



LOWER RIO GRANDE VALLEY

# Economic Development Strategy and Diversification Study



**Executive Summary**

April 2023

Prepared for

Texas General Land Office  
& Lower Rio Grande Valley  
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## Background

This project focuses on the region known as the **Lower Rio Grande Valley (LRGV)** consisting of three counties: Hidalgo, Willacy, and Cameron Counties.

The Lower Rio Grande Valley Economic Development Strategy and Diversification Study is a 15-month project being conducted in the three HUD (U.S. Department of Housing & Urban Development)-designated, eligible counties that make up our study area: Hidalgo, Cameron, and Willacy Counties. The study came about as a result of the 2019 Texas Severe Storms and Flooding Events (DR-4454-TX declared by FEMA). The three counties were most severely impacted by the events and were designated Major Disaster Declaration areas as of July 17, 2019.

The project was funded through HUD Community Development Block Grants (CDBG-DR) to help the Texas General Land Office (GLO) develop a series of studies to assist HUD-designated eligible areas. The study brings together the three counties to build an inventory of the economic assets and areas for improvement within the study area, provide economic development strategies, and develop an action plan for creating a diverse, resilient economic base.

FIGURE 1  
Site Location within Texas



### Legend

-  County Seat
-  Railway
-  Major Highway
-  Cities

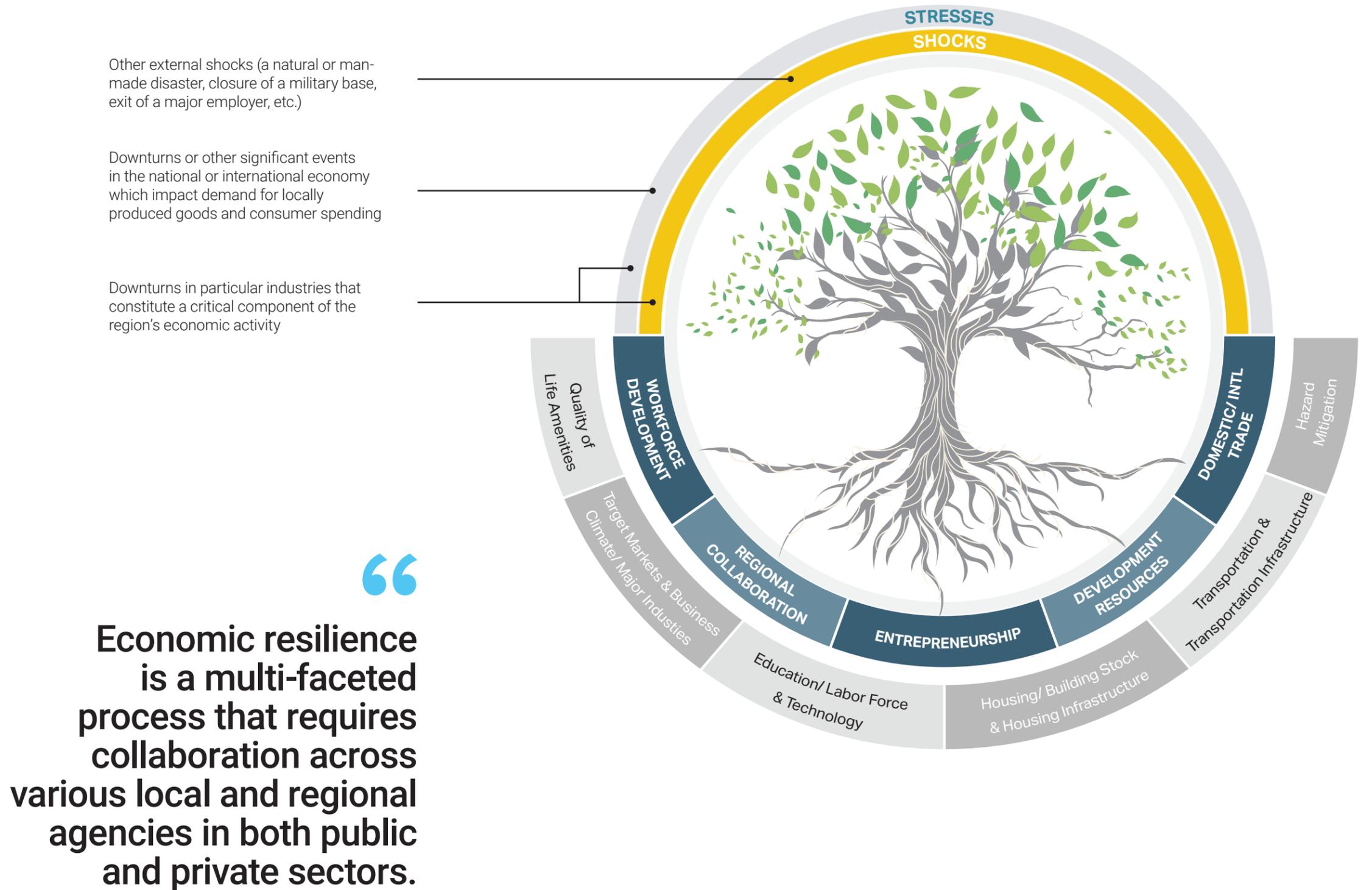
Source: Texas GLO, AECOM

# Economic Resilience

In general, resilience refers to the ability to recover quickly from disruption. In the context of economic development, the U.S. Economic Development Administration (EDA) defines economic resilience to be inclusive of three primary attributes: the ability to recover quickly from a shock or stress, the ability to withstand a shock or stress, and the ability to avoid the shock and stress altogether. Shocks are sudden events that can impact the economy of a given region and include natural disasters such as hurricanes, tropical storms, and pandemics, but also human-made disruptions such as recessions, decline of major industries. Stresses are long-term trends that undermine the potential of the economy and exacerbate shocks when they occur. Often, the shocks to the economic base of an area or region are manifested in three ways, as shown in Figure 2.

In the context of the Lower Rio Grande Valley Economic Development Strategy and Diversification Study, the same definition of economic resilience as that of the EDA (Figure 2) has been used. Thus, it is important to note that economic resilience is a multi-faceted process that requires collaboration across various local and regional agencies in both public and private sectors in anticipating risks, evaluating how the risks can impact key economic assets, and building a responsive adaptive capacity that could minimize the impacts of shocks and stresses and aids in faster recovery.

FIGURE 2  
Economic Resilience Framework



## Study Goals

The study's primary goal is to inform and assist the areas within the study region impacted by the 2019 flooding events with the expansion of its economic activities from an economic resilience standpoint through research and economic diversification strategy and action plan development. To achieve the goal, the project is composed of three phases:

### Phase 1

#### Research & Inventory Development

Through research and community outreach, identify existing assets, available resources, and deficits related to the overall economy, job market, and consumption of goods and services for each county and for the study region.

### Phase 2

#### Create an Economic Diversification Strategy for the Region

Develop an economic diversification strategy based on the comprehensive research and inventory developed for the region in Phase I. The strategy shall outline the implementation of the sustainable and resilient economic diversification goals and objectives noted in Phase I.

### Phase 3

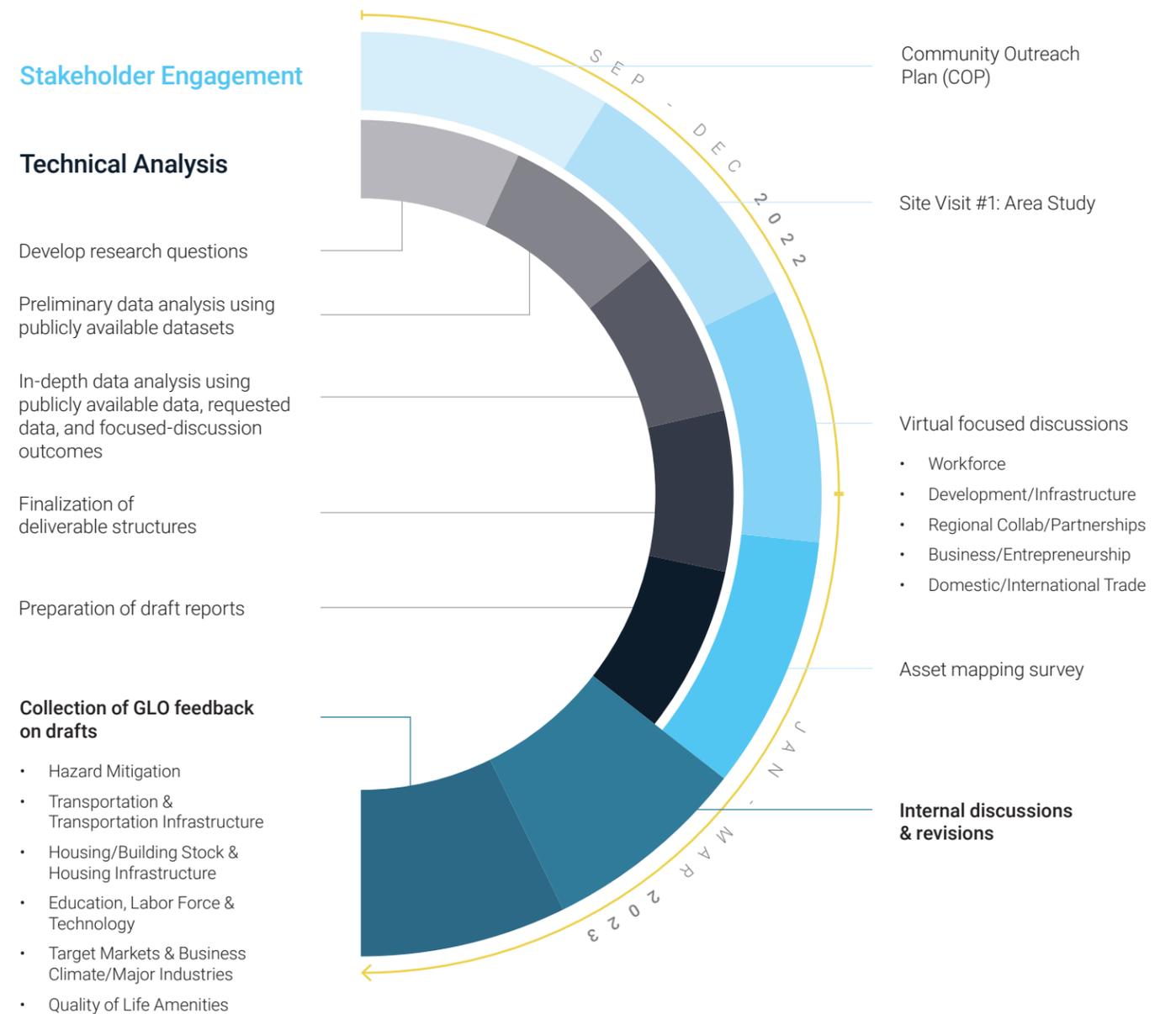
#### Develop an Action Plan

Develop an action plan outlining the steps necessary to implement the economic diversification strategy identified in Phase I and achieve the sustainable, economic goals and objectives outlined in Phase I and II.

## Timeline

This project took two tracks of data collection and analysis processes: technical analysis and stakeholder engagement (Figure 3). The technical analysis relied on publicly available datasets. The intent of Phase I of the project is to provide research and analysis of regional strengths and weaknesses, assets, available resources, and deficits, to understand the current levels of economic resilience in the LRGV (Lower Rio Grande Valley).

FIGURE 3  
Project Approach & Timeline



## History

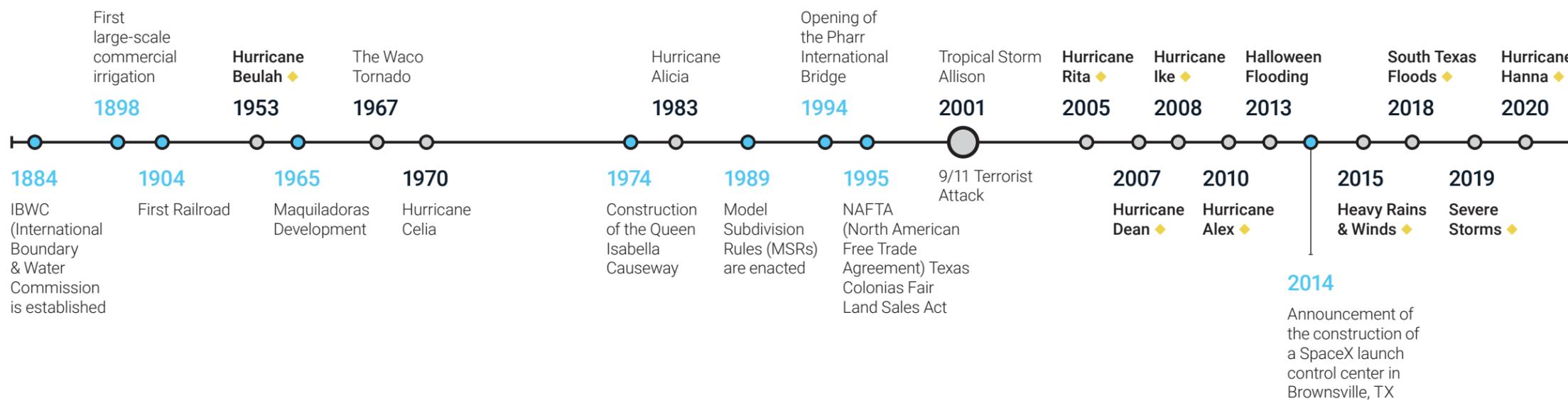
The LRGV, comprised of Hidalgo, Cameron, and Willacy Counties, is known to be among the oldest, most historic, and poorest areas of Texas. The region underwent the following periods of economic development. For each period, the region exhibited a longstanding history of withstanding and overcoming the impacts of regional- or state-level natural disasters for economic resilience (Figure 4).

**1900-1930s**  
Industrialization in the Early 20<sup>th</sup> Century

**1940s – 1980s**  
Tourism and Maquiladoras

**1990s – present**  
Globalization, Urbanization & South Texas Spaceport

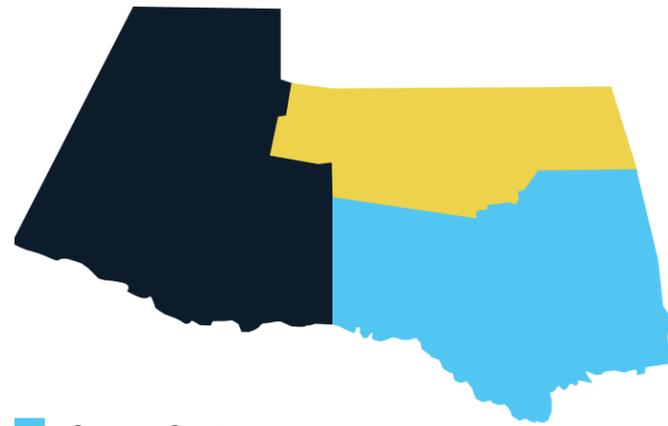
FIGURE 4  
LRGV Historical Timeline



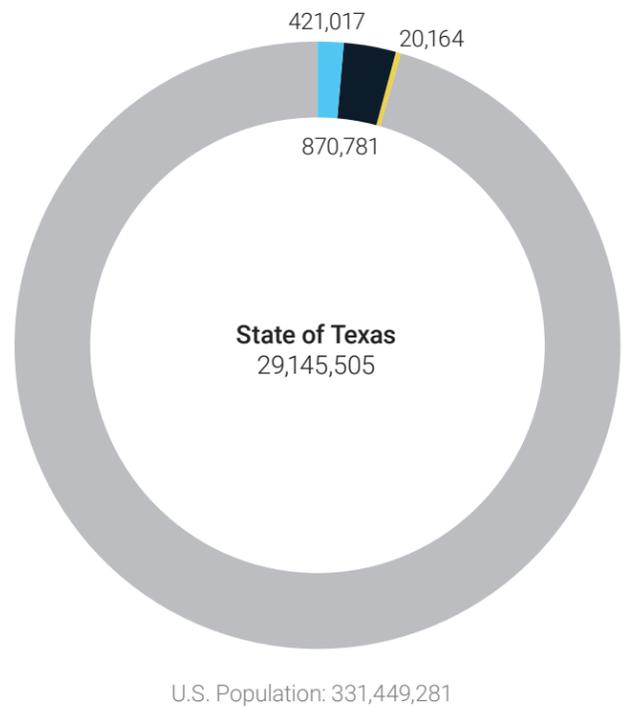
◆ Events that made the region eligible for funding

# County Profiles

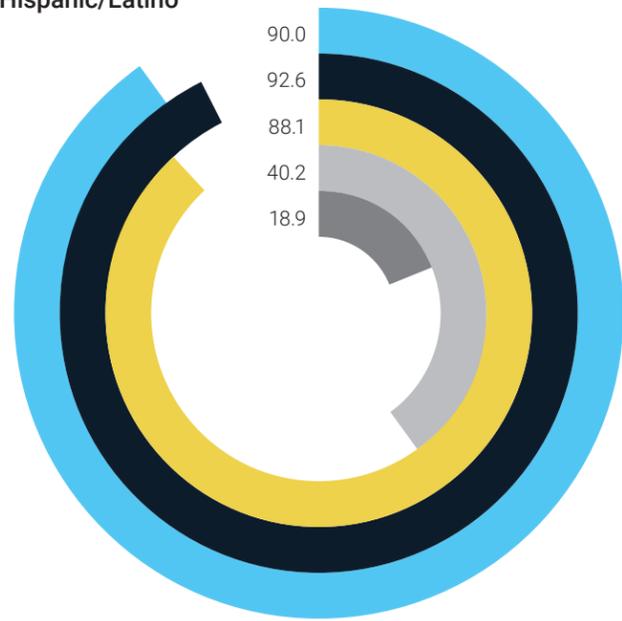
The three counties in the study area exhibit notable characteristics that set them apart from the rest of Texas and the country.



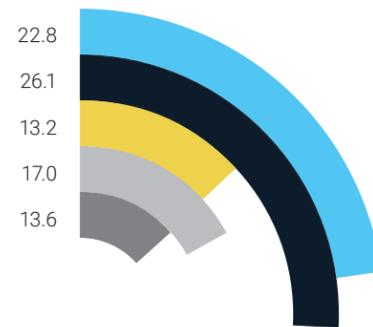
## Population (2020)



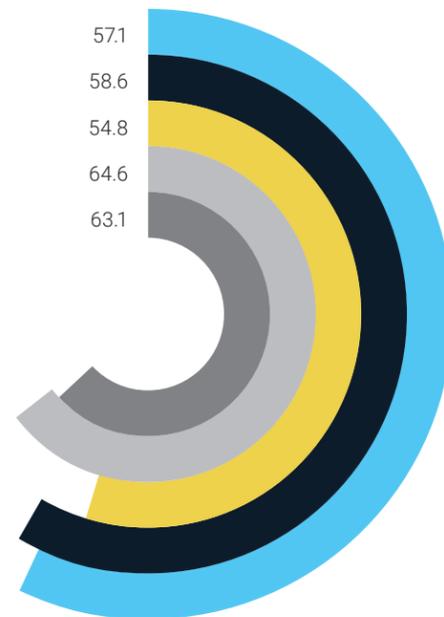
## % Hispanic/Latino



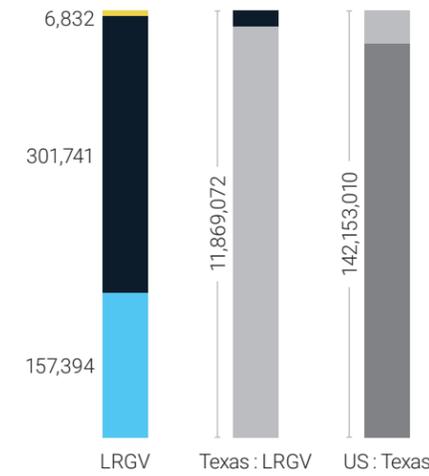
## % Foreign-Born Persons



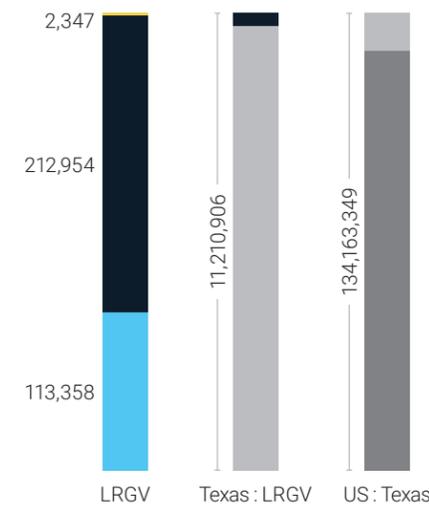
## % In Civilian Labor Force, 16+ Years (2017-2021)



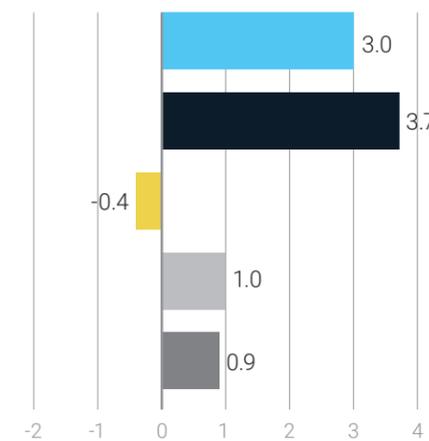
## Housing Units (2021)



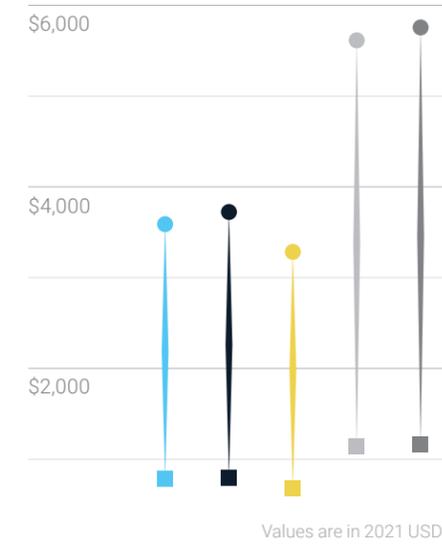
## Total Employment (2020)



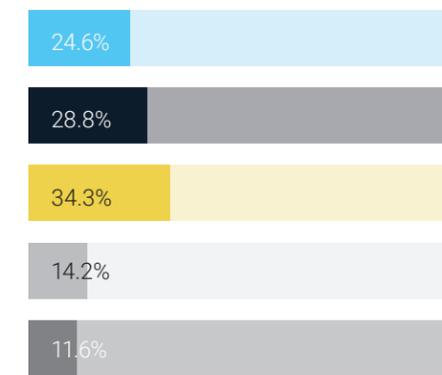
## % Change in Total Employment (2019-2020)



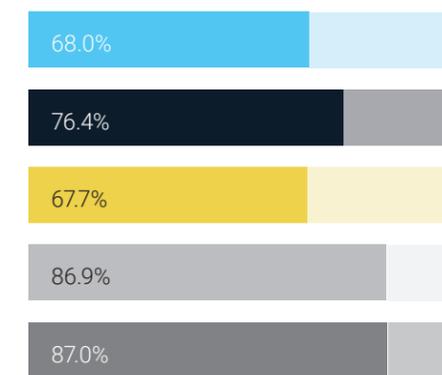
## Median Gross Rent & Household Income (2017-2021)



## Persons in Poverty



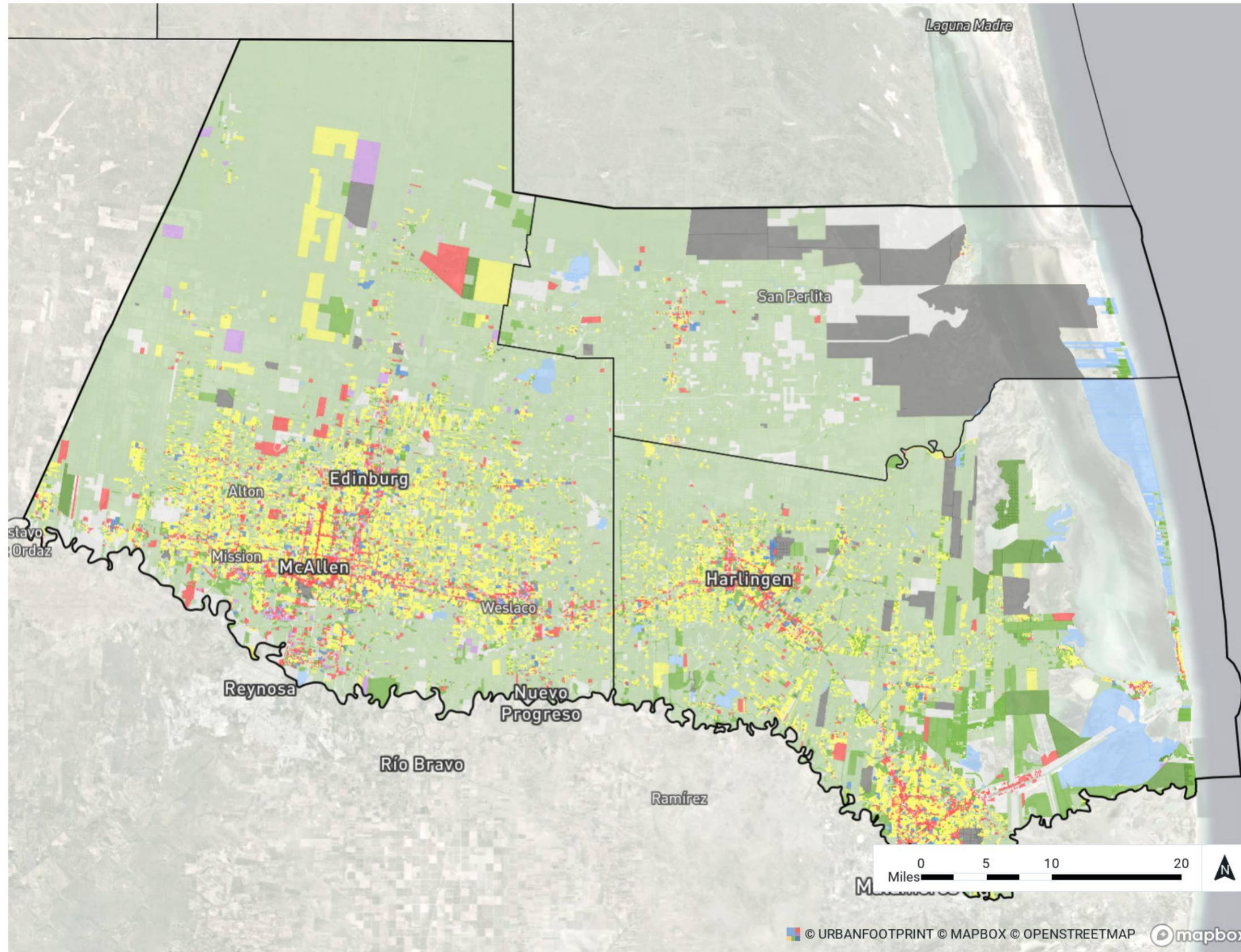
## Households with a Broadband Internet Subscription (2017-2021)



- The study area (Cameron, Hidalgo, and Willacy Counties) has a significantly high rate of Hispanic or Latino population (90.0%, 92.6%, and 88.1%, respectively) compared to Texas (40.2%) and nationwide (18.9%).
- Cameron and Hidalgo Counties have a higher rate of foreign-born persons (22.8% and 26.1%, respectively) than Texas (17.0%) and nationwide (13.6%).
- Overall, the study area has a lower rate of civilian labor force for 16+ years compared to Texas (64.6%) and nationwide (63.1%).
- Between 2019 and 2020, Cameron and Hidalgo Counties saw employment growth by 3.0% and 3.7%, respectively, which was higher than the Texas (1.0%) and national (0.9%) averages while Willacy County experienced a decrease in total employment by 0.4% during the same period.
- Median household income levels in the study area are lower than the Texas (\$67,321) and the U.S. (\$69,021) averages and the poverty rate is higher in the study area than Texas (14.2%) and nationwide (11.6%).
- Less households have access to broadband in the study area compared to the Texas (86.9%) and national (87.0%) averages.
- Northern Willacy County hosts a growing number of utility-scale wind farm developments.
- The presence of open space is sporadic but is most notable in the coastal areas of Cameron County.

Source: U.S. Census Bureau QuickFacts

FIGURE 5  
Land Use Summary Map



- Commercial and residential use make up most of the land use in incorporated areas.
- Industrial/Warehouse use in unincorporated areas of Hidalgo County is notable.
- A bulk of northeastern part of Willacy County is used for transportation/utilities.
- The presence of open space is sporadic but is most notable in the coastal areas of Cameron County.

**Legend**

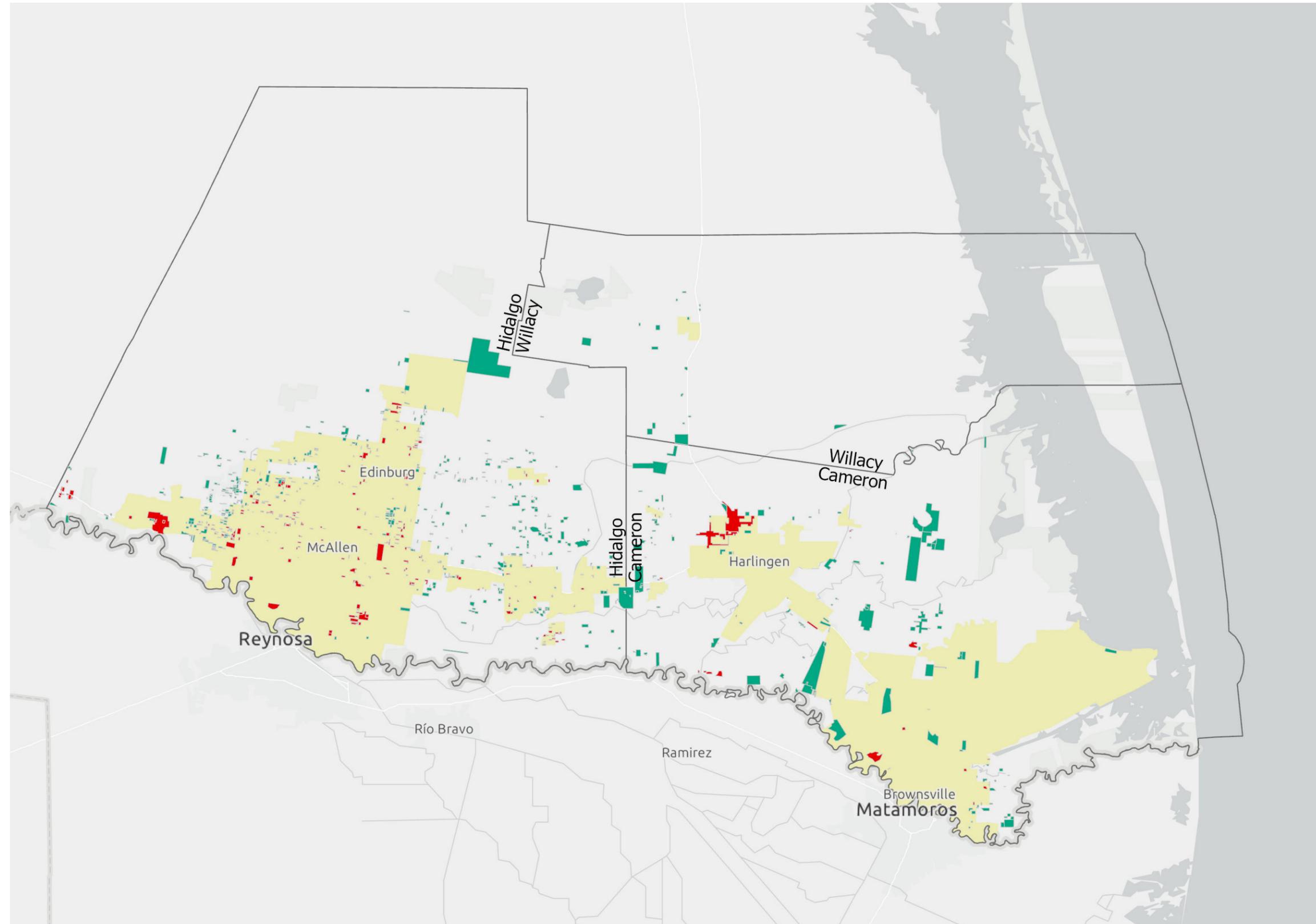
- Project Area
- Residential
- Commercial
- Industrial/Warehouse
- Civic/Institutional
- Transportation/Utilities
- Open Space
- Vacant/Other
- Agriculture
- Natural/Conservation
- Water

Source: Urban Footprint, AECOM

# Colonias

One notable trait of the U.S.-Mexico border areas, including the LRGV region, is the presence of the colonias. The term colonias has been applied generally to refer to “unincorporated communities located across California, Arizona, New Mexico, and Texas along the U.S.-Mexico border that are characterized by high poverty rates and substandard living conditions” (Figure 6). Beginning in the mid-20th century, under the Contract for Deed system, buyers entered a contract with the seller that would guarantee their rights to land without sufficient infrastructure upon the completion of agreed-upon installment payments. The terms of the contract were also unfairly in the favor of the seller. Contract for Deed provided access to affordable housing to buyers who were mostly farmworkers and immigrants who did not have the initial capital for a down payment to access a traditional mortgage. Naturally, the burden of establishing basic infrastructure on the land fell on the shoulders of buyers who relied on progressively building and extending their homes using “sweat equity” and self-help whenever resources allowed. Beginning in the late 1980s, the public health issues and poor living conditions of colonias were first brought to public attention through the media and efforts of advocates including colonias residents. Various laws and policies were passed to provide adequate infrastructure to existing colonias, prevent more colonias from developing, and better protect the Contract for Deed consumers.

FIGURE 6  
Colonias in the Study Area



Source: Texas Office of the Attorney General

# Hazard Risks & Mitigation

FEMA (Federal Emergency Management Agency) defines hazard mitigation as “sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects”. Hazard mitigation in the LRGV region is governed by policies and programs at international, federal, state, regional, and local levels. The most common hazard risks identified in the local Hazard Mitigation Plans in the study area were drought, hail, flood, tornado, wind, wildfire, winter storm, lightning, extreme heat, and dam/levee failure. Among these hazards, this study focuses on flooding as the most important hazard.

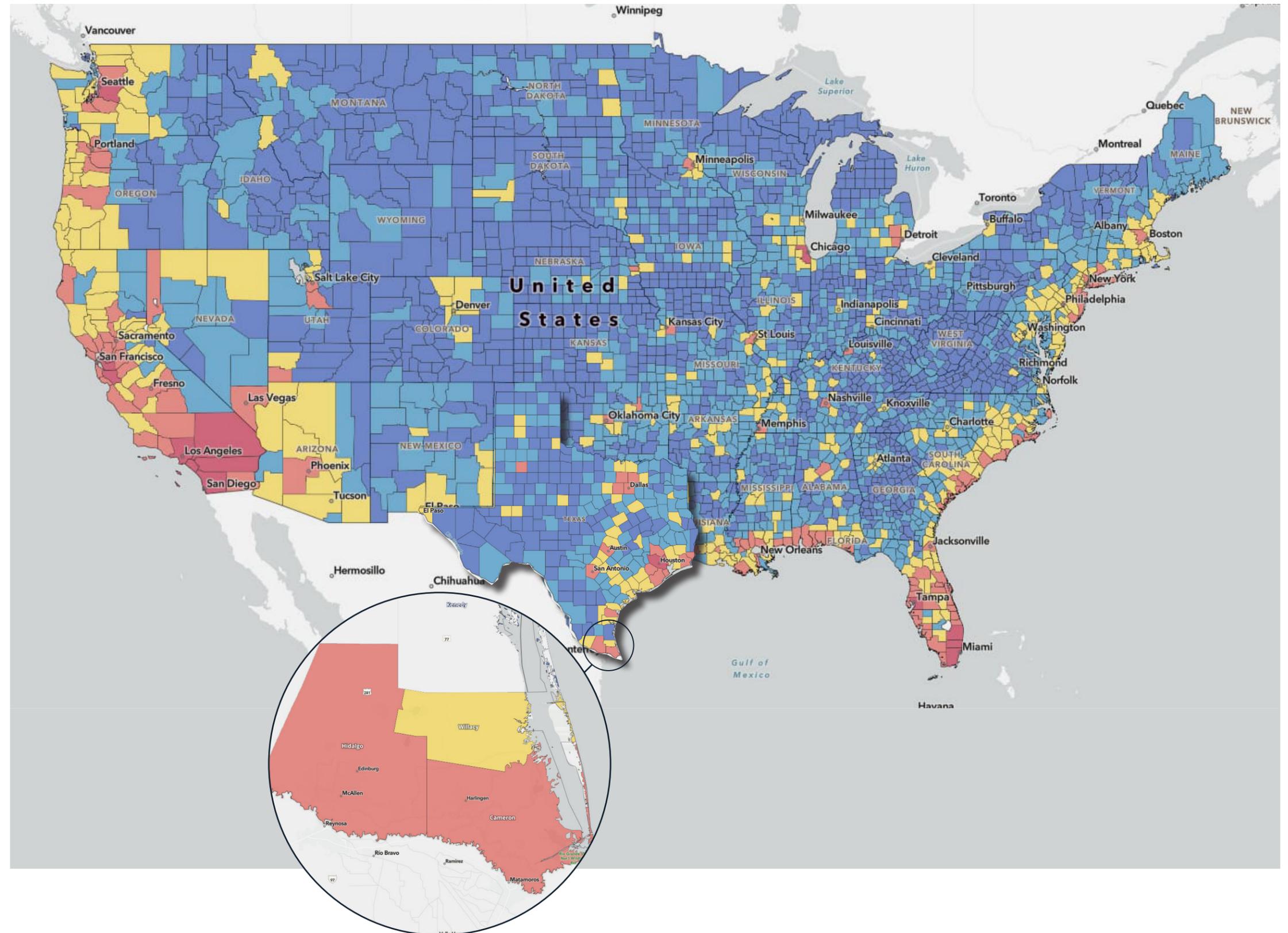
Compared to the counties across the nation, the three counties within the study area have a relatively high level of overall risk to the 18 natural hazards identified by FEMA (Figure 7). Overall risk is calculated based on expected losses, social vulnerability, and community resilience. In particular, the LRGV has a relatively high level of expected annual losses and high level of social vulnerability – indicating a community’s ability to prepare for, respond to, and recover from hazards. The State of Texas Hazard Mitigation Plan also notes that Hidalgo, Cameron, and Willacy Counties in Region 3 had one of the highest dollar losses from weather-related hazard across the state (Figure 7). The three counties are projected to continue experiencing the most weather-related loss by 2023.

Expected Annual Loss  
 x Social Vulnerability  
 ÷ Community Resilience

**Risk Index**

- Risk Index**
- Very High ■
  - Relatively High ■
  - Relatively Moderate ■
  - Relatively Low ■
  - Very Low ■
  - No Rating ■
  - Not Applicable ■
  - Insufficient Data ■

FIGURE 7  
 National and State-Level Hazard Risk



Source: FEMA National Risk Map; Texas Department of Emergency Management (TDEM) State Hazard Mitigation Plan (2018)

# Community Impact

Figure 8 shows the potential direct and indirect impacts of flooding in general terms across five different focus areas of this study (excluding the area of hazard mitigation): transportation; housing; education, labor force and technology; target markets and business climate/major industries; and quality of life amenities.

FIGURE 8  
Direct & Indirect Impacts of Flooding on Study Area Topics



Source: AECOM

## Direct impacts of flooding:

- Human life may be injured or lost.
- Property, crops, & livestock may be damaged or lost.
- Roadway, infrastructure, & transit centers could close
- Risk of developing or contracting waterborne diseases increases.

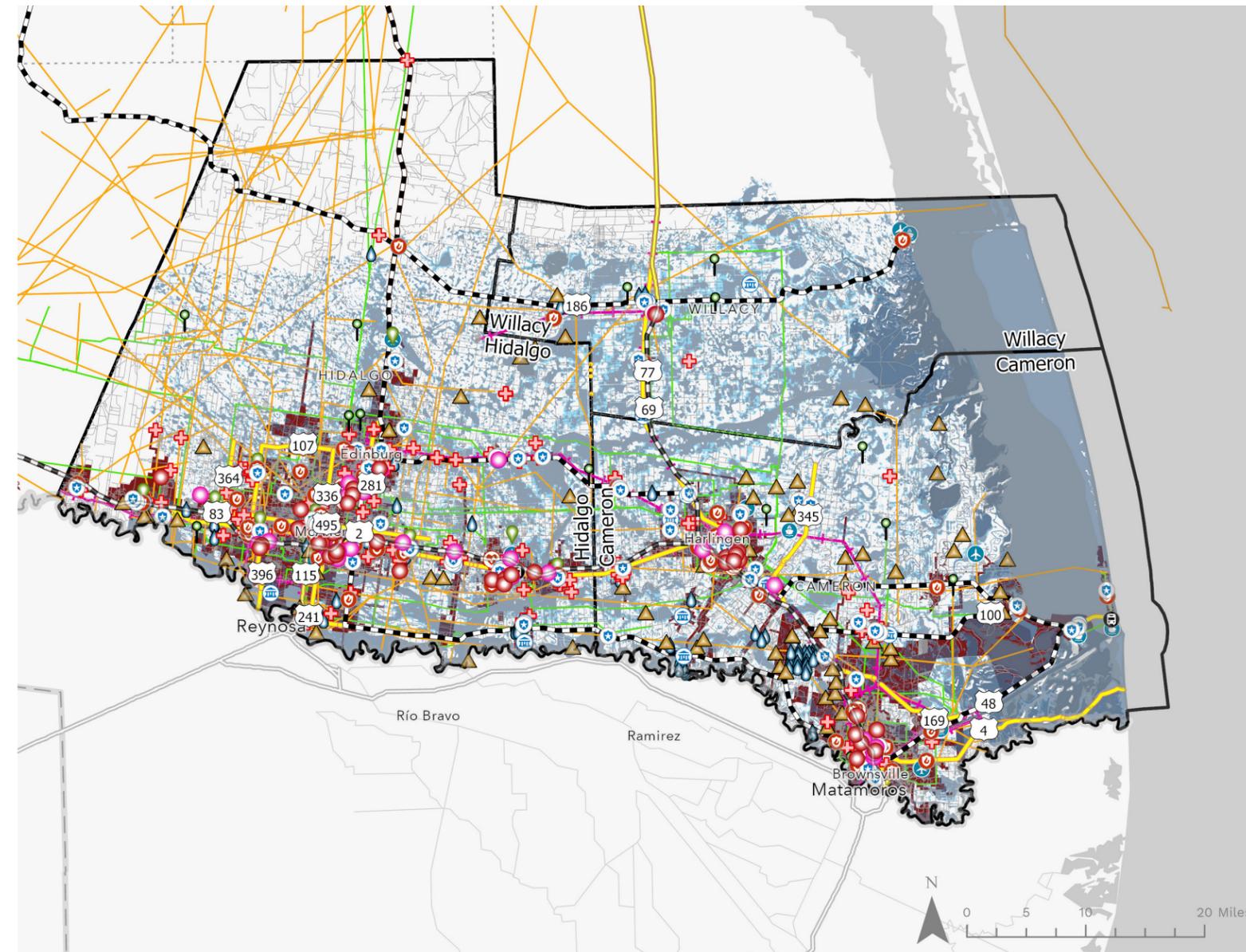
## Potential indirect impacts of flooding:

- Damage or loss of property or livelihood may lead to displacement and the need to rehabilitate or relocate (temporarily/permanently).
- Damage or loss of communication links may result in communication interruptions, making evacuation and information sharing challenging.
- Loss or injury to human life results in labor shortages and drives up labor cost.
- Waterborne diseases are more likely to develop and can lead to declining health especially for high-risk populations.
- Transportation closures may disrupt movement of goods through freight networks, resulting in supply chain issues and declines in purchasing power.

In addition, the study area contains critical infrastructure (CI) vital to sustaining basic human activities in the region. The following CI were identified for the purpose of this study and were mapped out to assess their vulnerability to 1% (100 year) riverine and coastal floodplains in the region (Figure 9).

- For communications, out of 13 PSAPs (Public Safety Answering Points), 2 PSAPs are located in floodplain in Hidalgo County.
- For transportation, out of 4 mass transit agencies in the area, 2 agencies are located in floodplain across Cameron and Hidalgo Counties. In addition, 4 airports out of 366 and 7 sea ports out of 37 are located in floodplain.
- For safety and security, 10 out of 46 government buildings, 7 out of 62 law enforcement, and 13 out of 68 fire stations in the study area are located in floodplain.
- For healthcare and public health, 2 out of 30 hospitals, 6 out of 37 nursing facilities, and 6 out of 37 dialysis facilities are located in floodplain.
- For energy, 3 out of 17 power plants and 39 out of 68 dams are located in floodplain.
- For food, weather, and shelter, 39 out of 144 shelters within the National Shelter System and 18 out of 76 public water systems are located in floodplain.

FIGURE 9  
Critical Infrastructure in the Study Area



## Legend

- |  |                               |                         |
|--|-------------------------------|-------------------------|
| ● Nursing Facility                     | ⊕ National Shelter System     | — Local Roads           |
| ● Dialysis Centers                     | ▲ Dams                        | — Texas Railroads       |
| ● Law Enforcement                      | ● Public Water System         | □ Study Area            |
| ● Fire Stations                        | ● Seaport                     | ■ Coastal Flood Zone 1% |
| ● Mass Transit Agency                  | ● Airport                     |                         |
| ● Public Safety Answering Point (PSAP) | — Evacuation Routes           |                         |
| ● Government Buildings                 | — Natural Gas                 |                         |
| ● Hospitals                            | — Electric Power Transmission |                         |
| ● Power Plants                         | — Primary and Secondary Roads |                         |
- 
- Riverine Flood Zones**
- 1%
  - Cities

Source: AECOM

# 04

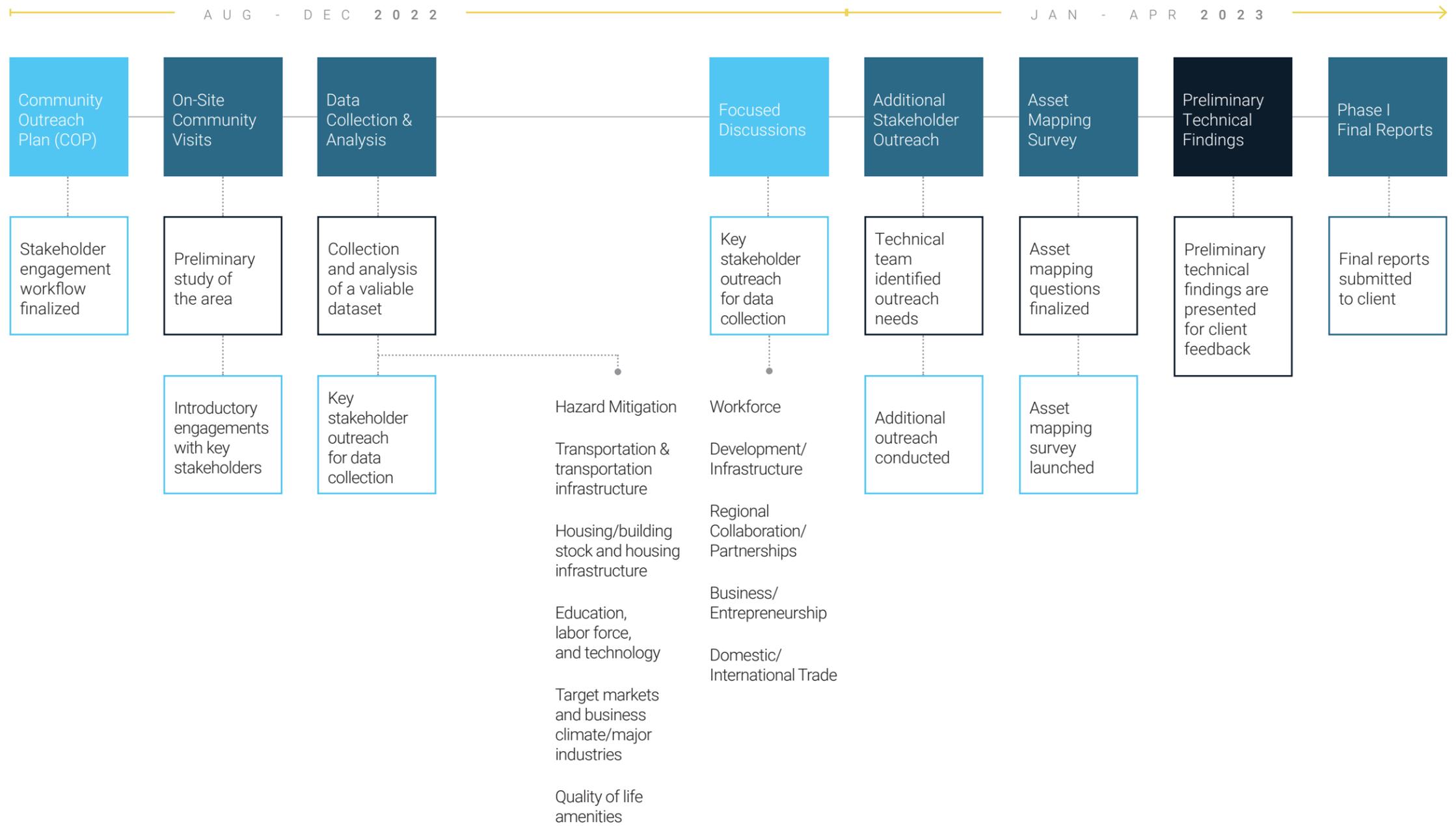
# Stakeholder Engagement

## Overview

Stakeholder engagement for Phase I of the study ran from August 2022 to April 2023 and included Educational Project Material, on-site community visits, virtual focused discussions, and an online asset mapping survey. Figure 10 summarizes the various engagement methods used in Phase I.

- Stakeholder Engagement
- Technical Analysis
- Stakeholder Engagement + Technical Analysis

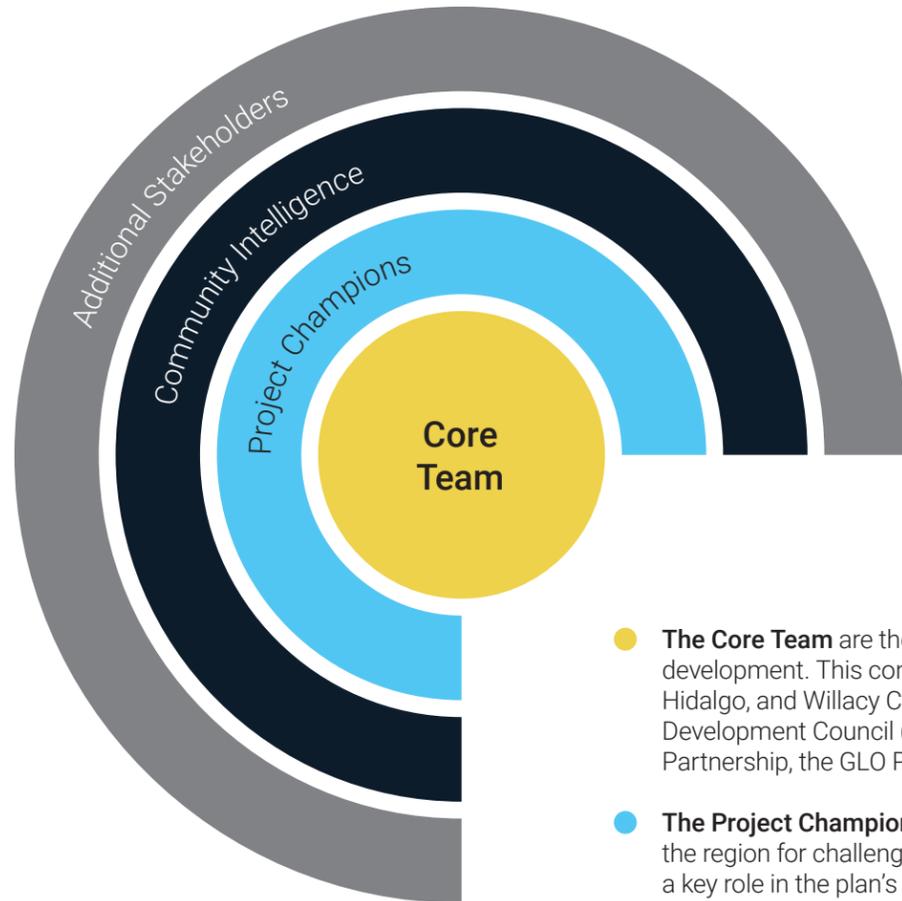
FIGURE 10  
Stakeholder Engagement & Technical Analysis Workflow



# Project Audience

To effectively conduct community outreach and achieve the expected project outcomes, stakeholders are categorized as in Figure 11.

FIGURE 11  
Broad Representation of Project Audiences



- **The Core Team** are the decision makers essential to the project development. This consists of County Judges of Cameron, Hidalgo, and Willacy Counties, the Lower Rio Grande Valley Development Council (LRGVDC), the Rio Grande Valley (RGV) Partnership, the GLO Project Team, and the Consultant Team.
- **The Project Champions** are key informants on the landscape of the region for challenges, trends, and opportunities, and will have a key role in the plan's implementation. This group consists of the boards of the LRGVDC and the RGV Partnership.
- **The Community Intelligence** are subject-matter experts on the regional's challenges, trends, and opportunities, especially based on their organization's interests. This group consists of City Leadership, Ports of Entry, Chambers and business partners, utilities, economic development organizations, educational entities, and regional and state officials and staff.
- **The Additional Stakeholders** are general audience members who are indirectly engaged through the GLO project website or other informational project materials to share their community interests and feedback.

# Milestones

FIGURE 12  
Stakeholder Engagement Milestones & Outcomes

## SEPTEMBER

### Community Outreach Plan

Identified strategies to help the project team gather data for analysis, inform stakeholders and interested individuals and groups about the study, to ultimately engage local community members in the overall action plan for potential implementation.

### Educational Project Materials

Created public-facing materials for engagement with all interested stakeholders, such as language for the project website and a one-pager. The one-pager was posted on Texas GLO's website and used for physical outreach as well as electronically.

## NOVEMBER

### On-Site Community Visits

The Engagement Team and local Texas GLO Leadership were diligent in connecting with the Core Team leaders and meeting with them in person. As activities developed, Project Champions and Community Intelligence subject-matter experts were engaged in the process. Community visits took place between August 30 and November 10, 2022.

FIGURE 13  
Meeting with Stakeholders at the Pharr International Bridge in November 2022



## DECEMBER

### Focused Discussions

To support the Technical Team's research, the Project Team invited the Core Team, Project Stakeholders, and Community Intelligence subject-matter experts to share their perspectives. Engagement initiatives included email invitations and personal follow-ups with phone calls or additional emails. The five focused discussions took place between Thursday, December 8 and Friday, December 16, 2022.

Category	Participants
Workforce Development	13
Regional Collaboration/Partnerships	9
Development/Infrastructure	7
Business/Entrepreneurship	8
Domestic/International Trade	8

## MARCH

### Asset Mapping Survey

The Study's first survey was released during the first phase of engagement on January 13, 2023 and received more than 102 assets from 21 unique stakeholders within an 8-week period. The survey closed on Tuesday, March 7, 2023. The online, interactive mapping tool allowed participants to "drag and drop" comment pins onto a satellite imagery map to provide details on community assets for the three-county area by the following five asset types.

- **Associations/Community Groups**  
A social, religious, non-profit, or other organization serving community needs.
- **Institutions**  
A formally established organization founded for a religious, educational, social, or similar purpose.
- **Physical Space**  
A place or geographic location that serves a particular social, economic, or cultural purpose.
- **Local Business/Economy**  
Businesses or other economic drivers that are important to the community.
- **Individuals**  
Persons who play an important social, economic, or cultural role in the community.

## Overview

To understand the state and trends of economic development from an economic resilience standpoint for the LRGV, detailed focus area analyses were conducted for the six areas.

- 1 Hazard Mitigation
- 2 Transportation and Transportation Infrastructure
- 3 Housing/Building Stock and Housing Infrastructure
- 4 Education, Labor Force, and Technology
- 5 Target Markets and Business Climate /Major Industries
- 6 Quality of Life Amenities

Each focus area analysis included core findings, SWOT analysis, and challenges and opportunities. The analyses relied on publicly available datasets through the U.S. Census, FEMA, National Oceanic & Atmospheric Administration (NOAA), Bureau of Transportation Statistics, U.S. Geological Survey, U.S. Department of Homeland Security, Texas Department of Transportation (TxDOT), etc. Input from stakeholder engagements was also synthesized and analyzed by focus area. Basic statistical analysis and GIS (Geographic Information System) analysis were conducted to understand the implications of the collected datasets.

## 1 Hazard Mitigation

FIGURE 14  
Historical Precipitation in the LRGV  
(1993-2022, measured in inches)

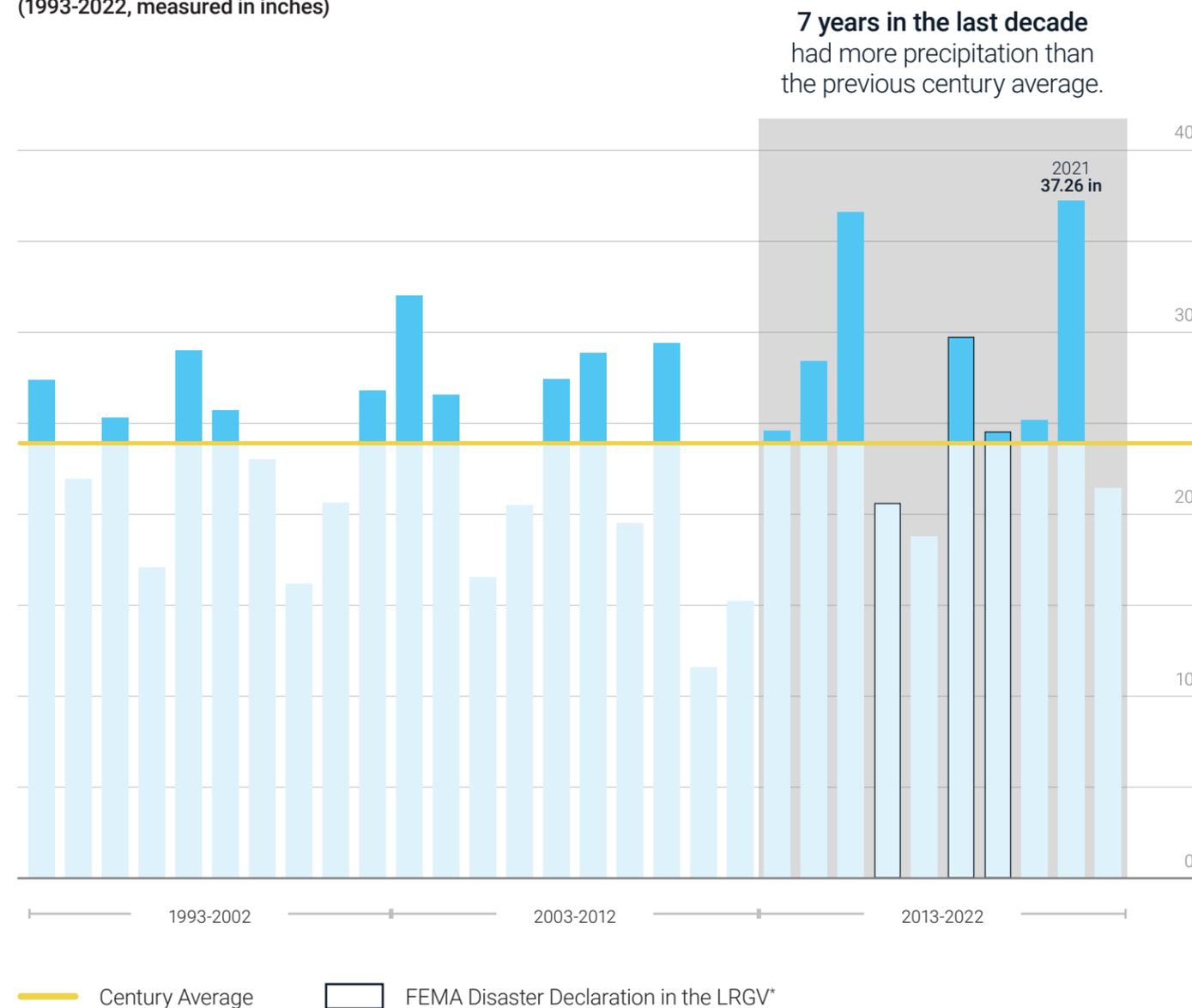
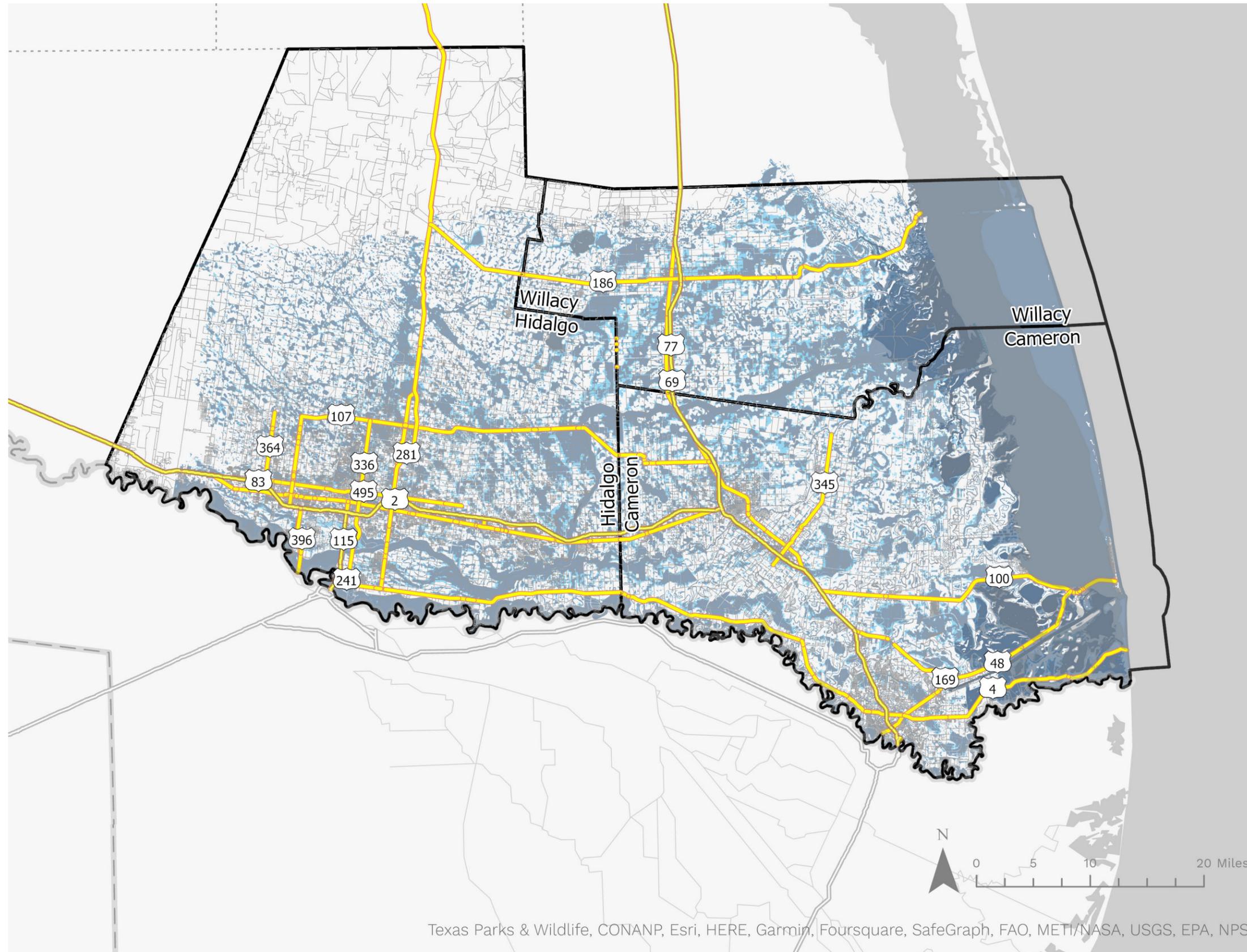


Figure 14 visualizes the historical precipitation data from 1993 to 2022 and shows an overall gradual increase in the size of precipitation against the century average and the number of FEMA-declared disasters in the most recent decade. Even though the chart does not directly indicate an increased occurrence of flooding events, it depicts a changing pattern of precipitation in the region.

\*At least one of the three counties in the study area was disaster declared.

Source: NOAA National Centers for Environmental information, Climate at a Glance: Divisional Time Series, published May 2023, retrieved on May 12, 2023 from <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series>

FIGURE 15  
100-year (1.0%) & 500-year (0.2%) BLE Riverine and Coastal (1.0%) Floodplain Map



**Approximately 38.32% of the study area lies within a floodplain with 1.0% (100-year) or 0.2% (500-year) annual chance of flooding.**

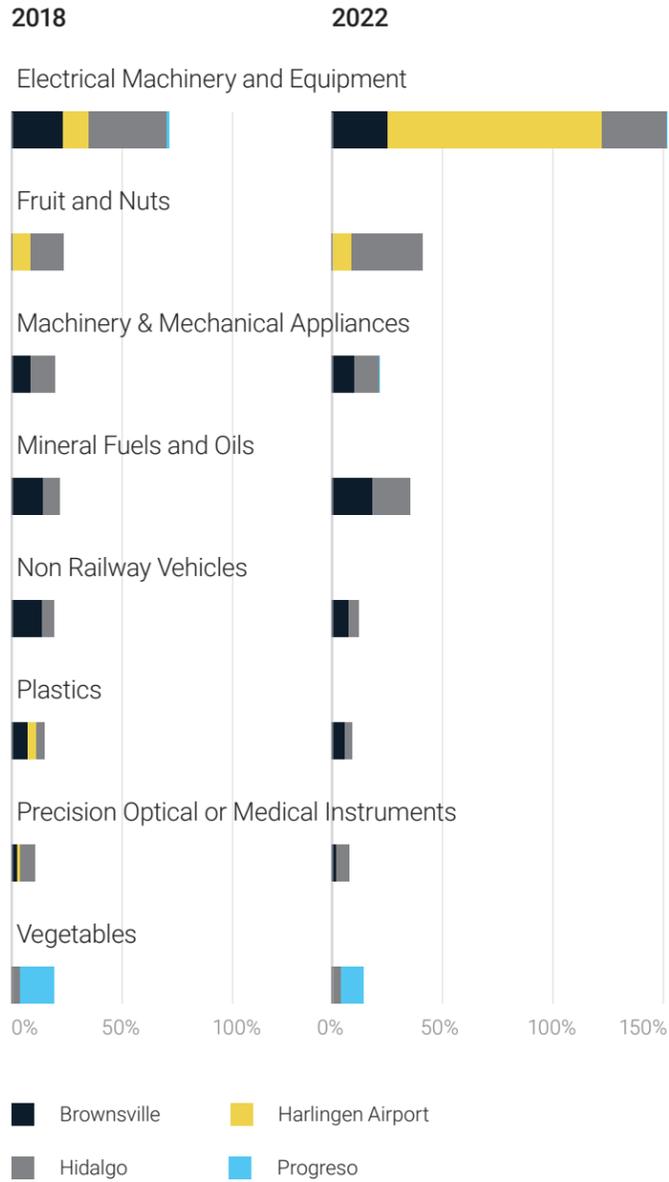
Floodplains are illustrated in Figure 15 with dark blue and light blue indicating the 1.0% (or 100-year) and 0.2% (500-year) annual chance of flooding, respectively. Generally, a 1.0% annual chance of flooding equates to a 26% chance of flooding over the life of a 30-year mortgage. Based on this data, approximately 38.32% of the study area lies within a floodplain. To map out the level of flood risk in the LRGV, data from the BLE (Base Level Engineering) study for the South Laguna Madre Watershed were used.

**Legend**  
Riverine Flood Zones  
1%  
0.2%  
Primary and Secondary Roads  
Local Roads  
Study Area  
Coastal Flood Zone 1%

Source: FEMA Estimated Base Flood Elevation (estBFE) Viewer

# 2 Transportation & Transportation Infrastructure

FIGURE 16  
Commodities Moving Through LRGV Ports  
(Top 8 Commodities by Value)



Source: BTS (Bureau of Transportation Statistics) Freight Data

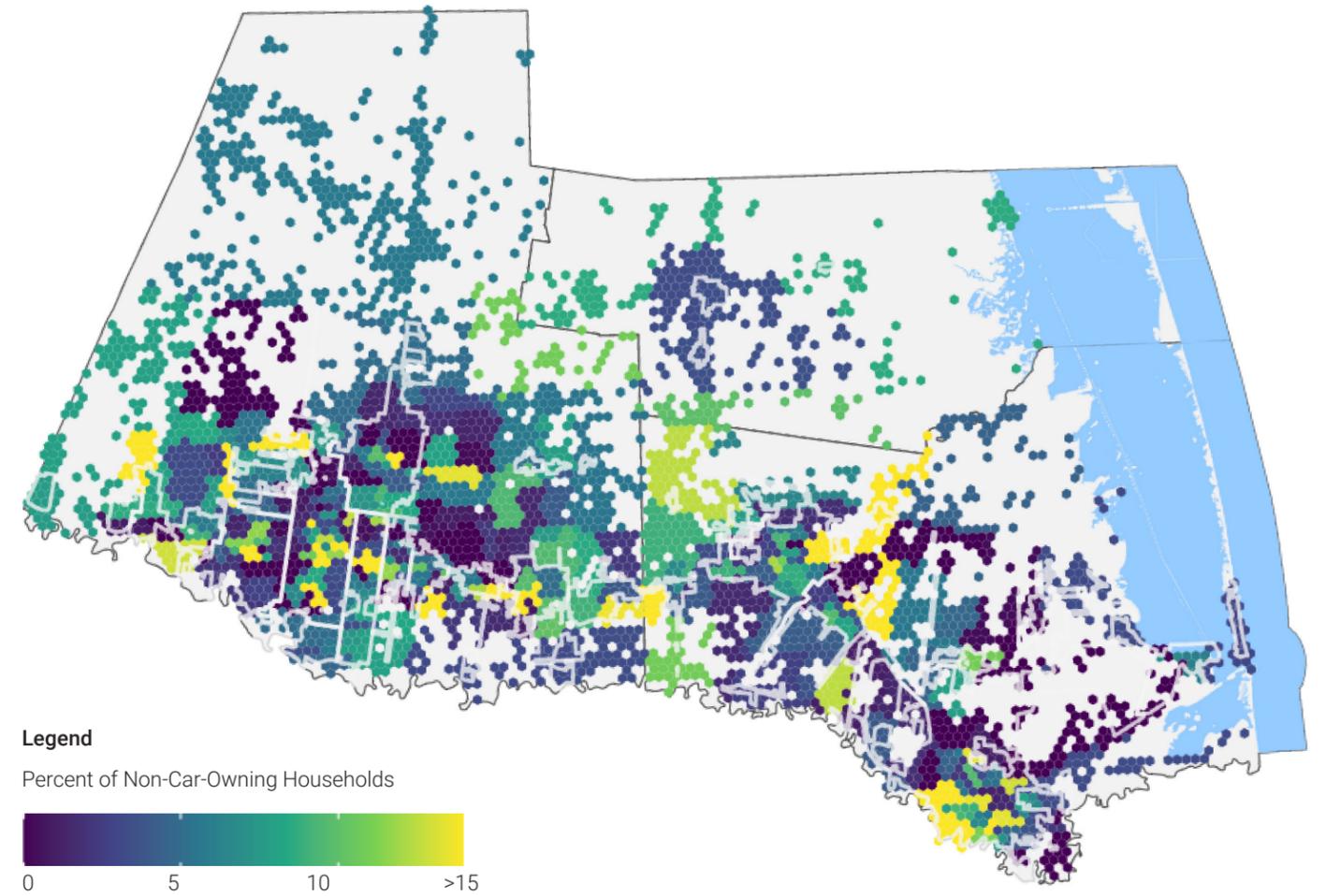
The LRGV plays a unique role relative to the rest of the state in goods movement (Figure 16). The region imports notable shares of fruits, nuts and vegetables coming into Texas from Mexico, as well as a large share of mineral fuels, oils, and raw metals like iron and steel. Its three commercial international airports also serve economic functions tied to cross-border economic activity and tourism, with Harlingen Airport showing significant increases in electrical machinery and equipment.

LRGV transportation infrastructure faces pressure created by steady growth in north-south movement of agricultural products and manufactured goods largely by truck through Cameron and Hidalgo Counties destined for geographic end markets such as Dallas and Chicago. This creates the need to plan intentionally for growing freight volumes, inclusive of infrastructure planning, operations, and the structure of regional economic development to ensure that opportunities to add value to goods that are currently otherwise just “passing through” can be maximized.

Regional airports, particularly Valley International in Harlingen, have seen significant increases in air cargo activity. Between 2014 and 2019, the landed weight of air cargo (lbs.) grew from 246.3 million lbs. to 365 million lbs. Resulting annual growth (8% annualized) was comparable to rates of growth for Dallas Fort Worth (8.6%) and Fort Worth-Alliance (8.7%). Brownsville/ South Padre International experienced a stronger rate of growth in air cargo over the same period (20.8%) with an increase from 17 million lbs. to 45.9 million lbs. Cargo tonnage for both airports has slowed from 2019 highs, more so compared to major airports in Texas.

LRGV transportation infrastructure equally contends with continued growth in generally east-west movement of people, in context with limited public transit infrastructure, modest incomes, and a significant share of zero-car households. Using the U.S. Census American Community Survey data overlaid with National Land Cover Database, concentrations of non-car owning households were identified, both within cities and in rural areas (Figure 17). Although most zero-car households are in lower-income areas of Brownsville, McAllen, Edinburg, and Pharr, there are also many zero-car households in unincorporated areas bordering these cities. Trips via public transit tend to be slower and as a result, lower income households endure longer commutes and face more limited access to jobs, schools, and educational or training opportunities.

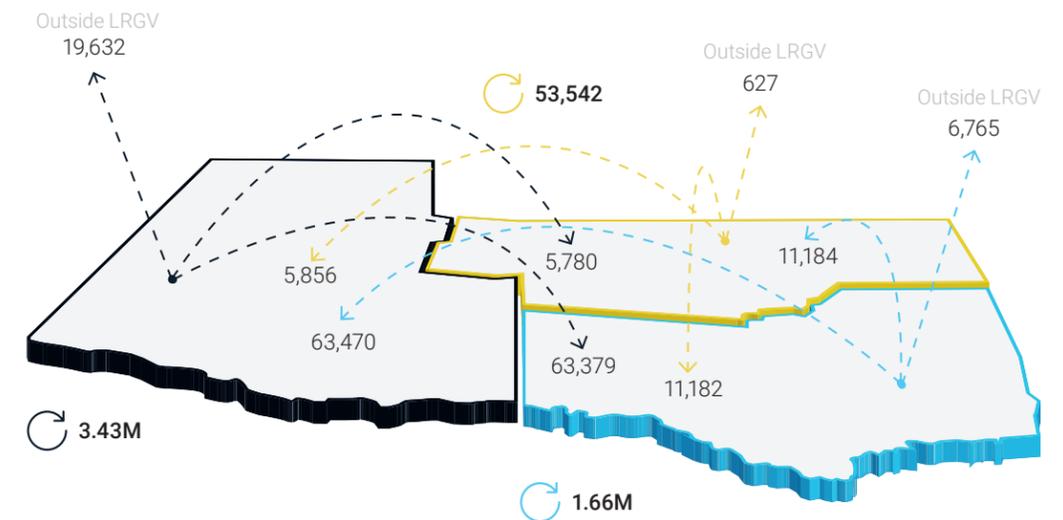
FIGURE 17  
Concentrations of Non-Car Owning Households in the LRGV



Source: U.S. Census Bureau 2021 5-Year ACS Estimates, MRLC National Land Cover Database

FIGURE 18  
Cross-County Travel Patterns in the LRGV

Data from Replica reinforces insight over the concentration of trips within a single county vs county to county. The extent to which residents both live and work in the same county may speak to concern over regional access to quality jobs.



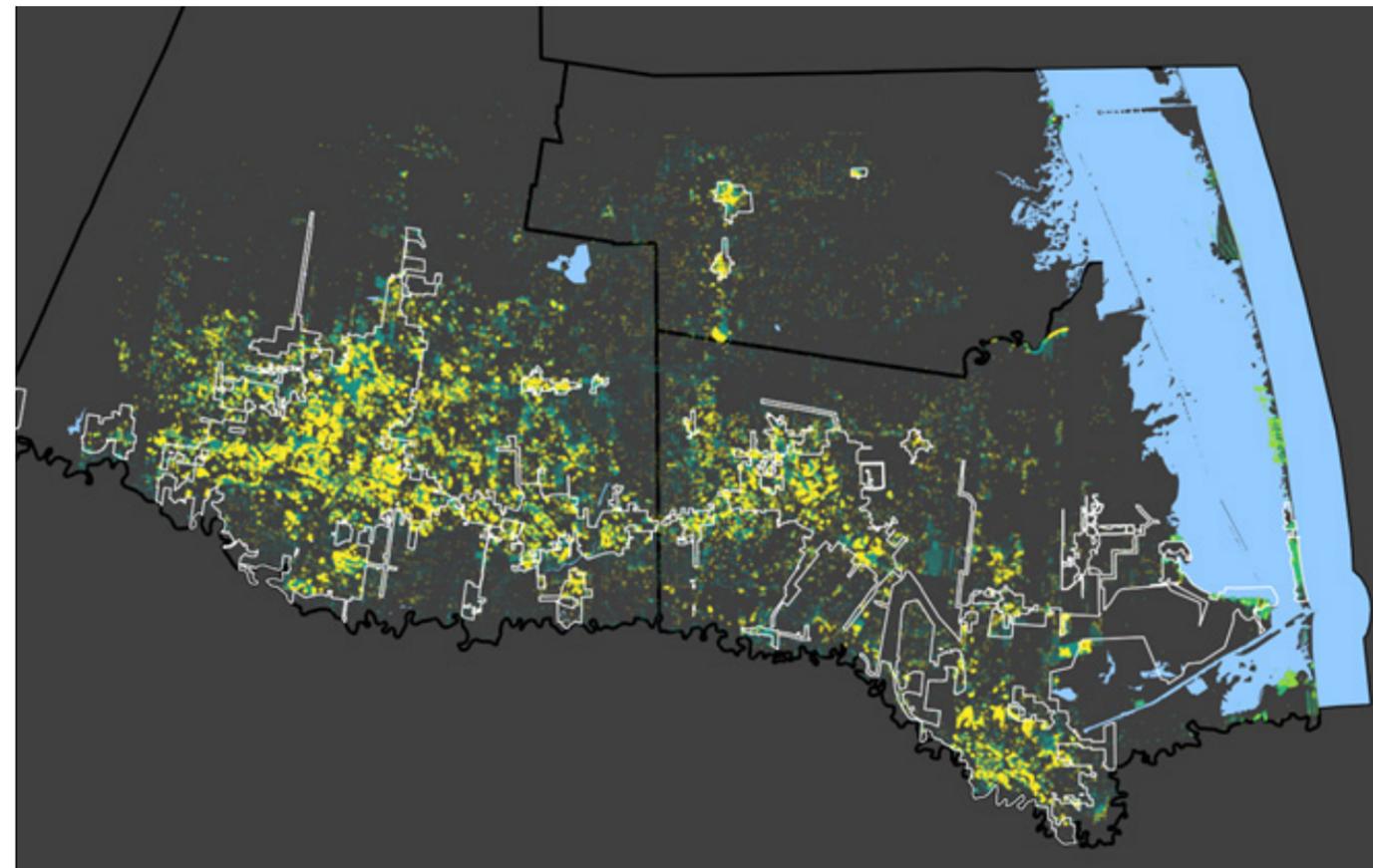
Source: Replica, Fall 2021, “Typical Thursday”

### 3 Housing/Building Stock & Housing Infrastructure

Population growth has encouraged construction of new housing units at an accelerated pace, particularly since 2018, as evidenced by permitted construction in 2019 (7,233 units) and 2021 (8,154 units) above 10-year averages. Within these totals, the number of multi-family apartments has grown, from roughly 260 units in 2011 to more than 1,600 units in 2021. Reflective of the surge in new apartment deliveries, median gross apartment rents have also increased from \$595 in 2010 to \$793 in 2021.

Analysis of assessed single-family property values in relation to potential flood risk for Cameron and Hidalgo Counties reveals important distinctions for urban and unincorporated / rural housing markets. In both counties, residential parcels within incorporated areas and with lower flood risks tend to have substantially higher assessed market values compared to those with higher flood risks or outside of incorporated areas (Figure 19).

FIGURE 19  
Parcels with High and Moderate Flood Risk in the LRGV

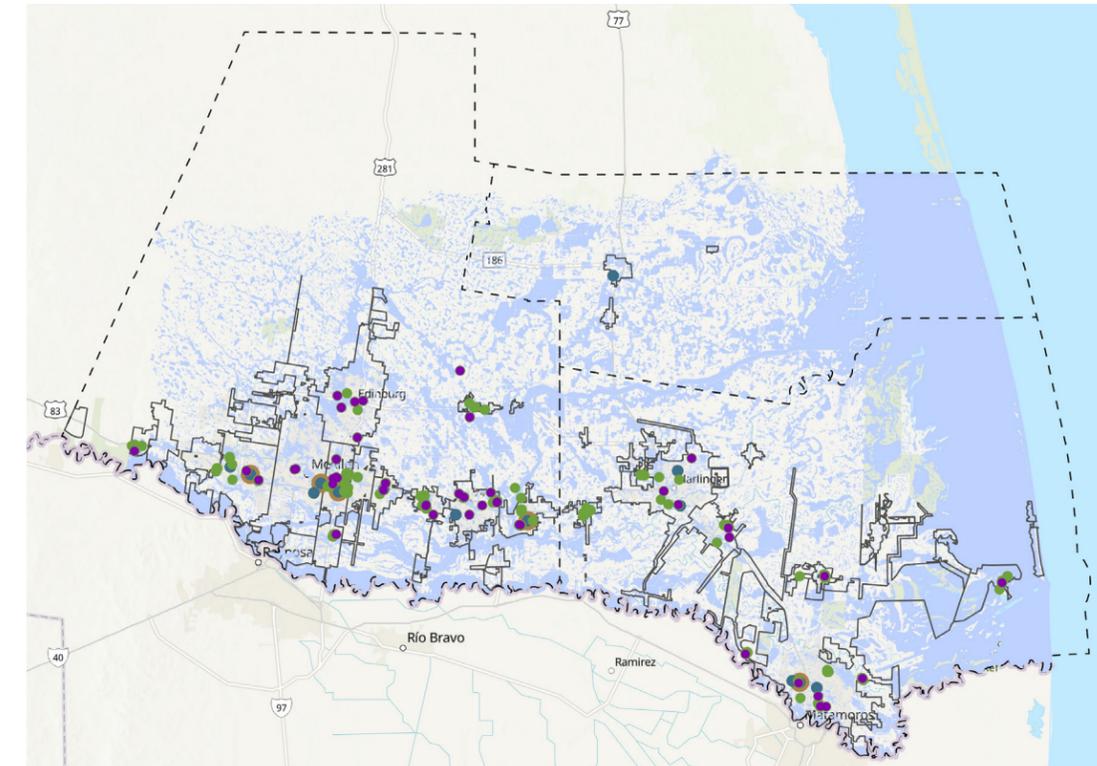


Legend  
● Annual Flood Risk 1.0%  
● Annual Flood Risk 0.2%

Source: FEMA Estimated Base Flood Elevation (estBFE) Viewer; 2018 TNRIS Land Parcels

A majority of LRGV households have incomes less than or equal to 80% of the Area Median Income (AMI) according to HUD, which means that a majority of study area households are eligible for assisted housing program by the Federal Government. Given these income fundamentals, the LRGV has a larger supply of public housing units (4.5% of households) compared to Texas average (0.96% of households). Data from HUD suggest that the supply of public housing has decreased slightly since 2010. Analysis of potential flood risk relative to locations of public housing units (inclusive of Section 8) suggests that a majority of these units are not in areas with higher flood risk (Figure 20).

FIGURE 20  
Locations of Public Housing Units Relative to Flood Risk

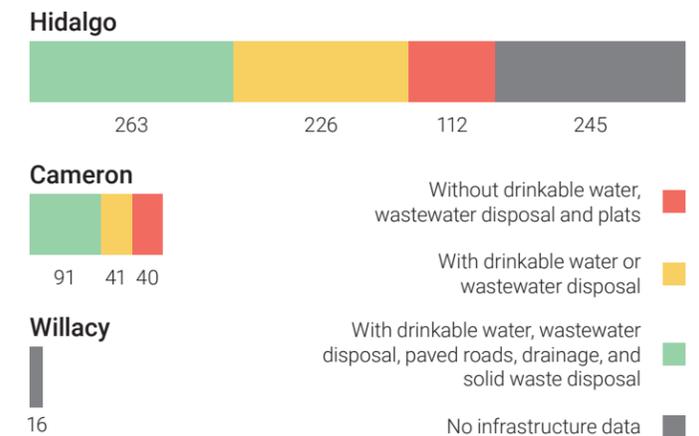


Legend  
● Public Housing Development  
● Public Housing Building  
● Section 202 Properties  
● Section 811 Properties  
 County Boundaries  
 Incorporated Areas  
 Flood Risk 1% Annual Chance

Source: HUD; FEMA BLE Maps; AECOM

Figure 21 shows the number of colonias by improvement status since 2010. Green colonias have drinkable water, wastewater disposal, paved roads, drainage, and solid waste disposal. Yellow colonias have drinkable water or wastewater disposal. Red colonias lack drinkable water, wastewater disposal, and plats. Unknown colonias lack infrastructure data. Using the data, Willacy County significantly lags behind in the improvement effort compared to Hidalgo and Cameron Counties.

FIGURE 21  
Study Area Colonia Infrastructure

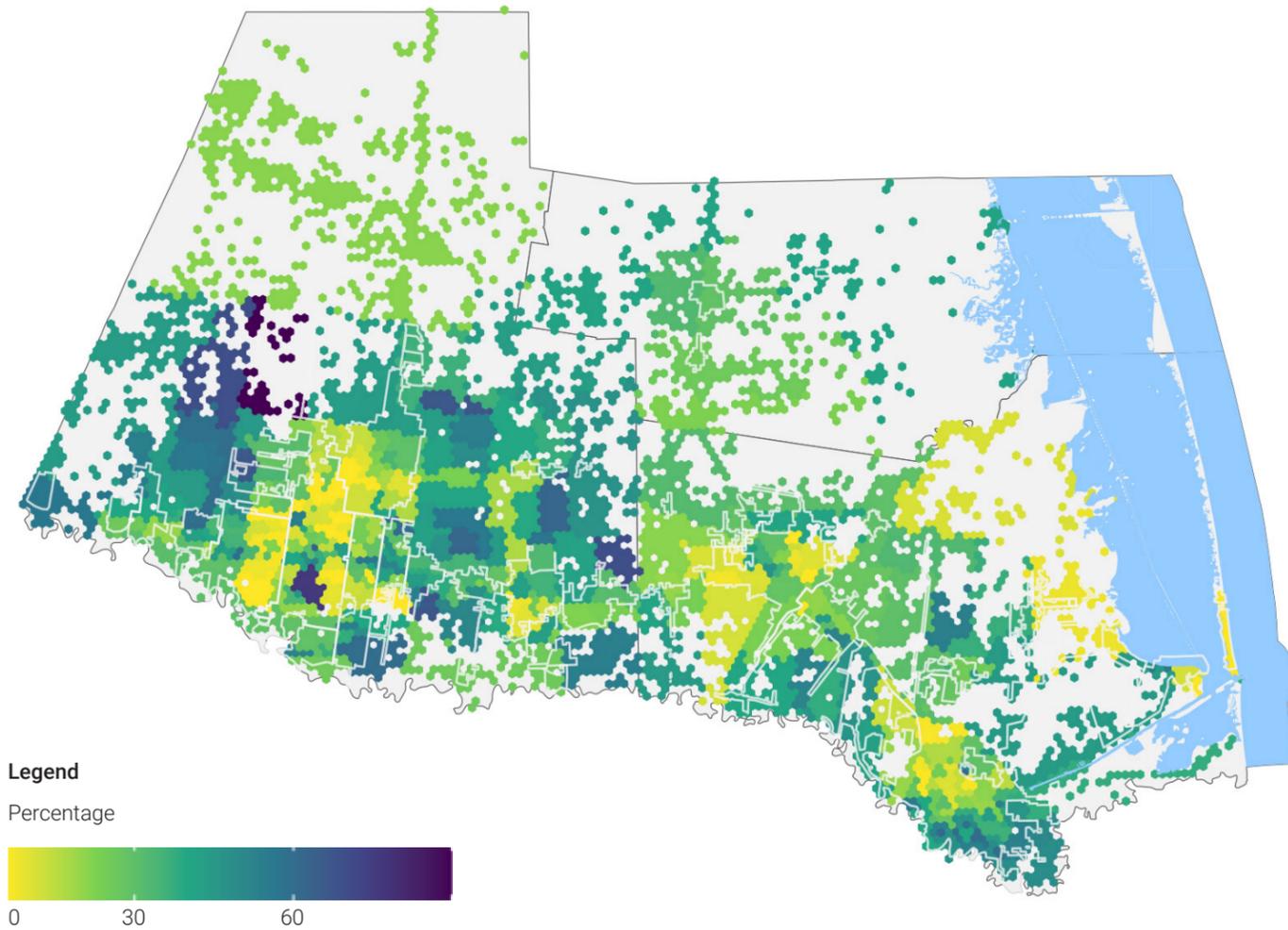


Source: Texas Attorney General Colonias Database

# 4 Education, Labor Force, and Technology

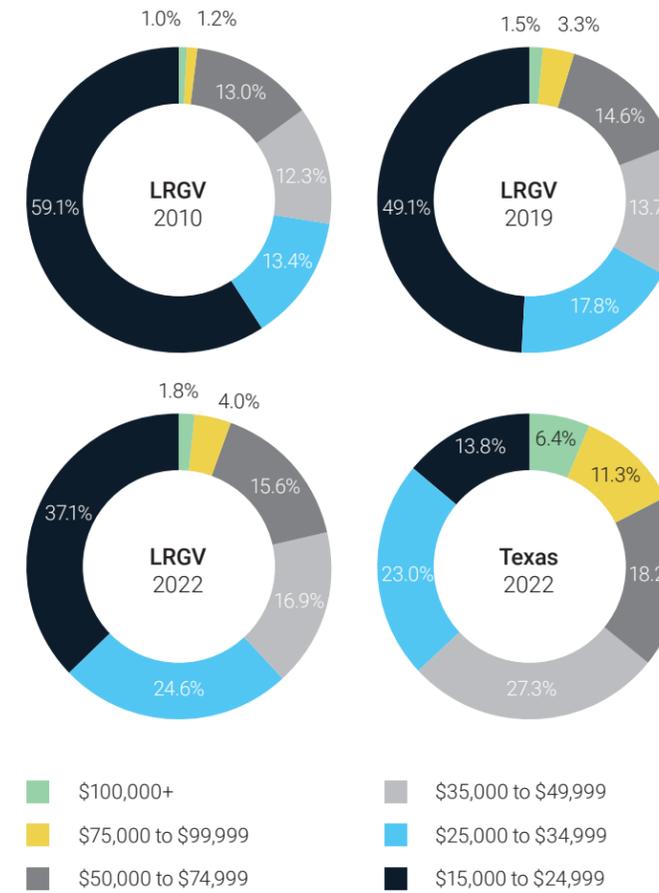
There has been significant improvement in educational attainment across the LRGV in part due to the benefits of dual enrollment (associate degree) programs at the high school level. Even so, about 32% of the population age 25 and over still lacks a high school diploma, which is twice the Texas average (Figure 22). Limited educational attainment is expected to aggravate gaps in skills and wage levels in the long run.

FIGURE 22  
Share of Population with Less than High School Graduate in LRGV, 2021



Source: U.S. Census Bureau

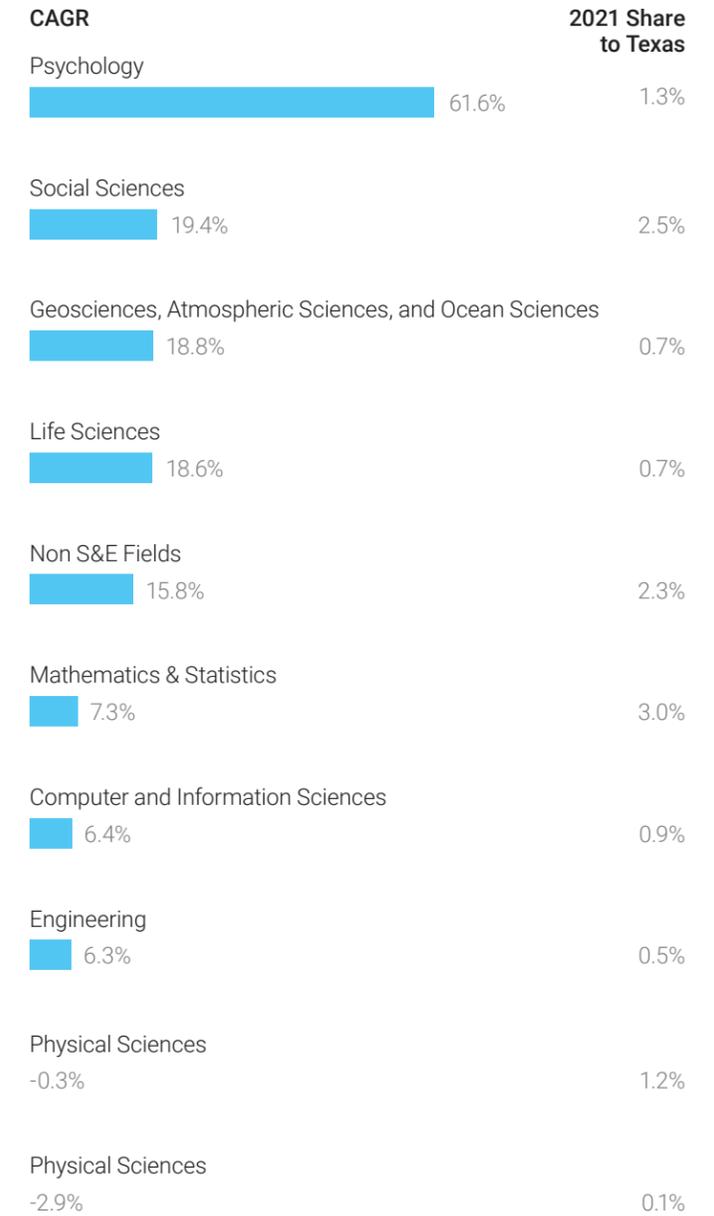
FIGURE 23  
Share of Jobs 2010, 2019, 2022 based on income



Source: EMSI Lightcast, AECOM Calculation

Analysis of employment and wages by occupation reinforce concern over what appears to be structural imbalance in the mix of LRGV jobs relative to state average (Figure 23). The region is over-weighted in occupations ranging from secondary school teachers, home health & personal care aids, fast food workers, police officers, farmworkers, telemarketers, middle school teachers, and retail salespeople, and under-weighted in occupations ranging from software developers, project managers, accountants, and computer systems analysts. The average salary for under-weighted occupations is \$52,287, and for over-weighted occupations, \$43,850.

FIGURE 24  
Share of R&D Expenditure for each Field of Study (%CAGR 2011- 2021) in the LRGV



According to the National Science Foundation (NSF) data, although LRGV universities support modest shares of total university R&D expenditures in Texas, the dollar value of LRGV expenditures has grown at a 12.4% annual growth rate since 2011 (Figure 24). Over the last decade, fields with accelerated LRGV growth in R&D expenditure were in psychology, social sciences, as well as geosciences, atmospheric sciences, and ocean sciences.

Source: NSF Higher Education and Research Development Survey, AECOM Calculation

# 5 Target Markets & Business Climate/ Major Industries

The AECOM Cluster Analysis tool incorporates an analysis metric called Location Quotients (LQ), which measures a specific region's industrial specialization relative to U.S. average. The following table summarizes AECOM standard definitions that have been applied for this effort. In general, an LQ less than 0.8 is defined as a long-term growth opportunity or under-developed, and a lower specialization in a given industry compared to the U.S. average.

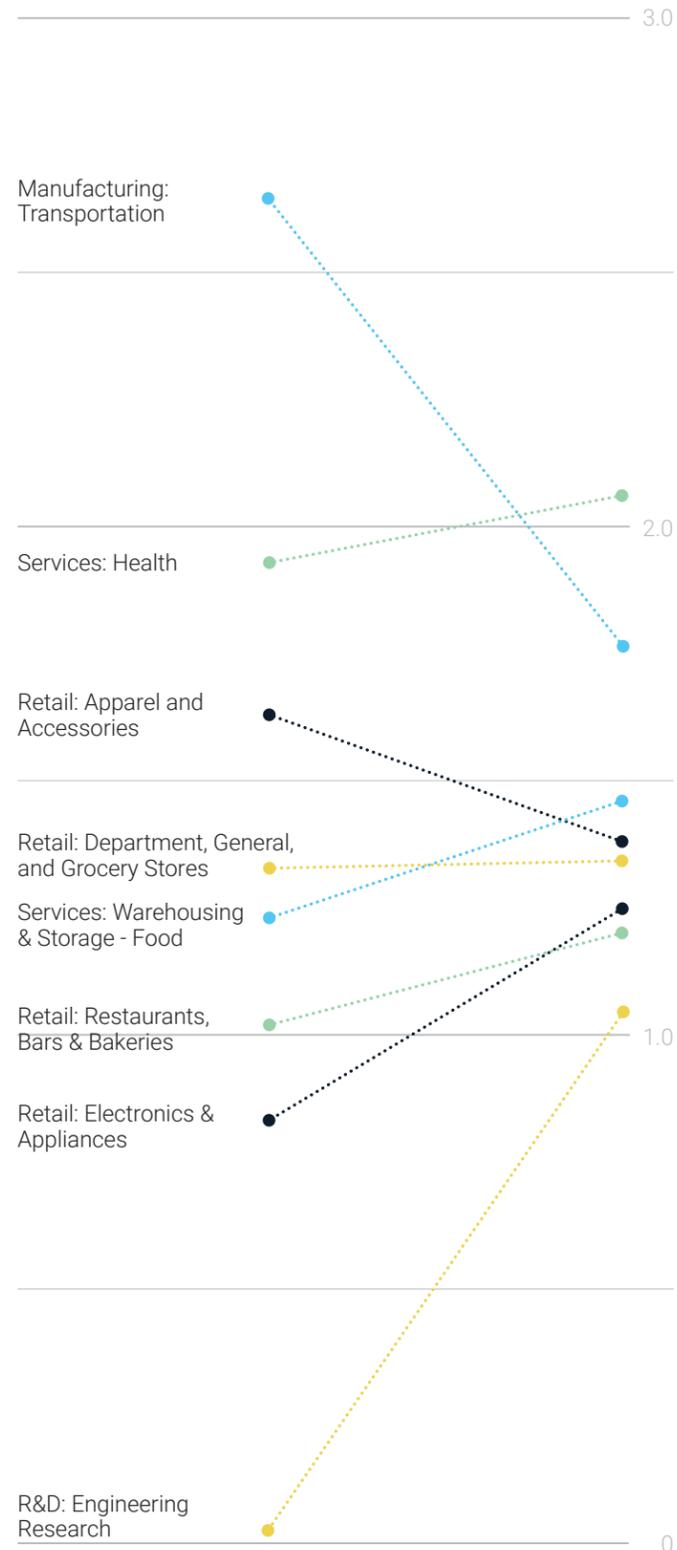
### Location Quotients Framework

Cluster	LQ Range	Framework
Under-Developed	< 0.4	Low probability of job creation
Long-Term Growth	0.4 – 0.8	Emerging opportunity for job creation
Medium-Term Growth	0.8 – 1.2	Core sectors for job creation
Short-Term Growth	1.2 – 1.6	Core sectors for job creation
Mature	1.6 – 4.0	Greater volatility in job creation vs. loss
Super Sector	> 4.0	Markets not limited by regional/national constraints

Source: AECOM

Engineering research (likely associated with SpaceX) has grown consequentially, with an LQ increase from 0 to 2.8 over the same period (Figure 25). Anticipated expansion of SpaceX operations in Boca Chica should bring significant opportunity for growth in engineering, aerospace, advanced manufacturing, and research and development (R&D) activities. The LRGV economy has seen more consistent growth in service sectors (retail, health care, transportation, and warehousing), while sectors that could support higher wages (e.g., manufacturing) have generally struggled.

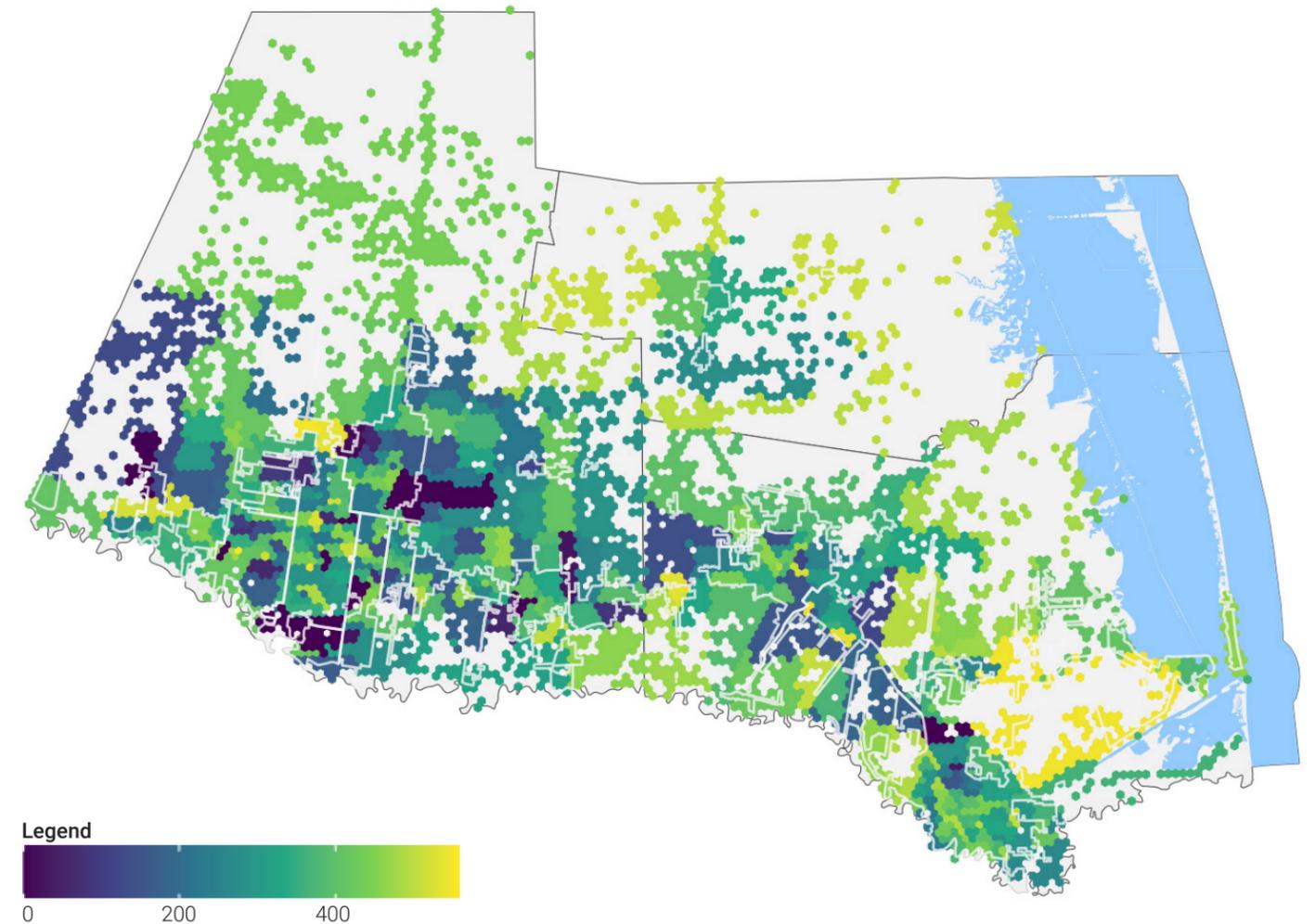
FIGURE 25  
Study Area Selected Location Quotient (LQ) Change, 2010-2022



Source: EMSI Lightcast, AECOM Calculation

FIGURE 26  
People Working in Wholesale and Retail Trade, 2021

A majority of people who work in the wholesale and retail trade tend to live in unincorporated areas, especially in Hidalgo County. In general, unincorporated areas are prone to flooding during heavy rain events making these workers particularly susceptible to loss of income and other issues during flooding events.



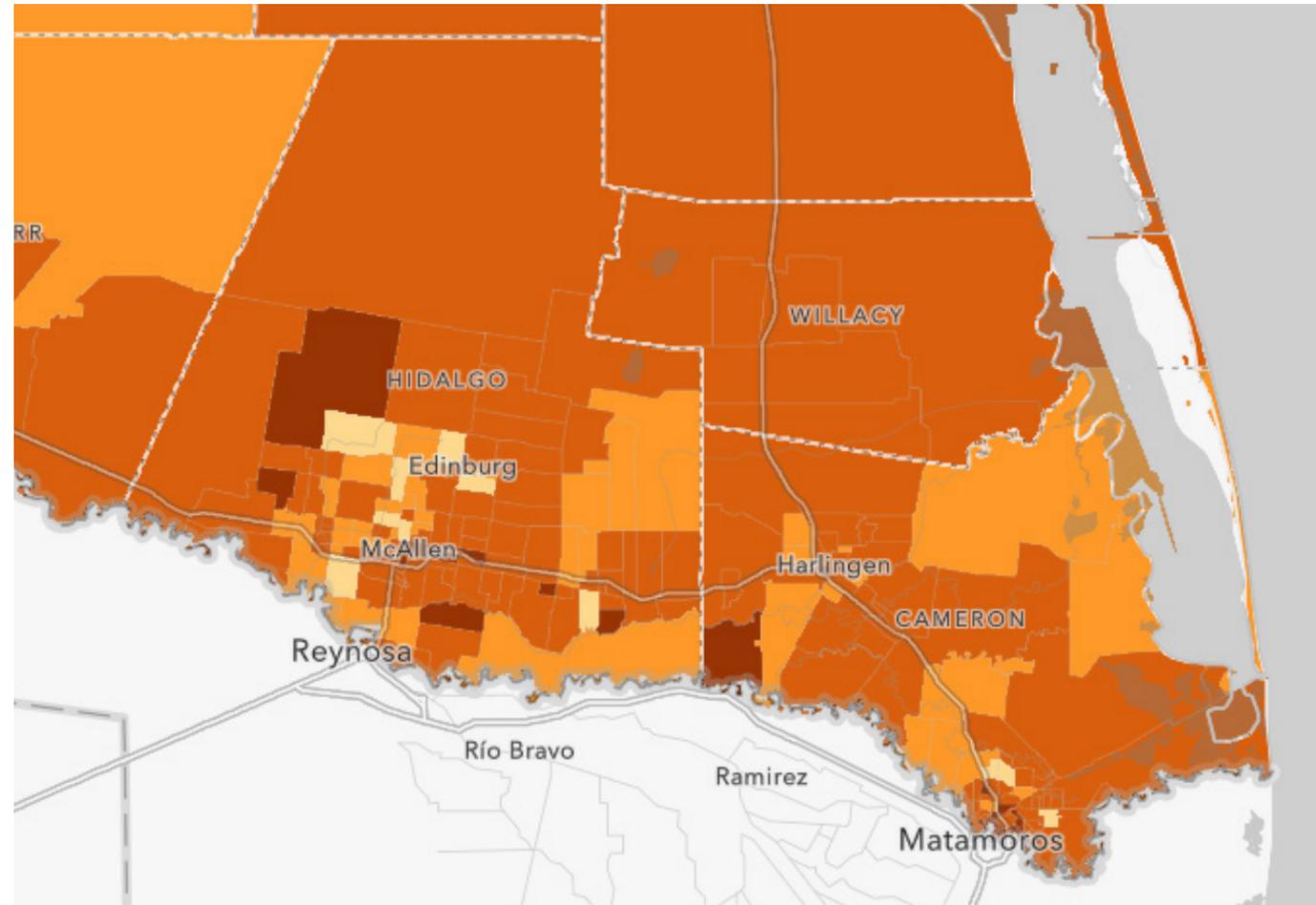
Source: U.S. Census Bureau

# 6 Quality of Life Amenities

In 2019, the U.S. Census Bureau published Community Resilience Estimates (CRE) that take into account individual and household characteristics related to risks using the 2019 ACS and Population Estimates Program. Scores for risk factors range from 0 (lowest) to 100 (highest). Factors include:

- Income to Poverty Ratio
- Single or Zero Caregiver Household
- Crowding
- Communication Barrier
- Households without FT, Year-round Employment
- Disability
- No Health Insurance
- Age 65+
- No Vehicle Access
- No Broadband Internet Access

FIGURE 27  
Percent Population Living in a Census Tract with 3 or More Risk Factors



**Legend**

- > 50 - 100
- > 30 - 50
- > 20 - 30
- > 10 - 20
- 0 - 10

Source: U.S. Census Bureau Community Resilience Estimates (CRE), 2019

The CRE shows that about 40% of Willacy County’s population live in census tracts with 3 or more risk factors, or 310,131 individuals. Cameron and Hidalgo had about 36% of their population living in these high-risk census tracts each (Figure 27).

The table below shows the average life expectancy between 2010 and 2015 for the study area at 78.2, compared to 77.9 for Texas, a high share of LRGV residents do not have health insurance. In 2012 about 36% of the population was not covered by health insurance, or 430,493 individuals; this share dropped to 30% in 2021, or 10% (Texas average for 2021 is 18%). Higher life expectancy also runs inconsistent with regional health outcomes across adult obesity, diabetes, smoking.

**Total People without Health Insurance**

County	2012	2021
Cameron	139,683	119,447
Hidalgo	283,994	264,565
Willacy	6,916	5,619
Study Area	430,593	389,631
Texas	5,695,586	4,995,381

**% Share of Total Population**

County	2012	2021	% Change
Cameron	35	29	-14
Hidalgo	37	31	-7
Willacy	35	29	-19
Study Area	36	30	-10
Texas	23	18	-12

Source: 2012 and 2021 5-Year ACS (Table B27001)



The LRGV offers world-class wildlife refuge and top bird watching destination in North America, with over 500 bird species according to local sources, with opportunities to expand into additional nature-related activities. Key assets include 3 wildlife refuges: Santa Ana National Wildlife Refuge (NWR), Laguna Atascosa NWR, the Lower Rio Grande Valley NWR, the World Birding Center sites, the South Padre Island National Seashore, alongside regional city & county parks. The region also boasts the Gladys Porter Zoo, a zoological and botanical park, and a multitude of historic sites on the National Register of Historic Places, including county courthouses, historic homes, commercial and industrial districts, battlefield locations, and archaeological sites. The region also benefits from access to assets including Arroyo Colorado, resaca channels, the Rio Grande River, and Laguna Madre including South Bay, in context with coastal wetlands and two salt lakes known as La Sal Vieja.

## Overview

The key findings and issues identified in the focus area analyses were categorized by themes to understand the major challenges and opportunities faced by the study area today and develop goals and strategies to improve economic resilience in the LRGV. Details for each theme can be found on the following pages.



### Factors Beyond Local Control



### Housing



### Labor Force/ Workforce Development



### Rural/Urban Divide



### Limited Industry Diversification



### Movement of Goods



### Movement of People



### Quality of Life and Social Infrastructure



## Factors Beyond Local Control

### Border

#### Federal funding for border operations and related infrastructure

The 2021 Texas Mexico Border Transportation Master Plan identified weaknesses that influence the movement of goods, and not all factors were under local control. For example, border delays at places such as the Pharr-Reynosa International Bridge are linked to a shortage of agricultural inspectors and the need for advanced border inspection technologies. Also, federal funding for border crossing infrastructure has not kept pace with cross-border trade growth.

#### Mexican economy impacting LRGV growth

The study area economy is influenced by proximity to consequential economic growth in Mexico, linked to historical expansion of maquiladora operations, but increasingly to manufacturing in general; expectations for expanded near-shoring will add fuel to current growth dynamics.



### Governance

#### Different regulatory standards between the U.S. & Mexico

Growth in truck traffic is influenced by both significant differences in fuel prices as well as different fuel standards between the U.S. and Mexico regarding sulfur content in diesel fuel. In the fall of 2022, the Mexican government postponed rulemaking regarding requirements for use of low-sulfur diesel until 2025. Low-sulfur fuels are generally known to reduce particulate and nitrous oxide emissions and improve air quality.

#### Regional fragmentation

The concentration of multiple local units of government within a single metro area tends to make regional planning across transit, infrastructure and economic development more challenging. The recent consolidation of three MPOs (Metropolitan Planning Organizations) into the RGVMP (Rio Grande Valley Metropolitan Planning Organization) shows progress being made in strengthening regional integration.

#### State legislative policy regarding the role of county government

Texas state law dictates that counties are subdivisions of the state, and therefore remain subject to the actions of the state legislature. This means that unlike municipal governments in Texas, county governments lack independent authority (e.g., land use control and ordinance authority). The reality of limited county government regulatory power has consequential impacts on LRGV counties, given the unique confluence of housing challenges across unincorporated and rural areas and colonias, particularly in the context of managing flood risk.



# Housing

## Flood Risk

### Expected increase in cost of insurance

Cost of insurance (wind, flood, and hurricane) for homeowners is expected to only increase. Research published by the Texas Windstorm Insurance Association argues that the 2022 residential rates would need to increase by 15% in order to adequately respond to predicted losses. In addition to the cost increase, homeowners in the coastal Willacy and Cameron Counties can access windstorm coverage through the Texas Windstorm Insurance Association whereas Hidalgo County residents cannot.

### Flood risk and home values

Within rural areas and colonias, increased flood risk is closely associated with decreased residential values. For Hidalgo County, unincorporated homes with flood risk have an average value of \$75,368 – 71% of the average value of homes in incorporated areas with flood risk. For Cameron County, homes in unincorporated areas with flood risk have an average value of \$88,338 – 65% of the average value of homes in incorporated areas with flood risk. Within urban areas exists a concern that the probability of increased future flood risk may not be priced into current home values. For example, in Cameron County, flood-prone homes carry a premium (avg. value: \$124,517) to homes with no flood risk (avg. value: \$83,001).

### Vulnerability of seasonal housing

Housing for seasonal use is concentrated along South Padre Island. U.S. Census data indicates that the majority of this housing (62%) was built prior to 1990. The Island's vulnerability to hurricane storm surges is well documented as shown in the example of Hurricane Allen that inundated the island in 1980. These relatively old housing units are known to be more vulnerable to natural disasters than newer units built by enhanced building codes.

### Community Resilience Estimates

U.S. Census Community Resilience Estimates (CRE) suggest that about 40% of Willacy County's population (310,131 individuals) live in census tracts with 3 or more risk factors, categorized as "high-risk." Cameron and Hidalgo Counties had about 36% of their population living in these high-risk census tracts each.

## Housing Affordability

### Home price acceleration relative to wage growth

Housing affordability is an emerging regional challenge. While incomes in the region have grown at a roughly 2.4% rate between 2010 and 2021, annual growth in home values across Cameron (6.8%) and Hidalgo (5.1%) has been faster. Trends for Willacy County point to faster growth in home values (11.6% annual growth since 2010), linked potentially to limited new housing inventory.

### Pressure on affordable housing units

The LRGV today offers a consequential supply of "naturally affordable" housing, in part due to the existence of significant substandard housing within cities, rural areas and colonias. Significantly, growth in both regional population job is leading to increased demand for housing. Since 2000, while LRGV cities have seen their shares of housing units valued at less than \$50,000 decrease significantly, rural areas appear to be struggling with limited inventory growth exacerbated by increased flood risk, more concentrated poverty, and constrained access to opportunity. With recent trends reinforcing acceleration in home values faster than wages, structural pressure on housing affordability is increasing.

For colonias adjacent to cities (e.g., Cameron Park near Brownsville), while neighborhood infrastructure has improved, significantly higher land and home values in adjacent neighborhoods may create pressure for displacement and gentrification in the long run. Sources such as Realtor.com point to considerable premiums in residential value "across the street" from Cameron Park, including new construction at prices ranging from \$250,000 towards \$400,000.

### Issues with Colonias

Based on the Texas Attorney General Database of colonias, the study area is home to the largest concentration of Colonia communities (roughly 50%). Hidalgo County has the highest number of study area colonias, a majority of them located in unincorporated areas. Scholars have pointed out that colonias "are not a phenomenon driven solely by lax regulation but also by high rates of poverty and the lack of affordable housing in cities." Thus, regulations alone will not prevent infrastructure-deficient developments from happening. Rather, alleviating poverty and supplying sufficient affordable housing units need to go hand in hand.

Past studies point to higher homeownership rates in Colonias (about 77%), with many purchases funded through contracts for deeds (CFDs) which tend to create higher risks for buyers. Since the 2000s, the Texas Colonias Fair Land Sales Act of 1995 and subsequent legislation in 2001 and 2005 introduced measures for better consumer protection by requiring a formal recording of all CFDs, proper disclosure of available utilities, financing, penalty, and default terms (in Spanish if the transaction was mainly done in Spanish). However, some Colonia residents still rely on this tool for various reasons ranging from a lack of financial resources, inability to access formal banking systems to immigration status.



**Colonias are not a phenomenon driven solely by lax regulation but also by high rates of poverty and the lack of affordable housing in cities.**

## Financing

### Impact of non-traditional home financing

While the region benefits from relatively high levels of owner-occupancy, the percentage of owner-occupied housing units that are financed by a mortgage is significantly lower (40.7%, compared to Texas and U.S. average at 57.0% and 62.1%, respectively). The share of owner-occupied housing units financed by mortgage is significantly lower for Willacy at 23% compared to Hidalgo and Cameron Counties at 41.4% and 40.1%, respectively.

## Mobile/Seasonal Homes

### Decreased share of manufactured homes

The LRGV historically supported larger shares of manufactured homes compared to U.S. and Texas average. Hidalgo County saw a decrease in the share of manufactured homes fall from 21% in 2000 to about 15% in 2021; Texas state average is about 7% in mobile homes as of 2021, which is only half of the LRGV share. Compared to Texas homeowners as a whole, owners of manufactured homes are more likely to be Latino, speak primarily Spanish and be younger than 35, and they are more than twice as likely to receive SNAP benefits. Manufactured homeowners have relatively low levels of educational attainment; just 12% of owners of manufactured homes have associate's degrees or higher, compared to 37% of all homeowners and 27% of renters.



# Labor Force/ Workforce Development

## Demographic Change

### A young region with less experience

The LRGV population remains relatively younger than state average; 32 in Cameron, 30 in Hidalgo, and 33.4 in Willacy County, compared to a statewide average of 35 years. While Cameron and Hidalgo Counties are seeing growth in median age, Willacy remains largely static, likely reflective of minimal population change. The study area labor force is also significantly younger than U.S. average, and as a result tend to lack the skills, abilities, certificates and educational background to compete for jobs in higher-paying industries (e.g., R&D and advanced manufacturing) relative to national labor force.

## Educational Attainment

### Educational attainment gap and low income

Across the LRGV, about 32% of the population aged 25 and over has no high school diploma, which is twice the Texas average. In Texas, 85% of the population holds a high school diploma or higher as compared to only 68% of the LRGV. Resulting pay and skills gaps tend to yield lower household incomes as reflected in a majority of LRGV employed residents (61.7% of total jobs) earning less than \$35,000 annually. The share of households in the LRGV with earnings from interest, dividends or net rental income was almost half the average for Texas, possibly reflecting the educational attainment gap.



## Vocational Training/Job Readiness

### Skills Gap

While study area major industries appear well-aligned with global end markets positioned for accelerated job growth, end markets linked to retail and tourism will tend to yield lower-wage jobs. Sectors linked to engineering and R&D (aerospace and automotive) are also positioned for growth, but would require a local labor force with more advanced skills and abilities.

The LRGV is over-weighted in occupations ranging from secondary school teachers, home health & personal care aids, fast food workers, police officers, farmworkers, telemarketers, middle school teachers, and retail salespeople, and under-weighted in occupations ranging from software developers, project managers, accountants, stockers & order fillers, and computer systems analysts. The average salary for under-weighted occupations is \$52,287, and for over-weighted occupations, \$43,850.

# Rural/Urban Divide

## Flood Risk

### Rural resident access to workplace during flooding

A majority of people who work in wholesale and retail trade, which is generally considered lower wage sectors, tend to live in unincorporated areas, especially in Hidalgo County. Overall, the unincorporated areas of the LRGV are relatively more prone to flooding during heavy rain events, making these workers particularly susceptible to loss of income due to the inability to travel to work when flooding happens.



“  
**The lack of public and active transit options poses a substantial financial burden on LRGV residents.**

## Industry Characteristics

### Discrepancy in rural economic performance

While Cameron and Hidalgo Counties are seeing steady growth from their top 15 industry clusters, for Willacy County, 5 of the top 15 industry clusters are experiencing job decline.

## Educational Attainment

### Unique challenges across unincorporated areas

Unincorporated areas are relatively disadvantaged compared to cities. For example, unincorporated areas have higher shares of the population without a high school diploma and are more isolated from schools and higher education institutions. These areas also have higher percentages of economically disadvantaged students, a high unemployment rate, and larger shares of the population not participating in the labor force.

## Housing Affordability

### Housing challenges for Willacy County

Housing trends for Willacy County diverge from trends across Cameron and Hidalgo Counties. Limited population growth and older or substandard housing appear to be structural impediments to growth. For Willacy County, the share of housing units valued at or less than \$50,000 has decreased at a slower rate, but from a higher baseline compared to the two other counties. In 2000, almost 80% of housing in Willacy County was valued at roughly \$50,000 according to the U.S. Census Bureau data. By 2021, this share had decreased to almost 50% of total housing. Across the top 10 Texas metro areas, the 2021 share of housing valued at or less than \$50,000 was about 4.6%, which is significantly higher than it is in Willacy County.

## Movement of People

### Limited cross-county trips

A majority of car trips within the region tend to be within a county, rather than between counties. Most trips are relatively short; 25% are less than two miles, nearly 60% are less than five miles, and 90% of trips by car are less than 16 miles. For rural residents, trips tend to be slightly longer. The lack of public and active transit options poses a substantial financial burden on lower income LRGV residents. More economic integration at a regional level may result in more cross-county trips.



## Limited Industry Diversification

### Wage Growth

#### Wage gap in healthcare service

While the healthcare service industry has grown considerably, analysis points to a considerable pay gap between high-skilled occupations (e.g., doctors and nurses) and low-skilled occupations (e.g., healthcare aides) in the same industry. The gap appears to be more concentrated in the study area compared to other regions across the nation.

#### Continued focus on lower wage service sector

Consistent with Dallas Federal Reserve border area research, the LRGV economy has seen consistent growth in service sectors (retail, healthcare, transportation, warehousing), while sectors that could support higher wages (e.g., manufacturing) have generally struggled. The LRGV economy is unbalanced as 56 out of 79 industry clusters (71%) are classified as underdeveloped or within long-term growth frameworks. Furthermore, roughly 40% of LRGV jobs are classified as mature or within long-term growth frameworks, which implies greater volatility in terms of job creation or loss.

### COVID-19 Impact

#### Lingering COVID-19 impact on unemployment

While the statewide economy is accelerating past the COVID-19 pandemic, the LRGV regional economy activity appears to continue to be overshadowed by the pandemic. For example, December 2022 unemployment rates remain above 2019 average annual totals.



## Movement of Goods

### Transportation Assets

#### Rural resident access to workplace during flooding

The LRGV transportation infrastructure faces pressure created by steady growth in north-south movement of agricultural products and manufactured goods largely by truck through Cameron and Hidalgo Counties destined for geographic end markets such as Dallas and Chicago. Global reshoring and near shoring trends are expected to support continued growth in advanced manufacturing in Mexico and further reinforce the LRGV's role as a front door to North American gateway for freight.

#### Increasing freight volume by rail

While the new West Rail Bridge in Cameron County resolved some concerns over at-grade railroad crossings and has the potential to slow the pace of growth in truck-based shipments across the border, expected growth in demand for rail shipments raises capacity concerns. Between 2015 and 2022, the number of loaded rail containers through Brownsville more than doubled from about 8,800 to more than 18,000 containers.

#### Impact of growing truck volumes

Truck volumes through the region's land ports of entry (particularly through Hidalgo County) have continued to grow. As historic LRGV trends show, truck volumes are expected to double every 20-30 years. Therefore, existing transportation infrastructure will need to keep pace, and strategies will be needed to address potential air quality and access issues particularly for lower-income residents, wear and tear on local streets, and congestion on both highways and local roads.



“

While the statewide economy is accelerating past the COVID-19 pandemic, the LRGV regional economy activity appears to continue to be overshadowed by the pandemic.



## Movement of People

### Reliance on Public Transportation

#### Limited public transit access

The LRGV transportation infrastructure faces issues resulting from continued growth in generally east-west movement of people, particularly in relation to limited public transit infrastructure. The analysis identified a regional tendency for shorter-distance resident trips within a county, rather than between cross counties, which may limit residents' access to higher-wage job opportunities. For lower-income households in rural areas and colonias, limited public transit tends to discourage longer commutes and reduce labor force participation, access to jobs, and other educational or training opportunities.

#### Zero-car households

A significant share (6.3%) of households in the region do not own a car. Although most zero-car households are in lower-income areas of Brownsville, McAllen, Edinburg, and Pharr, there are also many zero-car households in unincorporated areas bordering these cities. Trips via public transit tend to be slower based on analysis of Replica data, indicating that lower income households endure longer commutes and face more limited access to jobs, schools, and other educational or training opportunities.

### Air Traffic Disruptions

#### Commercial air traffic trends

Commercial passenger enplanements at LRGV airports have overall decreased in the past two decades, and enplanements have been declining relative to population. Total enplanements at the three international airports collectively decreased by 37% between 2000 and 2020. However, enplanements at the Brownsville South Padre Island International Airport grew by 67% between 2000 and 2021.



### Traffic Safety

#### Growing traffic congestion

The 2021 Texas Mexico Border Transportation Master Plan identified specific concerns over vehicle accidents along primary routes in the LRGV, at rates above Texas average.

### Transportation Assets

#### Unmet regional fair share

The LRGV has not historically received its "fair share" of incentive support from programs such as the Texas Enterprise Fund (TEF) compared to other metro areas in Texas. SATA group, an automotive parts manufacturer, is the only significant TEF investment in the last decade in the study area.

#### Heightened flood risk

National Oceanic and Atmospheric Administration (NOAA) data show how flash flooding has been the single largest cause of damage claims since 2010 (approximately \$300 million). The region has a number of emergency evacuation routes due to the prevalence of extreme weather events. However, there is a need for enhanced network redundancy and cross-border resilience planning in light of increasing system disruptions that hinder the efficient movement of people and goods across the border. For example, Rio Grande Valley flooding in 2010, Hurricane Harvey in 2017 and Hurricane Hanna in 2020 all led to road and border crossing closures.



## Quality of Life and Social Infrastructure

### Economic Productivity

#### Dependency ratios

Dependency ratios are calculated by dividing the total number of vulnerable populations (children and seniors) by the working age population. The findings show that in 2021, Cameron County had the highest dependency ratio (0.78) in the region, while Willacy County had the lowest (0.59). Overall, the LRGV had a dependency ratio of 0.70, a little higher than the average for Texas (0.62) and the U.S. (0.63). Willacy County's ratio dropped starkly between 2000 and 2021 from 0.77 to 0.59, respectively.

### Broadband access and digital divide

#### Broadband access gap

COVID-19 has widened a digital divide between lower and higher income households, with about 46.5% of households with income less than \$20,000 without an internet connection, compared to 11% of households with income more than \$75,000. The study area also has a lower share of households connected to cable, fiber optic, or DSL broadband compared to Texas and the U.S. average, and access to cable, fiber, and DSL broadband is especially limited in unincorporated areas.

### Air Quality

#### Worsening air quality

Data from the Texas Commission of Environmental Quality (TCEQ) suggests that air quality trends in the LRGV (24-hour pm 2.5) since 2000 have generally decreased, with a shift from "moderate" to increasingly "unhealthy for sensitive groups" days.

### Poverty/Unemployment

#### Poverty rates

In 2021, the LRGV regional poverty rate was 28%, compared to 14% and 13% for Texas and the U.S., respectively. The region continues to have a relatively high rate of poverty.



# 07

## Vision & Objectives for Phase II

Based on the initial findings in this report the following is the draft vision for Phase I and corresponding objectives. The vision statement and strategy objectives will be vetted, refined, and improved by the regions stakeholders and leadership to truly reflect the future economic development for the region.

### VISION

**The Lower Rio Grande Valley will be known as a collaborative region marked by increasing resilience with a sustainable economy that benefits all communities and individuals.**

### STRATEGY OBJECTIVES

1

Strategies to expand regional capacity to own, fund, and implement solutions to manage flood risk, encourage industry diversification

2

Strategies to expand access to reasonably priced housing and mitigate flood risk will be a cornerstone issue in supporting regional economic growth

3

Regional strategies to better integrate supportive infrastructure across workforce training, transit access, housing, and supportive services

4

Strategies which intentionally integrate economic development priorities for retention, expansion, and attraction with transportation planning priorities

5

Regional strategies to better integrate supportive infrastructure across workforce training, transit access, housing, and supportive services

6

Strategies to both validate geographies with consequential challenges, and implement infrastructure programs to improve resilience

7

While colonias have been a focus of public policy in Texas for more than 20 years (with a myriad programs available to support colonia residents) the analysis reinforces parallel challenges across rural areas within the LRGV (places not considered colonias), with trends across limited transit access, limited housing, unemployment, under-employment, and residents not participating in the workforce as concerns

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