# Coastal Bend Economic Development District COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY





2021-2026

About the Coastal Bend COG and CEDS	1
EXECUTIVE SUMMARY	2
BACKGROUND	4
Demographic and Socioeconomic Profiles	4
Environmental, Geographic, Climate, and Natural Resource Profiles	5
Infrastructure Assets	6
Industry Sectors and Clusters	7
Cluster Linkages	9
Building Resilience Through Change	10
Strategic Assessment for the Coastal Bend	10
GOALS & STRATEGIC ACTIONS	12
GOAL 1: Catalyze Resilient Economic Development	13
GOAL 2: Strengthen Resilient Infrastructure Investments	14
GOAL 3: Promote Workforce Agility	16
GOAL 4: Support Community Well-Being	17
ECONOMIC RESILIENCE	20
COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY COMMITTEE	22
APPENDIX:	23
REGIONAL ECONOMIC INDICATORS AND FULL SWOT ANALYSIS	23
Comparative Statistics	24
Economic Sectors	28
Labor Markets	29
Individual Community Profiles	30
Innovation Index – Indicators by County	41
Economic Designations for Federal Funding	74
CEDS Committee: SWOT Analysis	75



The Coastal Bend Council of Governments (CBCOG) was formed in 1966. In 1973 the CBCOG was designated an Economic Development District (EDD) by the U.S. Economic Development Administration (EDA) to coordinate regional economic development priorities. The CBCOG is one of 24 Councils of Government in the State of Texas serving as the Economic Development District and covers an 11-county region: Aransas, Bee, Brooks, Duval, Jim Wells, Kenedy, Kleberg, Live Oak, Nueces, Refugio, and San Patricio counties. The CBCOG develops and implements regional economic development strategies with the support from the U.S. Economic Development Administration (EDA), through the development of a Comprehensive Economic Development Strategy (CEDS).

CEDS is a strategy-driven plan for regional economic development. It is a planning process designed to build capacity and guide the economic resiliency of a region resulting in a document by which input from the region's public and private stakeholders establishes a strategic blueprint for regional collaboration and prosperity.

The CEDS is required by the EDA and is considered a priority for all of EDA's programs. The CEDS must be updated at least every five years and is meant to look forward and address a strategy for the next five years.

The EDA works in partnership with the CBCOG as the designated EDD for the region. Through an EDA Planning Grant, the CBCOG provides support to communities within the region to address problems associated with long-term economic distress as well as sudden and severe economic dislocations including recovering from the economic impacts of natural and man-made disasters, the closure of military installations and other federal facilities, and more. The EDD staff also serve as the local affiliate to the Texas State Data Center, which is responsible for the census.





The Texas Coastal Bend comprises an 11-county region situated along the bountiful Gulf of Mexico where diverse assets and opportunities for economic prosperity abound, yet a variety of natural and man-made risks threaten local to regional resilience. This 2021 Comprehensive Economic Development Strategy (CEDS) for the Coastal Bend was carefully crafted to address those risks while strengthening regional collaboration and partnerships to advance common economic resilience goals.

The 2021 CEDS builds on previous versions with updated economic statistics and analyses, while considering significant growth and challenges the region faced over the past 5 years. Both past challenges and those yet to come require a paradigm shift toward economic resilience and prosperity that centers on community well-being while fostering growth. This CEDS aims to reflect that aim by focusing on our greatest asset – our people. Using a Strengths, Weaknesses, Opportunities and Threats analysis, the CEDS highlights four key themes around which goals, objectives and strategic actions will be advanced, including: Resilience Economic Development, Resilient Infrastructure Investments, Workforce Agility and Community Well-Being. Importantly, in each theme, the cross-cutting theme of regional partnerships is carefully woven throughout.

It is only because of our partnerships and collaborations that we can address regional challenges, rebound from disasters and make gains toward economic resilience. Key among these is the CEDS Committee, a diverse group of 20 members from across the region representing varied interests, from economic development to municipal planning, academic resilience analysis, non-profit community issues and more. In finalizing the CEDS, the Committee also worked with additional key collaborative groups, including the Regional Resilience Partnership formed by the Coastal Bend Council of Governments and Texas A&M University Corpus Christi following Hurricane Harvey, the Coastal Bend Business Resources Working Group led by the Corpus Christi Regional Economic Development Corporation, as well as key individual organizations such as Workforce, Port industries and community organizations.



The CEDS further looks to its partners at state and federal levels to inform its actions and help strengthen its collaborations, including by incorporating key datasets and processes such as the Texas General Land Office's Economic Development Strategy and Diversification Study and the U.S. Economic Development Administration's evolving work and guidance on economic resilience. This is critical, as the CEDS Committee and Council of Governments do not have direct mission authority to address many of the actions contained herein, but will rely on partnerships and people to share capacity, data and information, strengthen regional assets and build resilience.

This Strategy is intended to guide regional collaborations and priorities over the next 5 years. Progress will be annually evaluated using performance metrics to ensure actions are being implemented while obstacles are identified and addressed. We invite all regional stakeholders to join us in advancing this vision for economic resilience and community well-being, which will make the Coastal Bend an even more remarkable place to work, live, raise our children and prosper.

We look forward to working with you toward our common, resilient future.

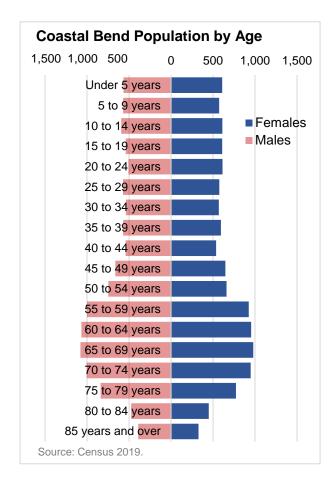
Dr. Katya Wowk **CEDS Committee Chair** Harte Research Institute for Gulf of Mexico Studies Texas A&M University Corpus Christi



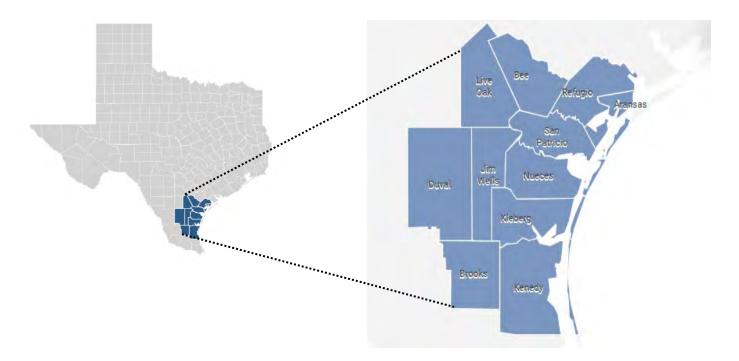
# **Demographic and Socioeconomic Profiles**

The Coastal Bend region had a population of 594,070 in 2019, according to Census figures. The three counties of the Corpus Christi metro area (Aransas, Nueces, and San Patricio) made up 76 percent of the regional population. The region experienced a 4 percent population growth between 2010 and 2019, compared with 15.3 percent for the state of Texas. The relatively slow regional population growth was attributable to outmigration, which occurred in all years after 2015. Population losses were more severe among rural counties as opposed to the urban counties of the metro area.

Outmigration of younger aged residents has resulted in an overall aging regional population. In 2019, opposite to national patterns, the population of cohorts between the ages of 50 and 79 exceeded that of the younger cohorts. The relatively smaller prime working age population between the ages of 25 and 54 has contributed to a relatively lower labor force participation rate.



# **Coastal Bend Economic Development District and Counties**



# **Environmental, Geographic, Climate, and Natural Resource Profiles**

The Coastal Bend Region is located on the broad Gulf coastal plain of Texas. CBCOG contains 11 counties in South Texas with a total land area of approximately 10,273 square miles. From the low-lying tidelands along the Gulf Coast, the surface rises gently culminating in gently rolling hill country in the inland counties. The coastal counties include Aransas, Kenedy, Kleberg, Nueces, Refugio and San Patricio, all of which are separated from the Gulf of Mexico by barrier islands. Between the coastal counties and the barrier islands lie numerous shallow bays, tidal flats and estuaries. The inland counties include Bee, Brooks, Duval, Jim Wells, and Live Oak. The land in these counties is primarily gentle to rolling hills and principal use is for cattle rangeland.

The Coastal Bend is rich in natural resource assets, including multiple river systems that drain central Texas and feed productive estuaries. The region is internationally known as a migratory bird hotspot – including the last wild migratory population of the federally endangered whooping crane – and also boasts grasslands to woody species that provide key habitat. These assets form the basis of the tourism industry, which is the region's third largest industry and a significant portion of the economy in some counties. For example, according to NOAA data, in 2018 employment in tourism and recreation represented some 80 percent of the economy in Aransas County (NOAA ENOW 2018).

Notably, the region is exposed to a number of climate and environmental risks, which are further discussed below, and is limited by access to freshwater supplies. With growth projections this has become a priority issue, including through the pursuit of desalination technology. Such options will prove critical to the future development and prosperity of the Coastal Bend, though they should be developed with a view to also strengthen environmental health by, e.g., ensuring careful design of intake and discharge locations, and limiting impacts to water quality.

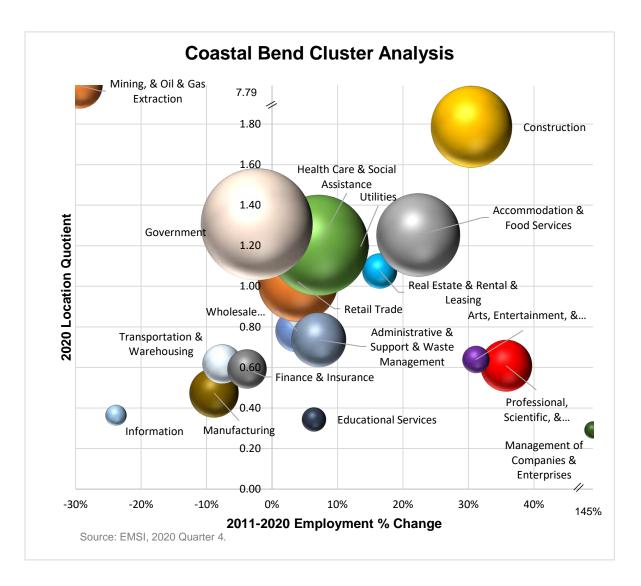


# **Infrastructure Assets**

The Coastal Bend region is near two major metropolitan areas. Houston, which is 200 miles to the northeast, attracts Coastal Bend labor and provides a marketing area for the region. San Antonio is 150 miles to the northwest and attracts Coastal Bend residents with jobs, tourist attractions and markets, while the Coastal Bend also is an attractive and regular tourist destination for San Antonio. To the south is the Rio Grande Valley and Mexican border with an urban area extending from Brownsville in the east to McAllen in the west. This area has a population of about 1,350,000 on the U.S. side and a greater amount on the Mexican side of the border. Laredo is directly west of the region and provides an inland port serving commerce on both sides of the International Border. Within the Coastal Bend, the Corpus Christi International Airport offers full commercial services. The region is also served by local airports and assets.

The Port of Corpus Christi is the third largest U.S. seaport by tonnage and is well positioned to take advantage of the increased traffic through the newly expanded Panama Canal and opening of trade opportunities with South America. The Port has continued to grow due to a 50-year ban on crude oil exports being lifted in 2015, emerging as the nation's top crude oil exporter in early 2020. Along with expansion in oil and gas export infrastructure, the Coastal Bend was able to attract the development of industrial manufacturing plants that use oil and gas as feedstock or energy, including a \$10 billion Exxon-Mobil/SABIC plastics plant and a \$1.9 billion Steel Dynamics steel mill. In addition, Cheniere Energy Inc.'s \$20 billion LNG facility yielded a significant number of local permanent jobs since opening in 2018. The development of these industrial facilities expanded the region's manufacturing sector and accompanying requirements for a skilled workforce.

The Coastal Bend also is home to significant and longstanding institutions, including two Naval Air Stations - NAS Corpus Christi and NAS Kingsville - that provide jobs and security to the region. In fact, NAS Corpus Christi includes the Corpus Christi Army Depot, which is the largest industrial employer in South Texas. Several higher education assets also exist in the region, including Texas A&M University Corpus Christi, Texas A&M University Kingsville, Del Mar College, Coastal Bend College, and the University of the Incarnate Word Corpus Christi Center. Further key programs offer training services, e.g., the Craft Training Center of the Coastal Bend and the Electrical Apprenticeship program at the International Brotherhood of Electrical Workers. Finally, Coastal Bend counties are part of Regional HealthCare Partnership 4, which includes a wide variety of public and private institutions focused on addressing chronic disease and health disparities, as well as enhancing access to primary and behavioral health care services.



# **Industry Sectors and Clusters**

An industry cluster is "a concentration of businesses and industries in a geographic region that are interconnected by the markets they serve, the products they produce, their suppliers, the trade associations to which their employees belong, or the educational institutions from which their employees or prospective employees receive training," according to the Texas Workforce Commission (2005). Industry cluster analysis is a framework that organizes observed business and economic data into meaningful groups called clusters. The objective is to identify key drivers in a regional economy.

The 2016 Coastal Bend CEDS identified five industry clusters for the region: Oil and gas, construction, industrial manufacturing, healthcare, and hospitality. The oil and gas cluster includes the upstream industries of oil and gas extraction and supporting activities; the construction cluster consists of residential, industrial, and roadwork construction. Industrial manufacturing is made up primarily of petrochemical and iron and steel manufacturing in the region. The healthcare cluster consists of the region's hospital systems, clinics, and other medical care facilities. The hospitality cluster includes visitor-oriented businesses, such as hotels and motels, as well as restaurants and arts and entertainment agencies that also cater to local residents.



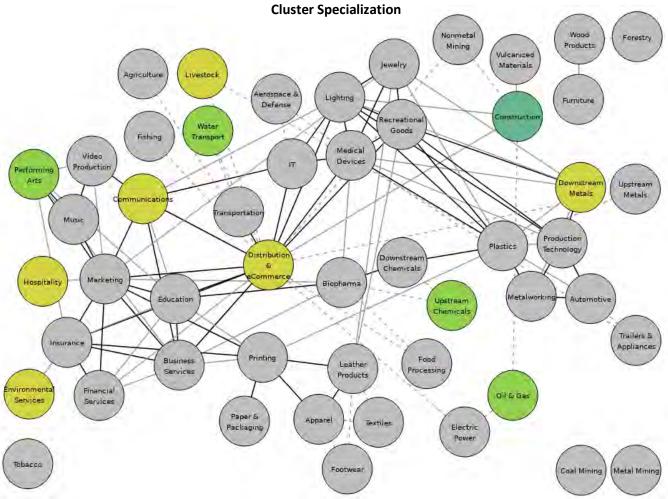
One common approach for assessing industry clusters draws on quantitative data, such as location quotients and shift-share ratios. A location quotient is a measure of an industry's concentration within a region relative to a benchmark, such as the nation. It is computed as the ratio of an industry's share of regional employment over that industry's share of national employment. If an industry's location quotient is greater than 1.0, then it has a larger concentration of employment within the region than employment in the same industry for the nation as a whole. Conversely, if a location quotient is less than 1.0, then the industry is not well represented in the region. Industries with a high location quotient are identified as key economic engines of a region. However, location quotients tell little about the growth patterns of regional industries, which can be measured as the percentage change of the employment level over a recent period.

The accompanying bubble chart plots the location quotients against the percentage changes of employment over the 2011-2020 period for a list of industries classified according to the 2-digit North American Industrial Classification Standards (NAICS). The size of each bubble represents the current employment size of an industry. Bubbles that are closer to the top right corner represent relatively larger regional industries that have also been growing at a relatively rapid pace. For the Coastal Bend, construction, which made up about 10% of the regional overall employment, stands out as one of those sectors. The construction industry's location quotient of 1.79 means its employment within the region is nearly 80% higher than the corresponding employment in the nation, and its employment has grown at a relatively strong pace of 30% between 2011 and 2020. Another relatively large industry that has also been expanding rapidly is accommodation and food services.

Opposite to those industries near the top right corner are industries that are relatively small and have been declining. These industries are information, manufacturing, transportation and warehousing, and finance and insurance. In contrast to those industries that exhibit the same relative size and growth patterns are two industries near the other corners of the bubble chart. These two industries are outliers that in fact fall off the scale for all other industries in the region. The first is the oil and gas extraction industry, which has a location quotient of 7.79, meaning an employment size nearly 8 times that of the nationwide average. However, employment in the region's oil and gas extraction industry has shrunk by about 30% since 2011. The other outlier is the industry of management of companies with employment only 30% of the size nationwide, but a relatively rapid expansion rate of 50% since 2011.

Overall, the industry cluster analysis highlights some key industries in the Coastal Bend that have continued to thrive (e.g., construction and hospitality), while identifying major but declining economic drivers (e.g., oil and gas) as well as new, emerging industries (e.g., business management).

# Cluster Linkages and Economic Diversification



# **Cluster Linkages**

To further evaluate the strengths of the industry clusters identified in the Coastal Bend, the above diagram shows the cluster linkages as part of Harvard Business School's Cluster Mapping Project. The analysis identifies "strong" clusters by comparing a cluster's location quotient to the location quotients of other regions throughout the United States. Clusters in the top 90<sup>th</sup> percentile of specialization (different from other regions) are in dark green, clusters in the top 75<sup>th</sup> percentile in light green, and other specialized clusters (i.e., LQ >1) are in yellow. Clusters are linked by lines, with solid black lines representing the strongest connection, followed by solid grey lines and then dotted grey lines.

Overall, the diagram indicates that the region is specialized in some clusters already identified above: construction, oil and gas, and hospitality. Also, the identified industrial manufacturing cluster includes upstream metals and downstream chemicals. In addition, this diagram highlights the economic significance of the Port of Corpus Christi in water transportation, as well as the two related industries of communications and ecommerce.



- Strong clusters above 90th percentile specialization
- Strong clusters above 75th percentile specialization
- Other specialized clusters (LQ > 1.0)
- BCR >= 95th pctile & RI >= 20%
- BCR 90th-94th pctile & RI >=
- Next closest clusters not meeting above criteria



# **Building Resilience Through Change**

It is important to recognize that though there have been key areas of growth, there also have been setbacks, including widespread disasters the region faced that threatened life and property. Hurricane Harvey in 2017, the 2020 COVID-19 pandemic and the 2021 winter storm all tore at the very fabric of our communities. Beyond those major disasters, there are also smaller, more localized disaster events that continue to cause destruction and challenge our way of life. Being situated along the Gulf of Mexico, the Coastal Bend is especially subjected to flooding and climate impacts, which are already occurring and are expected to worsen. When these events occur in areas with higher rates of poverty or vulnerable communities, the longstanding social and economic impacts are especially devastating. In addition, as oil prices have fallen against the COVID-19 pandemic, the Port of Corpus Christi and its industrial customers face challenging "bust" conditions once again, while the once-thriving tourism industry struggles to rebound after both a major hurricane and pandemic disaster.

As difficult as these crises have been, however, they also provide the necessity and opportunity to reimagine regional resilience. By identifying our Strengths, Weaknesses, Opportunities and Threats – both locally and across the region – Coastal Bend partners can prioritize actions needed for resilient change.

# **Strategic Assessment for the Coastal Bend**

The Committee conducted a SWOT analysis to assess the Coastal Bend's unique assets and competitive advantages, while also determining critical internal and external challenges. Key data gathered, summarized and analyzed for the exercise includes (among other data sets): US Census Demographic Data; Coastal Bend Cluster Analysis; Innovation 2.0 Comparison; AARP Livability Index; Stats America Opportunity Zones; US Bureau of Labor Statistics Census Bureau's Longitudinal Employer-Household Dynamics; Census Bureau's On The Map; Monthly Sales Tax Allocation Comparison Summary Reports; HUD Consolidated Planning/CHAS Data; Debt Delinquency; Headwater Economics Neighborhoods at Risk - Headwaters Economics; Regional Healthcare Partnership 4 Assessment; Texas Land Trends Data; Texas Almanac Geographic Data; and Post-Harvey Economic Recovery Data.



# STRENGTHS

- Infrastructure assets (e.g., Port of Corpus Christi / deep ship channel; established pipeline and rail networks; healthcare system for acute care; higher education system; land and abundant space)
- Strong existing sectors (e.g., Mining, Oil and Gas; Construction; Health Care; Hospitality; Agriculture; Military assets)
- Strong growth sectors (e.g., Renewable energy; UAV test center; Cybercommand; Logistics/Warehousing/Shipping)
- Competitive workforce skills (e.g., hospitality; welding; engineering; crafts/trades; scientific monitoring; agriculture)
- Key livability factors (e.g., climate, beach to bay lifestyle; ranching/hunting; decent paying jobs; cluster of higher academic institutions; Corpus Christi designated a Dementia Friendly City)

- Affordable and accessible housing options to meet the needs of aging, low-income and workforce populations
- Health challenges and lack of access to care in rural areas
- Degraded water infrastructure systems, street systems
- Distressed industry sectors such as oil and gas (on a decades-long decline) and hospitality (due to the COVID-19 pandemic as well as hurricanes/storms)
- Strategic needs such as meeting workforce needs of new large employers, providing innovative development opportunities requiring specialized skills, preparing workforce for high-paying jobs
- Local "brain drain"
- Broadband/fiberoptics access in certain areas
- Engagement from the region's vulnerable and/or underserved populations
- Using technology-based tools to widen the distribution of information and increase feedback





# **OPPORTUNITIES**

- Existing logistical advantages of the region with a deep-sea port
- Sources of tourism investment, e.g., birdiest city designation as well as vast ranchland
- Seventeen Opportunity Zones
- Growth potential of industry sectors, e.g., healthcare, manufacturing, remote work, renewable energy
- Shortened supply chain links with Mexico
- Workforce training program development
- Data-driven strategies through the Regional Resilience Partnership
- Integration of planning efforts, e.g., assessing housing and land use policies, streamlining processes for developers, promoting standardized building codes
- Redevelop brownfields and vacant space
- Distributed and advanced energy

- Economy-wide risk as well as industry-specific risks to petrochemical and heavy manufacturing
- Energy transmission
- Base realignment and closure
- Rail and roadway congestion
- Water quality and quantity
- Coastal flooding and land subsidence
- Climate change and increasing strength and frequency of tropical storms, as well as drought





**Vision:** The Coastal Bend region has strong local to regional assets to build economic resilience and attract sustainable economic prosperity while enhancing the quality, livability, cooperation and character of all communities.

Mission: Coastal Bend Council of Governments leads integrated planning to promote and coordinate projects of regional significance that advance and sustain economic vitality and resilience.

Resilience is the ability to prepare for, withstand and adapt to, and rapidly recover from changing conditions and acute disruptions. This includes economic resilience, which is a measure of a region's ability to continue functioning at certain capacity after a disruption or event. The following Goals, Objectives and Strategic Actions focus on advancing economic resilience in an era of climate, environmental and technological change. They are based on the foundation provided by the revised 2019 CEDS as well as the updated SWOT analysis, which found that the CEDS should continue to advance Goals to develop the region's economy, infrastructure and workforce. Given the risks posed by disasters to the Coastal Bend, including natural, industrial, technological and health-related disasters such as the COVID-19 pandemic, it was further determined that an additional Goal on community well-being is needed. Because the CEDS Committee and CBCOG do not have direct mission authority over these areas, but rely on partnerships to strengthen regional assets, the cross-cutting theme of regional partnerships is included throughout.

Working with regional partners, the CEDS Committee will focus on advancing these Goals, Objectives and Strategic Actions over the next five years. Action Groups and Performance Metrics also are included to specify how/by whom progress will be tracked in achieving Goals as well as the CEDS Vision and Mission. A general timeline for all actions can be found at the end of this section.



# **GOAL 1: Catalyze Resilient Economic Development**

Economic resilience is especially important to a region like the Coastal Bend that faces multiple risks from potential downturns and external shocks such as natural and man-made disasters. Building economic resilience will facilitate the region's ability to anticipate and evaluate how risks may impact key economic assets, while advancing a responsive capacity that can address regional needs pre- and post-disaster. Strategic Actions will strengthen and diversify the regional economy through a comprehensive economic development approach that works with partners to achieve common objectives.

# Objective 1.1: Coastal Bend counties have county-wide resilient economic development plans Strategic Actions

- 1. Conduct an annual Resilient Economy Workshop to provide research, technical assistance and economic data for the development of resilient economic development plans.
- 2. Advance GIS tools to facilitate inventories of public and privately owned land within county and city jurisdictions and to identify shovel ready sites, as well as persistent barriers.
- 3. Engage lower capacity communities to identify public and private needs and assets with a view toward promoting sub-regional economic development partnerships.
- 4. Support alliances to exchange information, share ideas, identify high priority needs and collaborate, with an aim to evolve the Texas Triangle to the Texas Star, an extension of the premier economic

# Objective 1.2: Resilient and diverse industries expand while local partners support innovation and entrepreneurship across small and mid-sized business

# Strategic Actions

- 6. Market regional strengths in computer science programs to industry partners.
- 7. Identify new services and clients for the Coastal Bend Business Innovation Center and Unmanned Aircraft Systems Test Center.
- 8. Facilitate expansion of new, innovative business, e.g., in telemedicine, farm to market, aquaculture, logistics and shipping, energy storage, manufacturing and renewable energy technology.
- 9. Provide opportunities for small and mid-sized business to network with large business.
- 10. Increase awareness of the Small Business Development Center around the region and to key national partners in support of enhanced use of services and resources for rural counselors.



# Objective 1.3: Coastal Bend has heightened attractiveness to global visitors and businesses Strategic Actions

- 1. Identify and promote tourism assets in the region with promotional advertising.
- 2. Create a shared regional website to market goods and services.
- 3. Promote the 17 opportunity zones in the Coastal Bend to attract diverse partners.
- 4. Advance GIS tools to facilitate inventories of utilities accessibility (power and water) to attract industry.
- 5. Develop an inventory of capital providers to expand access to investments for existing and new businesses and entrepreneurs in the region.

# **Action Groups:**

• CBCOG CEDS Committee, local economic development and planning agencies, local convention & visitors bureaus (e.g., Visit Corpus Christi), local chambers of commerce, higher learning institutions (regional universities and community colleges) and their research units

# **Measuring Progress:**

• Number of new and existing businesses; number of visitors; amounts of capital investments; evidence of regional collaboration and partnerships (e.g., regional websites)

# **GOAL 2: Strengthen Resilient Infrastructure Investments**

Strengthened and expanded physical and digital infrastructure is critical to the Coastal Bend Region's economic development and quality of life. CEDS entities will support cooperative and regional planning on issues related to broadband, water resources, housing, transportation connectivity, supply chains, land use, storm water management and more, especially considering infrastructure assets in light of climate and environmental change, e.g., increased intensity or frequency of hurricanes, flooding and drought.

# Objective 2.1: Digital infrastructure assets are expanded and strengthened Strategic Actions

1. Encourage communities to incorporate planning for future fiber optics in public improvement projects.



- 2. Advance partnerships to improve reliability and functionality of information, communication and energy infrastructure.
- 3. Pursue regional funding for improved broadband throughout the 11-county region to ensure a minimum service level enabling online education and work.

# Objective 2.2: Water infrastructure assets are expanded and strengthened

# Strategic Actions

- 1. Support initiatives to secure additional water supply sources to meet future development in the region, including responsible seawater desalination.
- 2. Advance water conservation partnerships and programs to safeguard existing water supplies.
- 3. Encourage low impact development and resilient stormwater management practices.
- 4. Strengthen wastewater infrastructure and expand where needed.

# Objective 2.3: Transportation connectivity and mobility are enhanced

### Strategic Actions

- 1. Enhance access to coordinated public and private regional transportation services.
- 2. Advocate for novel transportation approaches, such as passenger rail linkage to San Antonio and Houston, local water transportation options, etc.
- 3. Advance feasibility studies for new airports and facilities in the region.
- 4. Identify transportation connectivity needs related to affordable housing.

# Objective 2.4: Housing affordability is advanced with a diversity of resilient housing options to all *Strategic Actions*

- 1. Facilitate discussions to build consensus among stakeholders on resilient housing needs and options.
- 2. Increase housing supply with a priority on affordability and attainability for seniors, individuals with disabilities, and households at the lowest income levels.
- 3. Increase opportunities for home ownership among lower income households and rural communities
- 4. Advocate for best practices and streamlined processes for developers that focus on building resilient housing for vulnerable populations.



# Objective 2.5: Development opportunities are maximized by minimizing vacant properties *Strategic Actions*

- 1. Engage communities where vacant properties exist to gather local input in visioning processes.
- 2. Assist city officials in formulating incentives for infill development.
- 3. Develop regional best practices for ordinances that encourage occupancy of vacant land.

# **Action Groups:**

• CBCOG CEDS Committee, local economic development and planning agencies, local government and housing development agencies, Corpus Christi Regional Transportation Authority

# **Measuring Progress:**

Number of infrastructure projects funded by federal or state government; funding for enhancing broadband infrastructure; capital investments in water supply, wastewater treatment infrastructure; income-based housing supply; numbers of vacant properties

# **GOAL 3: Promote Workforce Agility**

Regional workforce development is needed to support a growing, competitive and resilient economy. CEDS focuses on building a trained, educated, highly skilled and diversified workforce to support alignment of workforce activities throughout the region, including through new partnerships for expanded community outreach.

# Objective 3.1: A regional, highly skilled workforce is strengthened and positioned for higher wages Strategic Actions

- 1. Support development of vocational and technical training for K-16 to better prepare youth entering the workforce, and for continuing adult education, particularly in innovation and technology.
- 2. Build partnerships to facilitate the Texas 60x30 goal, including by advocating for state and local funding to expand apprenticeship programs focused on upskilling rural communities.
- 3. Expand and market technology programs, including in advanced manufacturing, computer science, Unmanned Aircraft Systems and artificial intelligence.
- 4. Support development of green industry job training, such as in renewable energy, soil science, conservation, etc.



5. Promote remote Coastal Bend workforce and business support capabilities to leverage fast-growing markets in large cities, e.g., San Antonio and Austin.

# Objective 3.2: Collaboration is expanded for workforce planning, information networks and outreach *Strategic Actions*

- 1. Expand access to workforce goals, strategies, studies and plans through the CBCOG economic development web page.
- 2. Advance marketing to expand MSA strategic educational and workforce plans to the broader region.
- 3. Facilitate recruitment of retiring workforce experts as instructors.
- 4. Support the Texas Veterans Commission in connecting retirees to Coastal Bend Workforce Solutions, and particularly with military at the Corpus Christi and Kingsville locations.

# **Action Groups:**

• CBCOG CEDS Committee, local economic development and planning agencies, Workforce Solutions of the Coastal Bend and its workforce training partners (e.g., Citizens for Educational Excellence), local ISDs and regional higher learning institutions, Coastal Bend Craft Training Center

# **Measuring Progress:**

• Enrollment in the region's apprenticeship, vocational training, STEM and other post-secondary degree programs; composition of job skills and occupations; wage and employment growth; K-12 State of Texas Assessments of Academic Readiness (STAAR) test results

# **GOAL 4: Support Community Well-Being**

Advancing community well-being is a theme that underpins and intersects with strong and resilient economies, infrastructure and workforce. Building community well-being and resilience is about fostering the collective ability to understand risks, diversify community strengths and establish safeguards to better mitigate disaster impacts. This goes beyond the physical aspects of disaster events to create stronger economies and social systems while providing access to and expertise in technologies that enable self-healing, such as smart grid systems. This is a critical point for small and rural communities that do not have the resources and capacity needed to pursue such goals, and as such, a key priority for this theme is to build local to regional capacity.



# Objective 4.1: Quality of life programs and opportunities are made accessible to all Coastal Bend communities

# Strategic Actions

- 1. Increase the percentage of children enrolled in pre-K programs.
- 2. Build on regional healthcare and wellness assets to improve access to quality care and programs, with a focus on small town and rural areas.
- 3. Promote and support Corpus Christi's designation as a Dementia Friendly City.
- 4. Support and expand partnerships for air quality, water quality and natural capital assets.
- 5. Conduct an annual survey on quality-of-life issues and provide opportunities to build social resilience.

# Objective 4.2: Capacity is built across local agencies and businesses to prevent, prepare for, respond to and recover from disaster events

### Strategic Actions

- 1. Implement and expand the Regional Resilience Partnership (RRP) and additional networks to provide capacity building services and innovation for data-driven resilience strategies.
- 2. Use Leadership Corpus Christi as a model to develop a Regional Leadership Program.
- 3. Support loan funds such as LiftFund for local governments after a disaster, with targeted assistance to small communities that do not compete well in funding options.
- 4. Strengthen coordination of support networks in disaster emergency management and response to assist low-income households and other vulnerable populations.
- 5. Conduct education campaigns to the general public and business communities that focus on disaster mitigation and local sustainability initiatives.

# Objective 4.3: Local to regional projects are advanced to mitigate disaster risk

# Strategic Actions

- 1. Coordinate GIS dataset integration across Coastal Bend communities and provide training on applications and use for resilience planning, especially through the launch and expansion of the Geospatial Resilience Economic Development tool (GeoRED).
- 2. Advance natural infrastructure projects to protect against storm surge and flooding while providing additional opportunities such as recreation.
- 3. Enhance collaboration between the scientific community, engineering professionals, university researchers and municipal government, especially to advance adaptation planning for regional landuse, extreme weather events and environmental change.



# **Action Groups:**

CBCOG CEDS Committee, local economic development and planning agencies, local civic and social support networks (e.g., Coastal Bend Disaster Recovery Group), higher learning institutions (regional universities and community colleges) and their research units (e.g., GeoRED team), Workforce Solutions of the Coastal Bend and its workforce training partners (e.g., Citizens for Educational Excellence), local ISDs and regional higher learning institutions,

# **Measuring Progress:**

Enrollment in pre-K and other early childhood programs; local quality of life rankings in the U.S.; natural disaster mitigation workshops and infrastructure investments; evidence of collaboration and applications of GIS-based data for disaster risk mitigation and emergency response

# **Timeline**

Over the next five years, the CEDS Committee will work with Action Groups and additional partners to implement strategic actions to advance objectives and goals. The Committee will carefully track progress and identify and document barriers to progress, such that challenges can be identified and, where possible, addressed. In following a methodological process of engagement, data collection and assessment, evaluation and revision, the Committee will be able to work with partners to advance regional economic resilience.





Numerous factors determine a region's resilience to natural disasters. The Hazard and Vulnerability Research Institute at the University of South Carolina has developed the Baseline Resilience Indicators for Communities (BRIC) as quantitative measures of those factors. BRIC consists of six broad sub-categories of indicators: social (e.g., educational attainment, access to transportation and physicians), economic (e.g., homeownership, income equality and economic diversity), housing and infrastructure (e.g., temporary housing availability, housing construction standards, high-speed internet availability), community capital (e.g., participation in civic organizations and other social networks), institutional (e.g., mitigation spending, disaster aid applications, insurance coverage), and environmental (e.g., flood buffers, storm frequency).

BRIC values in each sub-category range from 0-1 and are summed to create an overall score theoretically ranging from 0-6 for each county, with 0 being less resilient and 6 being more resilient. The following table shows values for Coastal Bend counties calculated from 2015 Census data. While there are strengths across the breadth of factors that contribute to overall resilience in Coastal Bend communities, there also is a need for progress. The CEDS will work to achieve that progress by strengthening BRIC indicators while also working with communities on locally tailored approaches that also build regional resilience.

**Baseline Resilience Indicators for Communities (2015)** 

County	Social	Economic	Housing /Infra- structure	Community Capital	Institutional	Environ- mental	Overall
Aransas	0.59	0.39	0.26	0.33	0.46	0.66	2.69
Bee	0.62	0.37	0.17	0.36	0.40	0.55	2.49
Brooks	0.53	0.41	0.28	0.40	0.38	0.57	2.56
Duval	0.54	0.36	0.24	0.44	0.37	0.59	2.54
Jim Wells	0.64	0.41	0.27	0.38	0.40	0.58	2.68
Kenedy	0.58	0.33	0.27	0.28	0.35	0.58	2.39
Kleberg	0.65	0.41	0.31	0.38	0.39	0.59	2.73
Live Oak	0.63	0.38	0.26	0.36	0.38	0.57	2.58
Nueces	0.68	0.44	0.31	0.35	0.49	0.57	2.84
Refugio	0.60	0.39	0.29	0.44	0.42	0.60	2.73
San Patricio	0.67	0.43	0.23	0.36	0.48	0.58	2.74

Source: Hazards & Vulnerability Research Institute, University of South Carolina.



Overall, more urbanized counties, such as those in the Corpus Christi metro area and Kleberg, tend to exhibit greater resilience. A recent study (Lee, 2021) finds that the particular indicators for social, economic and community capital attributes help explain how fast the communities in the Coastal Bend and Southeastern Texas recovered from the devastation of Hurricane Harvey in 2017.

To foster the region's economic resilience, the Coastal Bend Council of Governments and CEDS committee members will continue to review and implement the action plans in the Economic Development Strategy and Diversification Study recently conducted by the Texas General Land Office (January 2021). According to the study, regional resilience is fostered through economic inclusion and diversification. The study's recommended strategies also align with the CEDS, including to:

- 1. Expand capacity of economic development agencies to pursue economic resilience initiatives and focus on business retention and expansion efforts.
- 2. Provide resources for branding and marketing locally produced goods and expand global market demand.
- 3. Develop a collaborative of workforce training entities to identify "in demand" occupations and transferable skills.
- 4. Enhance collaboration across stakeholders to grow an innovation ecosystem and start a business incubation program.
- 5. Promote investments in healthcare to improve economic opportunity as well as quality of care.
- 6. Collaborate with economic development entities to establish a "Business Recovery One-Stop Center" to provide resources to businesses in the wake of disasters.
- 7. Improve access to job opportunities through the expansion of transit services.

The CEDS Committee and partners will continue to advance the goals, objectives and strategies outlined herein to strengthen the economic and community resilience of the Coastal Bend – this special place to live, work and raise our children, and as one County Judge put it, the crown jewel of Texas.

I call our Coastal Bend the crown jewel of Texas ... From our beaches to the bay, from city to country, we are blessed with natural beauty and resources. I was born and raised here, and as County Judge, I took an oath to ensure that future generations will be able to live, work, prosper, and enjoy this magnificent region. Today is an important step in delivering on this promise. "

Nueces County Judge Barbara Canales' remark on the approval of a \$2.7 million grant from the Texas Water Development Board on May 20, 2021, for studying watershed shared by Nueces, Jim Wells, and Kleberg Counties.







Sheasby, Yvonne

Hale, Chris



























# **COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY** COMMITTEE

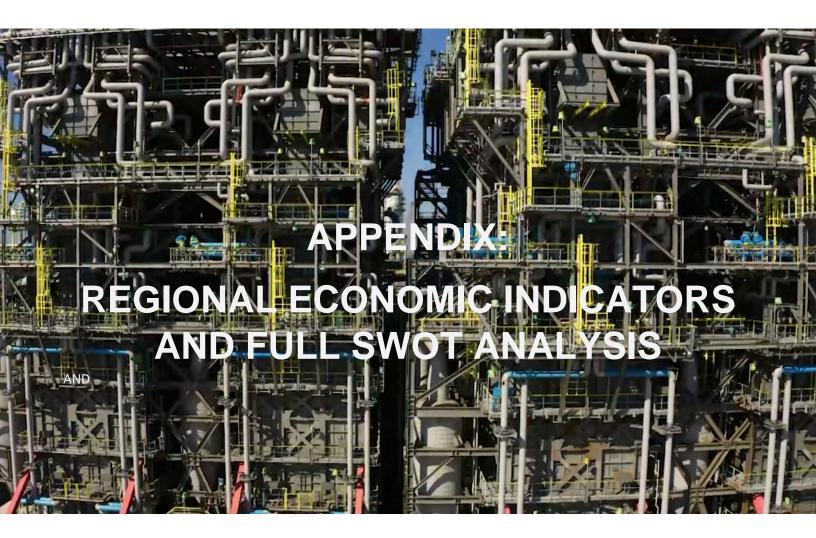
Harte Research Institute / TAMUCC

Harte Research Institute / TAMUCC

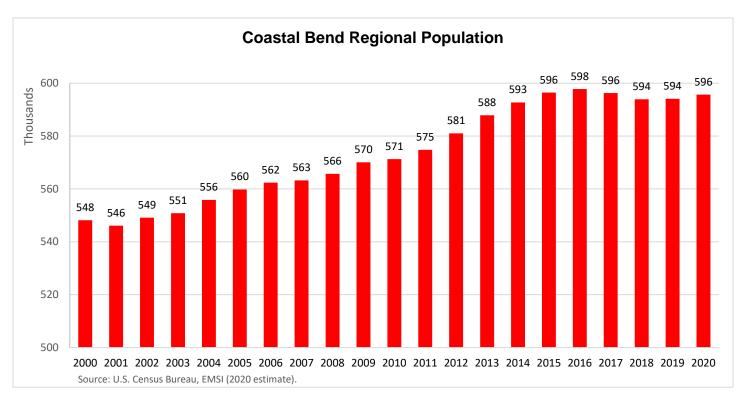
A LANGE OF	Name 1	COMMITTEE
Member Name	Area of Representation	Affiliation
Bennis, Ashley	Coastal Bend	Texas Sea Grant
Bryant, Christine	City of Corpus Christi	Corpus Christi Regional Economic
		Development Corporation
Casper, Craig	Corpus Christi Metropolitan Area	Corpus Christi MPO
Costanzo, Keren	City of Corpus Christi, Nueces County	City of Corpus Christi
Cross, Ginny	Corpus Christi and Regional Partners	United Corpus Christi Chamber of Commerce
Echeozo, Uche	Kleberg County	City of Kingsville
Fierova, Ann	Coastal Bend	Del Mar College
Herring, Virginia	City of Three Rivers, Live Oak County	City of Three Rivers
Laubach, Wendy	Aransas County	County commissioner
Johnson, Marty	Coastal Bend	World Affairs Texas
Korus, Dan	Coastal Bend	Del Mar College & Military Task Force
Lee, Jim	Coastal Bend	Texas A&M University Corpus Christi
Martinez, Larry	City of Alice and Jim Wells County	Alice & Jim Wells County Economic
		Development Corporation
Matula, Anne	San Patricio County	San Patricio County
Oetting, Brett	Corpus Christi	Visit Corpus Christi
Paulison, Bob	Corpus Christi Metropolitan Area	Port Industries
Pollack, Jeff	Port of Corpus Christi	Port of Corpus Christi
Rhoades, Philip	Coastal Bend	Texas A&M University Corpus Christi
Telge, Judy	Coastal Bend	Coastal Bend Center for Independent Living
Wowk, Katya (Chair)	Coastal Bend	Harte Research Institute / TAMUCC
Staff Name	Area of Representation	Affiliation
Martinez, Emily	Coastal Bend	Coastal Bend Council of Governments
Afuso, Mary	Coastal Bend	Coastal Bend Council of Governments
Simms, Shelby	Coastal Bend	Coastal Bend Council of Governments

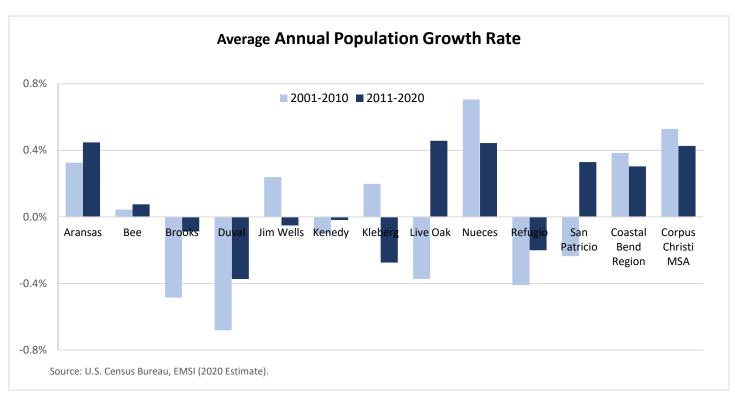
Coastal Bend

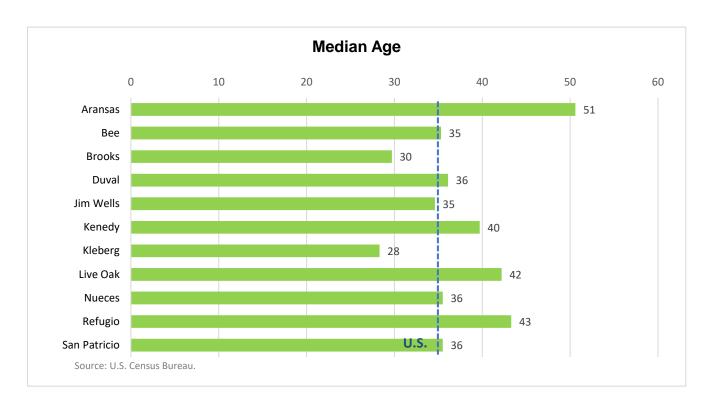
Coastal Bend

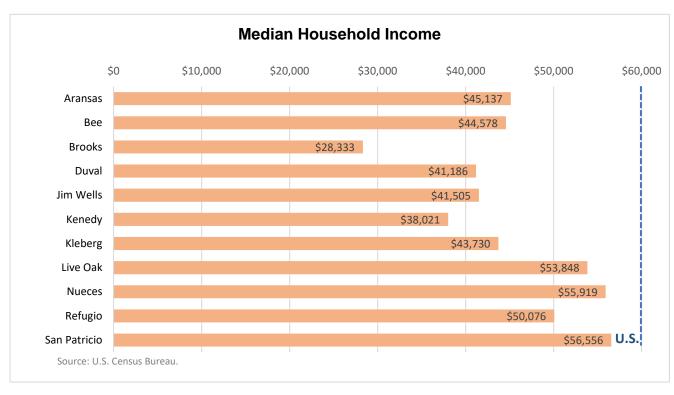


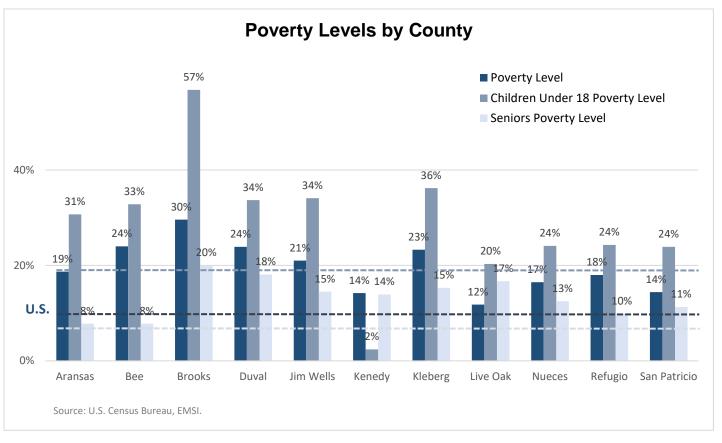
# **Comparative Statistics**

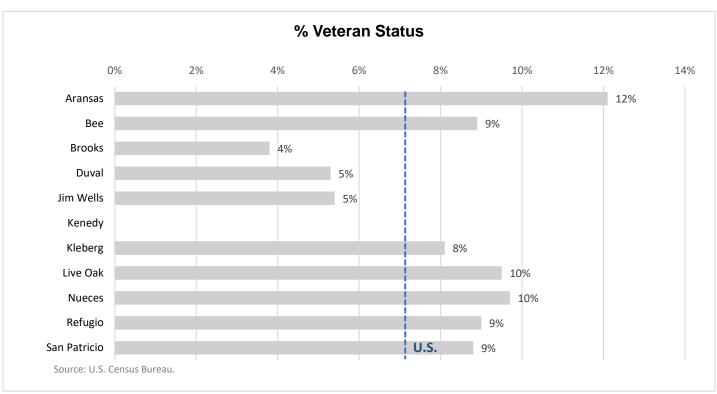












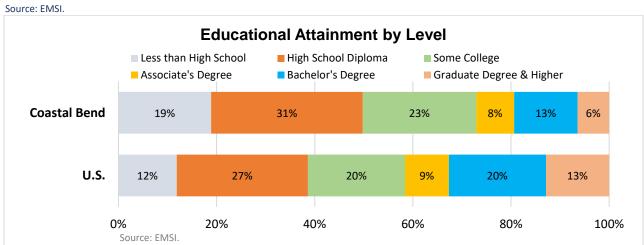
**Coastal Bend Region Population Change by Age Group** 

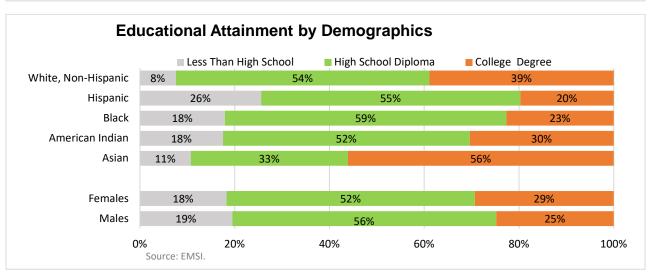
	2001	2020	Change
Under 20	170,536	159,633	-6%
20 to 24	40,304	43,003	7%
25 to 39	110,190	123,558	12%
40 to 54	112,248	103,520	-8%
55 to 69	65,461	100,433	53%
70 to 84	38,964	54,796	41%
85 & Over	7,103	10,919	54%

Source: EMSI.

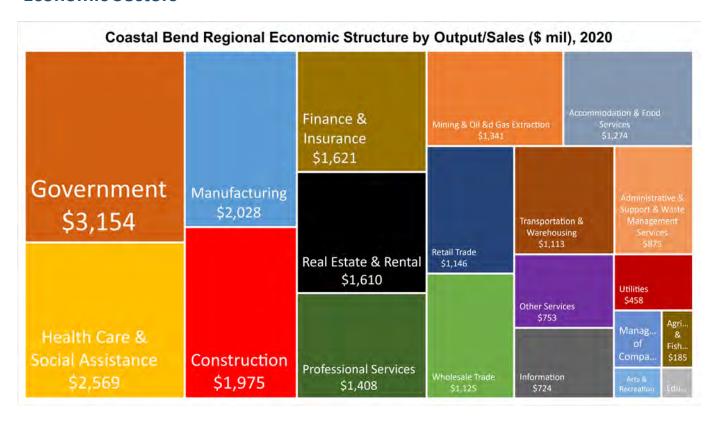
**Coastal Bend Population by Race/Ethnicity** 

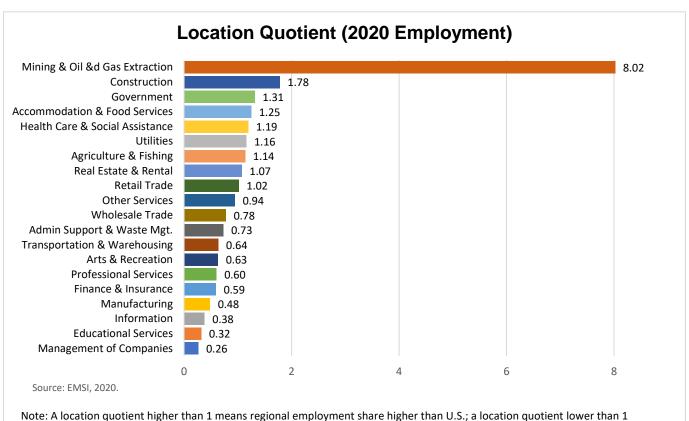
Race/Ethnicity	2001	2020	Change	% Change	% 2020 Total
Hispanic	302,586	368,859	66,273	22%	62%
White, Non-Hispanic	204,632	177,251	-27,381	-13%	30%
Black	20,014	18,906	-1,108	-6%	3%
Asian	5,553	9,989	4,436	80%	2%
Two or More Races	3,358	5,433	2,075	62%	1%
American Indian	2,433	3,853	1,420	58%	1%
Other	6,230	11,570	5,340	186%	2%
Total	544,806	595,861	51,055	9%	100%



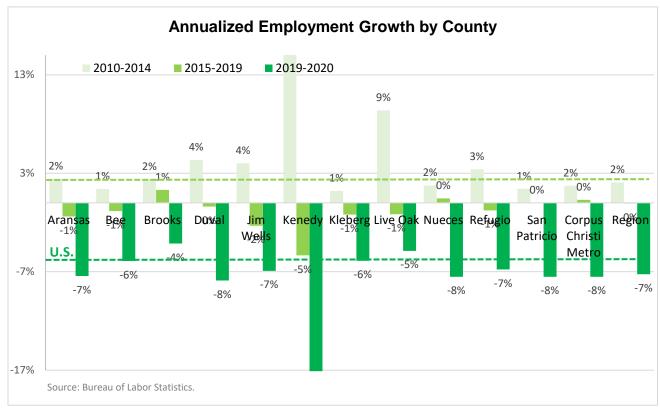


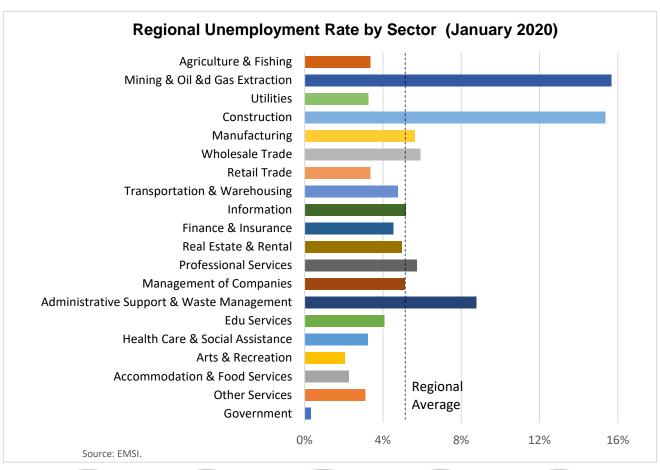
# **Economic Sectors**





# **Labor Markets**



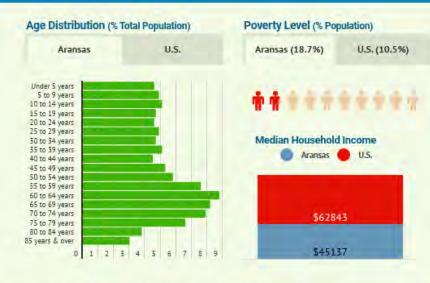


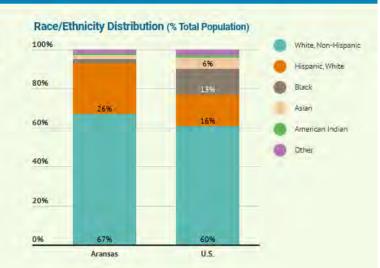
# **Individual Community Profiles**

# **Aransas County**

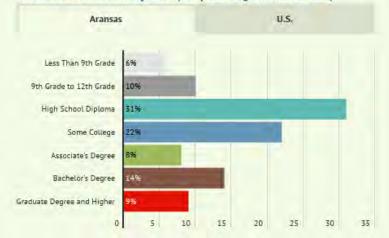
Socioeconomic Profile

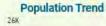


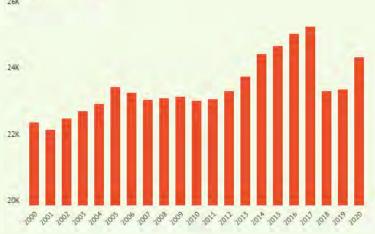




# Educational Attainment by Level (% Population Aged 25 Years & Older)



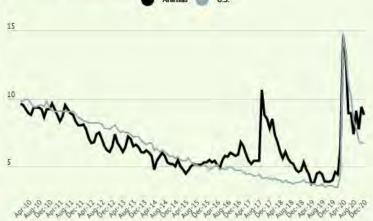




# **Economic Composition by Sector**





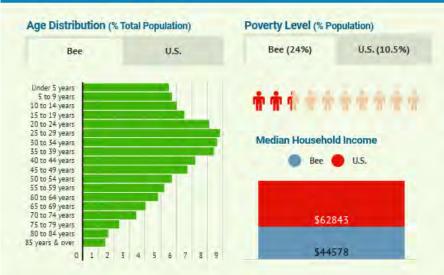


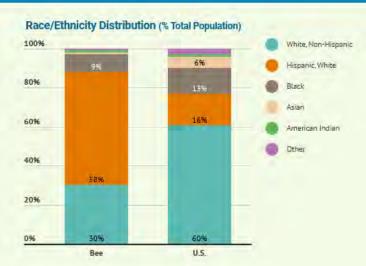
Data Sources; EMSI, TAMU Real Estate Center, Texas Workforce Commission.

# **Bee County**

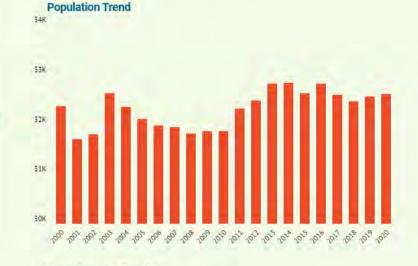
Socioeconomic Profile



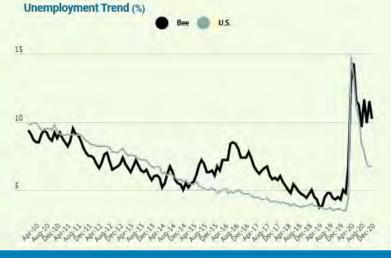




### Educational Attainment by Level (% Population Aged 25 Years & Older) U.S. Bee Less Than 9th Grade 10% 9th Grade to 12th Grade High School Diploma 35% 26% Some College Associate's Degree Bachelor's Degree Graduate Degree and Higher 15 25 30 35





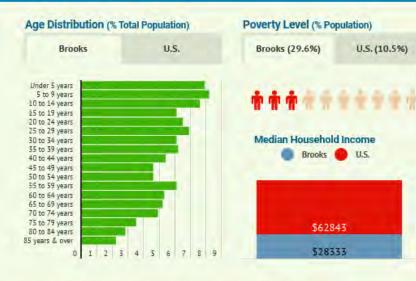


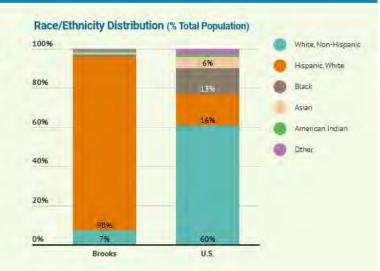
Data Sources: EMSI, TAMU Real Estate Center, Texas Workforce Commission.

# **Brooks County**

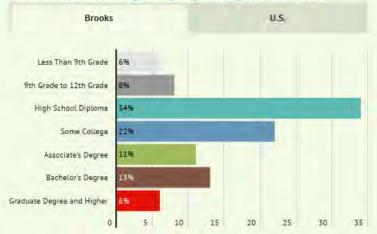
# Socioeconomic Profile

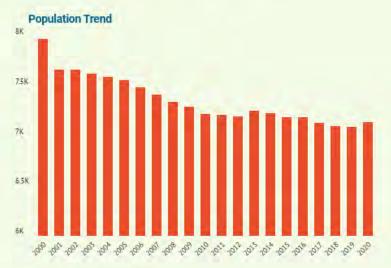






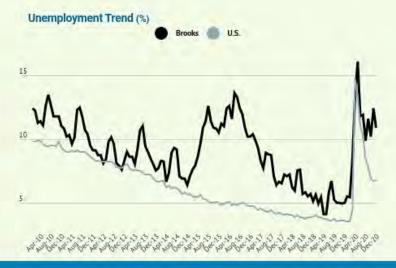
### Educational Attainment by Level (% Population Aged 25 Years & Older)





# **Economic Composition by Sector**



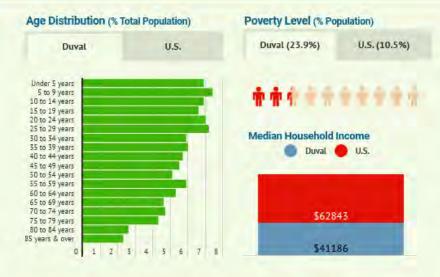


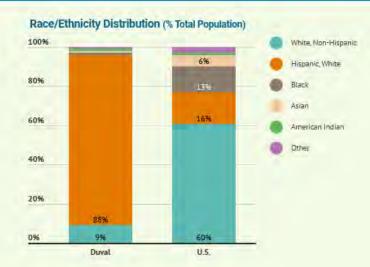
Data Sources: EMSI, TAMU Real Estate Center, Texas Workforce Commission.

# **Duval County**

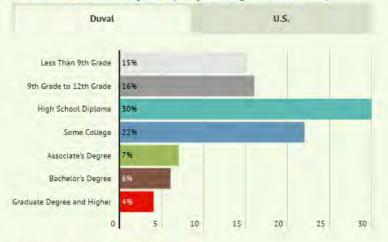
Socioeconomic Profile





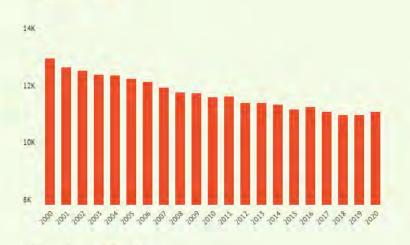


### Educational Attainment by Level (% Population Aged 25 Years & Older)



### **Population Trend**

**Unemployment Trend (%)** 



# **Economic Composition by Sector**



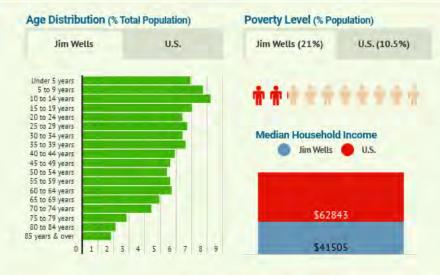
20 15

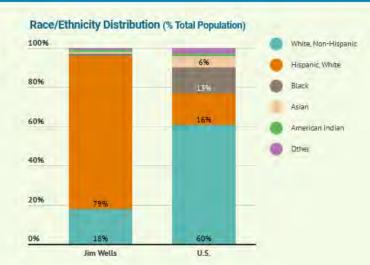
Data Sources: EMSI, TAMU Real Estate Center, Texas Workforce Commission.

# **Jim Wells County**

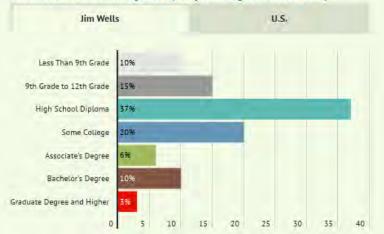
Socioeconomic Profile

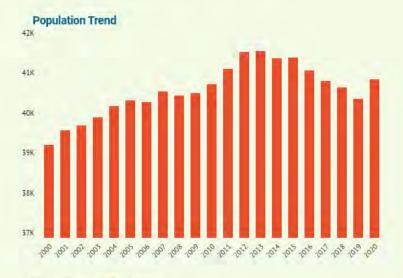






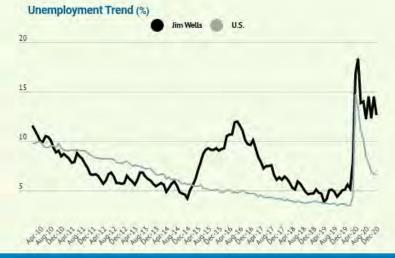
### Educational Attainment by Level (% Population Aged 25 Years & Older)





### **Economic Composition by Sector**



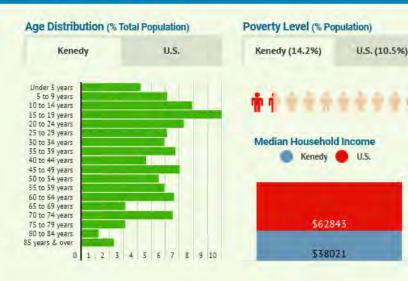


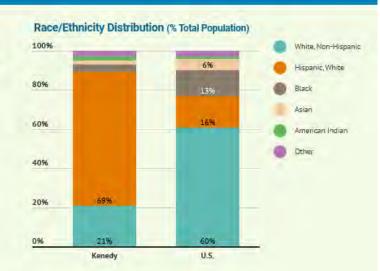
Data Sources; EMSI, TAMU Real Estate Center, Texas Workforce Commission.

# **Kenedy County**

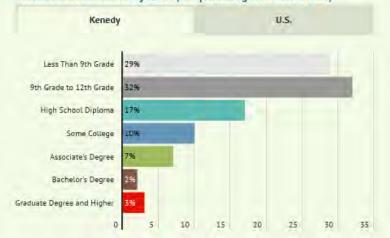
Socioeconomic Profile







#### Educational Attainment by Level (% Population Aged 25 Years & Older)

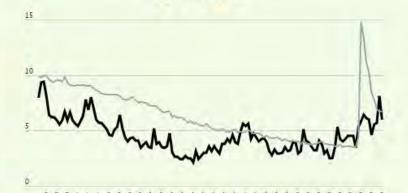






## **Economic Composition by Sector**



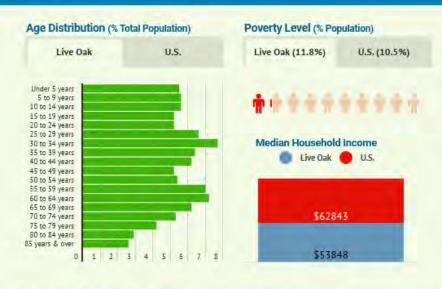


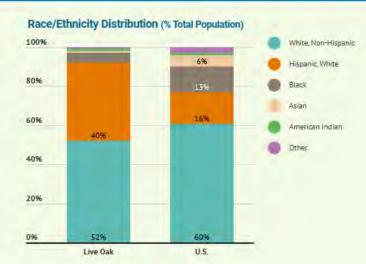
U.S.

# **Live Oak County**

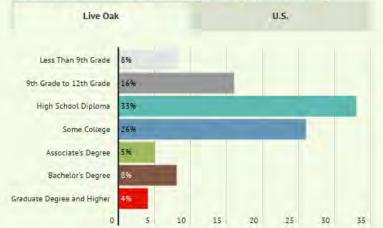
Socioeconomic Profile



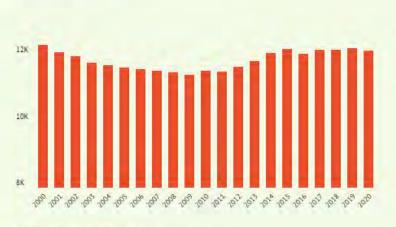




## Educational Attainment by Level (% Population Aged 25 Years & Older)





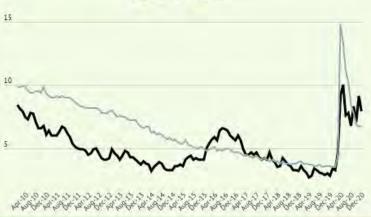


## **Economic Composition by Sector**



Unemployment Trend (%)

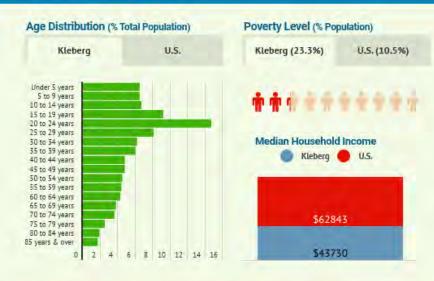
Live Oak U.S.

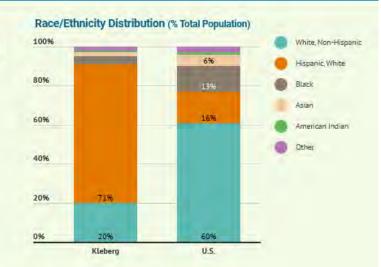


# **Kleberg County**

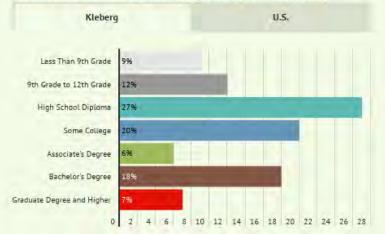
Socioeconomic Profile



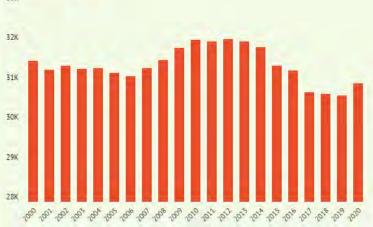




#### Educational Attainment by Level (% Population Aged 25 Years & Older)



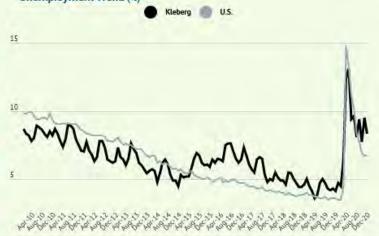




#### **Economic Composition by Sector**



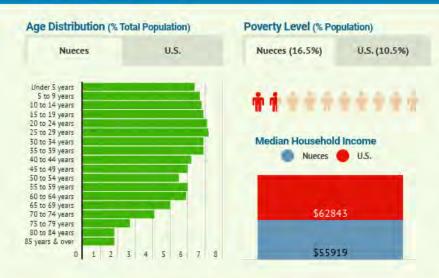
#### Unemployment Trend (%)

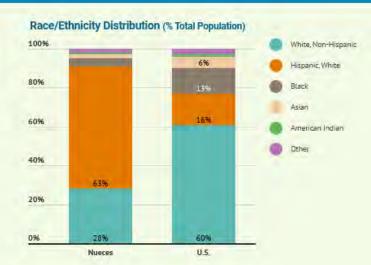


# **Nueces County**

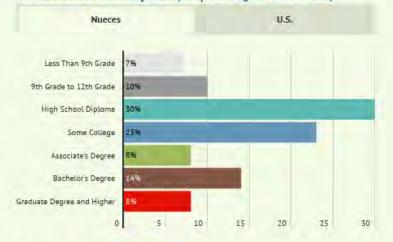
## Socioeconomic Profile



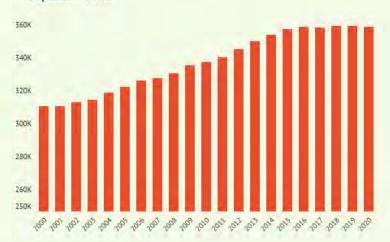




#### Educational Attainment by Level (% Population Aged 25 Years & Older)

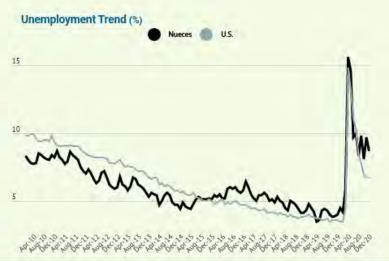






#### **Economic Composition by Sector**

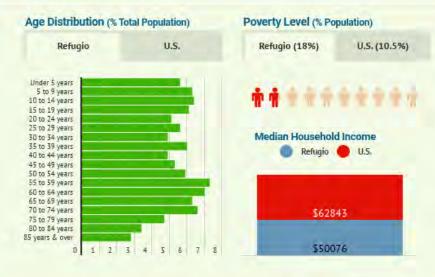


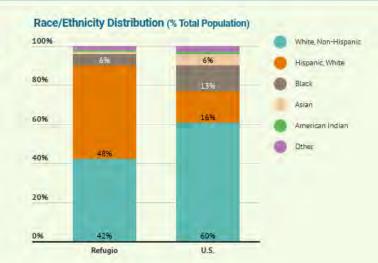


# **Refugio County**

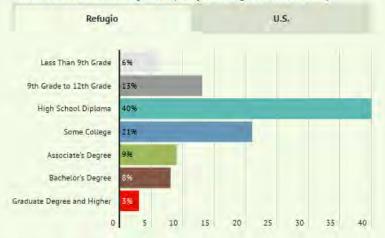
Socioeconomic Profile

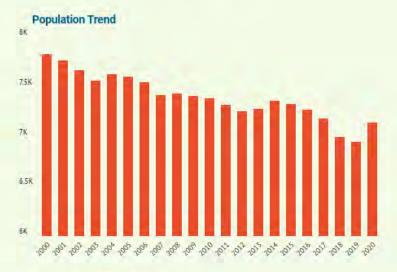






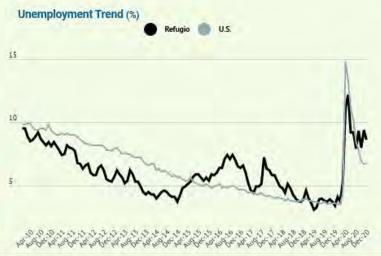
#### Educational Attainment by Level (% Population Aged 25 Years & Older)





## **Economic Composition by Sector**

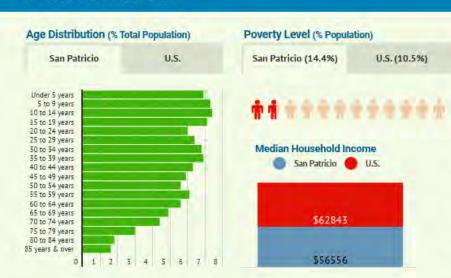


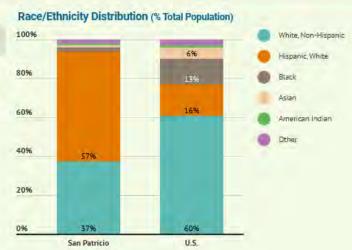


# **San Patricio County**

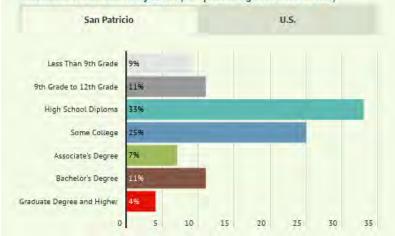
Socioeconomic Profile

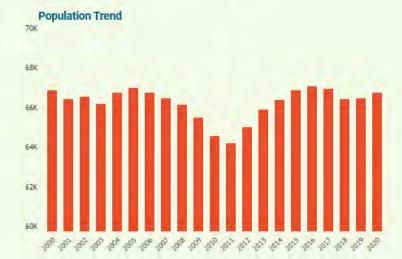






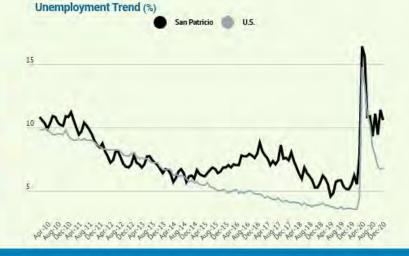
## Educational Attainment by Level (% Population Aged 25 Years & Older)

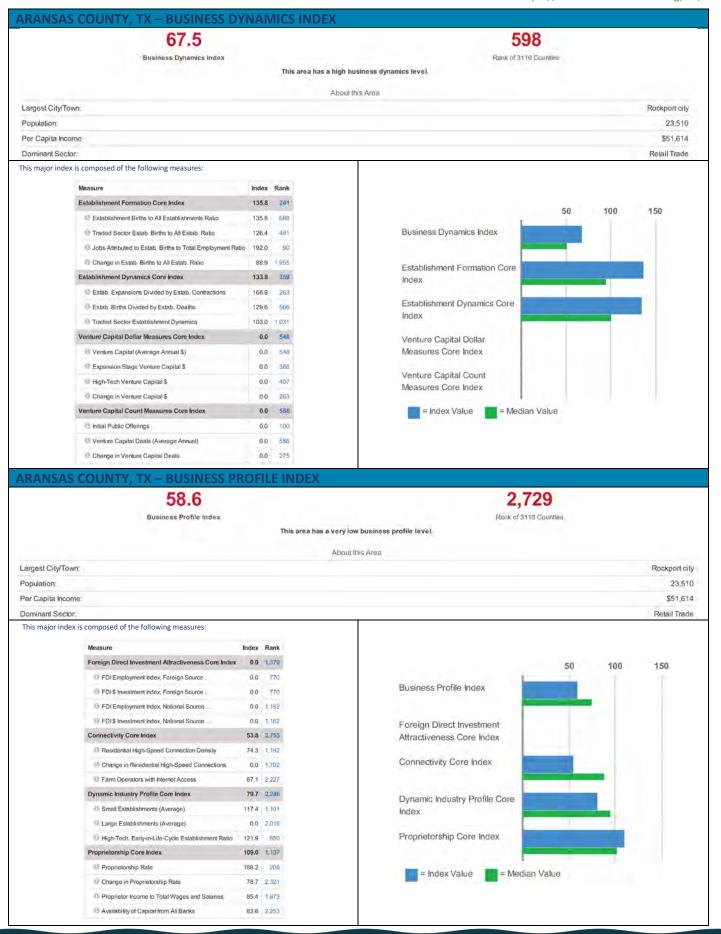




#### **Economic Composition by Sector**

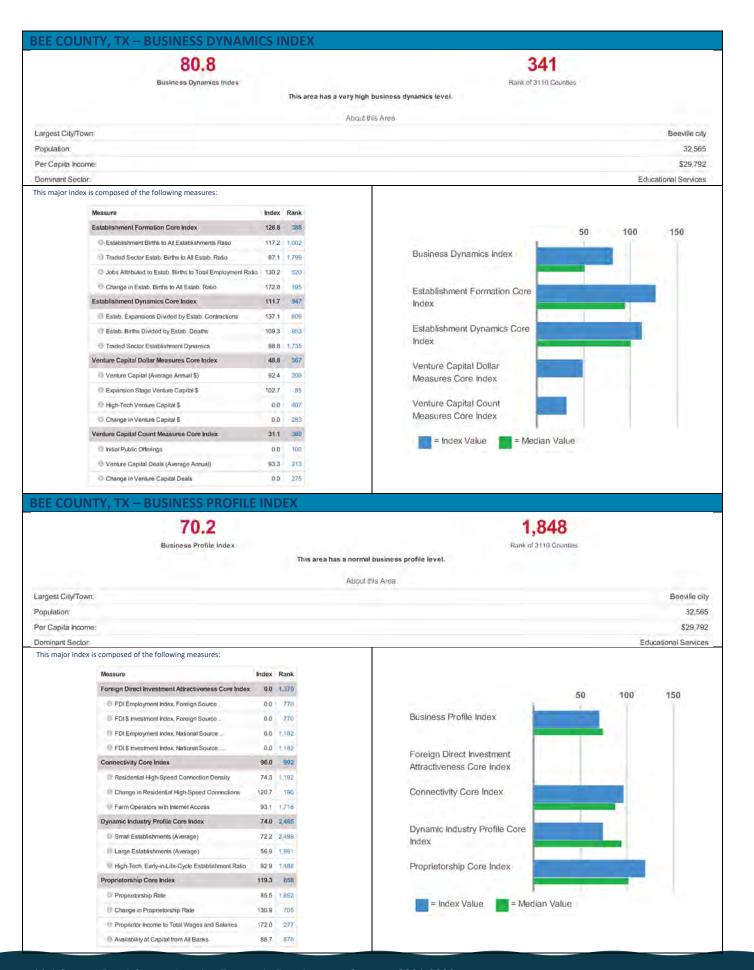


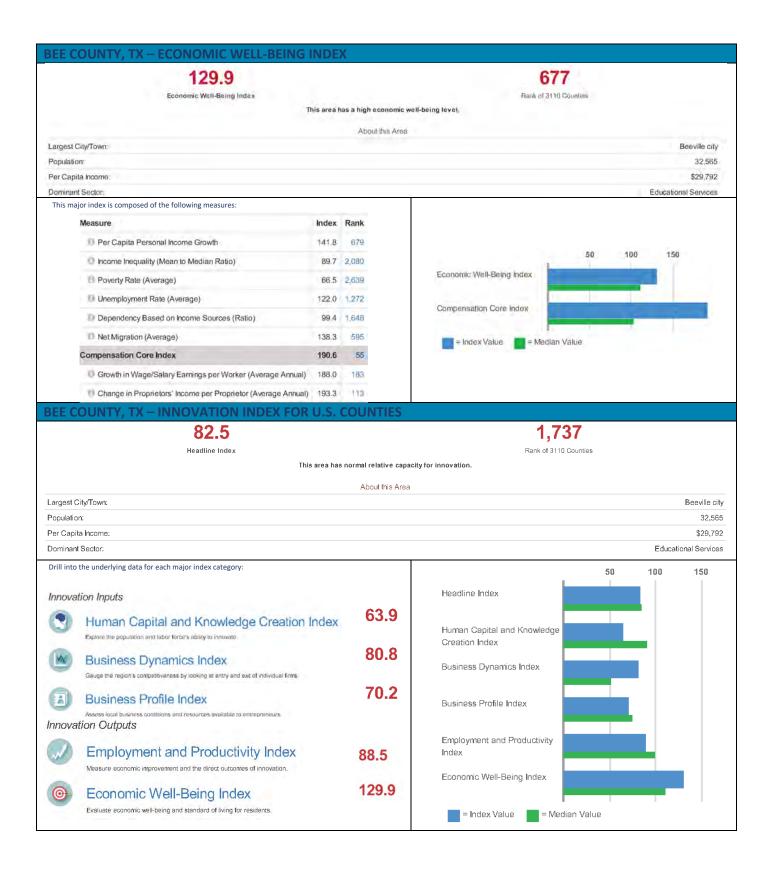


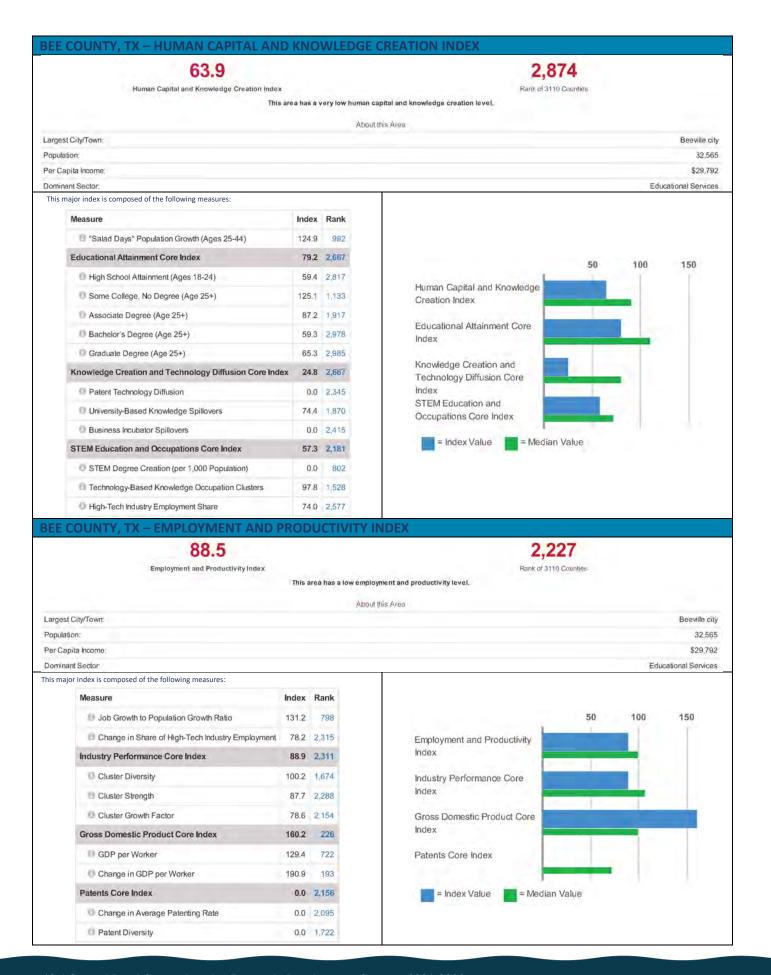


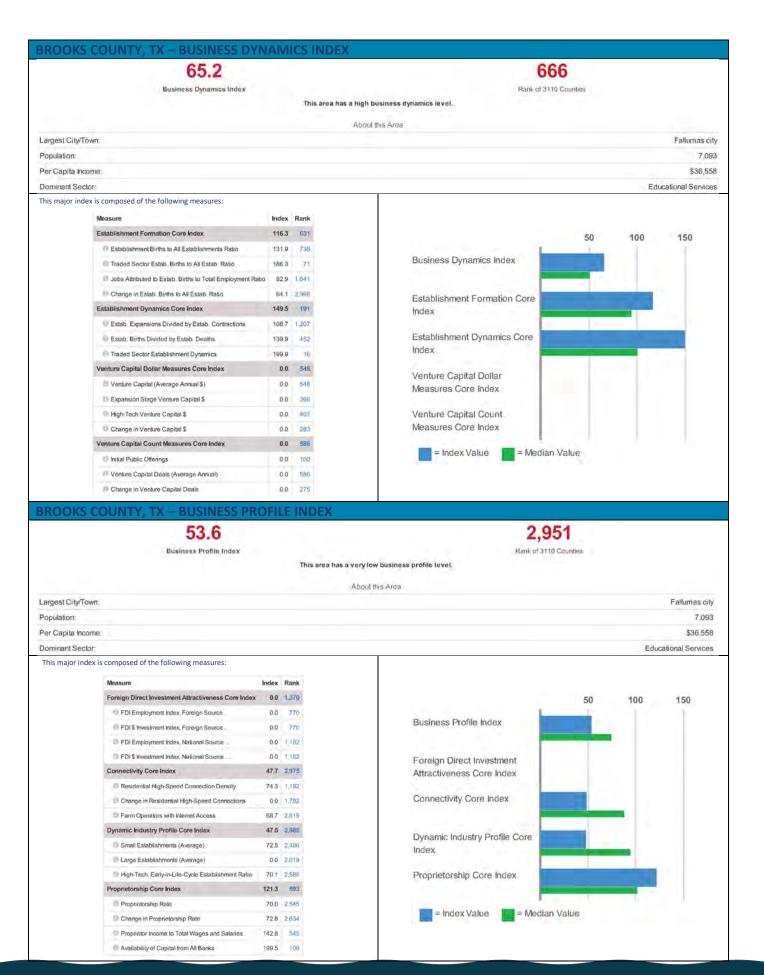


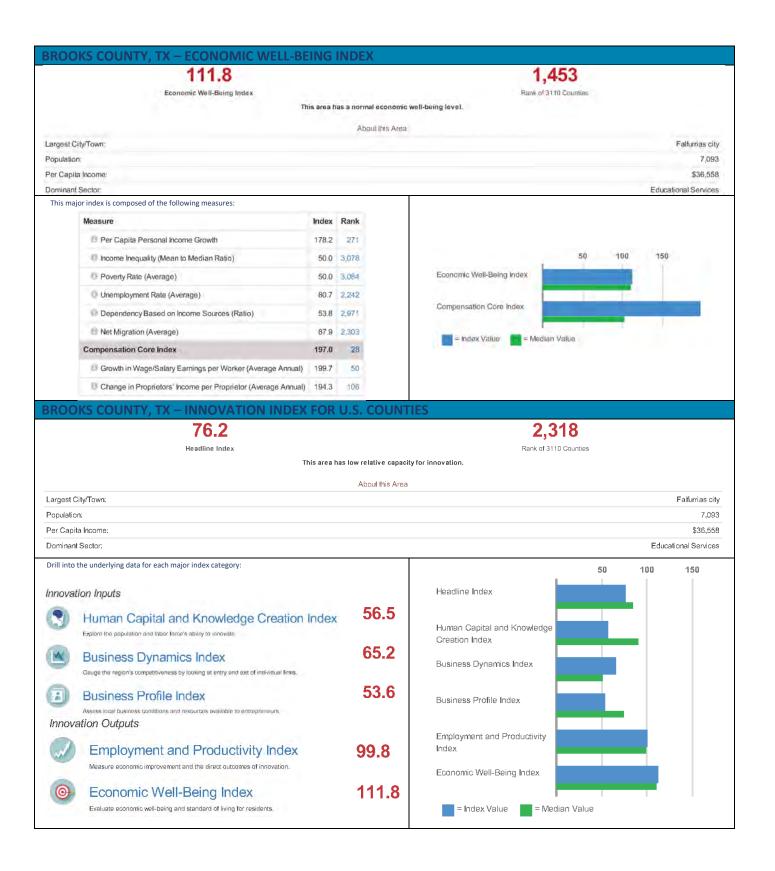
#### **HUMAN CAPITAL AND KNOWLEDGE CREATION** 84.3 1,871 Rank of 3110 Counties Human Capital and Knowledge Creation Index This area has a normal human capital and knowledge creation level. About this Area Largest City/Town: Rockport city Population: 23.510 Per Capita Income \$51,614 Dominant Sector Retail Trade This major index is composed of the following measures: Index Rank Measure "Salad Days" Population Growth (Ages 25-44) 139.3 781 **Educational Attainment Core Index** 108.7 1,575 50 100 150 High School Attainment (Ages 18-24) 91.9 1.978 Human Capital and Knowledge Some College, No Degree (Age 25+) 195.4 90 Creation Index Associate Degree (Age 25+) 60.5 2,808 Educational Attainment Core Bachelor's Degree (Age 25+) 96.5 1.445 Index Graduate Degree (Age 25+) 99.2 1,120 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 58.7 1,983 Technology Diffusion Core Index Patent Technology Diffusion 99.0 1,198 STEM Education and University-Based Knowledge Spillovers 77.2 1,566 Occupations Core Index Business Incubator Spillovers 0.0 2,415 = Index Value = Median Value STEM Education and Occupations Core Index 50.9 2.618 STEM Degree Creation (per 1,000 Population) 0.0 802 Technology-Based Knowledge Occupation Clusters 59.0 2,934 High-Tech Industry Employment Share 93.6 1.360 TX – EMPLOYMENT AND PRODUCTIVITY INDEX 114.4 460 Rank of 3110 Countles **Employment and Productivity Index** This area has a high employment and productivity level. About this Area Largest City/Town Rockport city Population: 23,510 \$51,614 Per Capita Income: Dominant Sector Retail Trade This major index is composed of the following measures: Measure Index Rank 50 100 150 Job Growth to Population Growth Ratio 178.7 289 Change in Share of High-Tech Industry Employment 60.9 2,791 Employment and Productivity Index Industry Performance Core Index 142.9 264 Cluster Diversity 166.5 437 Industry Performance Core Index Cluster Strength 90,4 1.887 Cluster Growth Factor 171.8 379 Gross Domestic Product Core Index **Gross Domestic Product Core Index** 117.3 993 GDP per Worker 80.6 2,262 Patents Core Index Change in GDP per Worker 154.0 532 Patents Core Index 63.4 1,713 = Index Value = Median Value Change in Average Patenting Rate 67.5 2.067 Patent Diversity 59.3 1,443

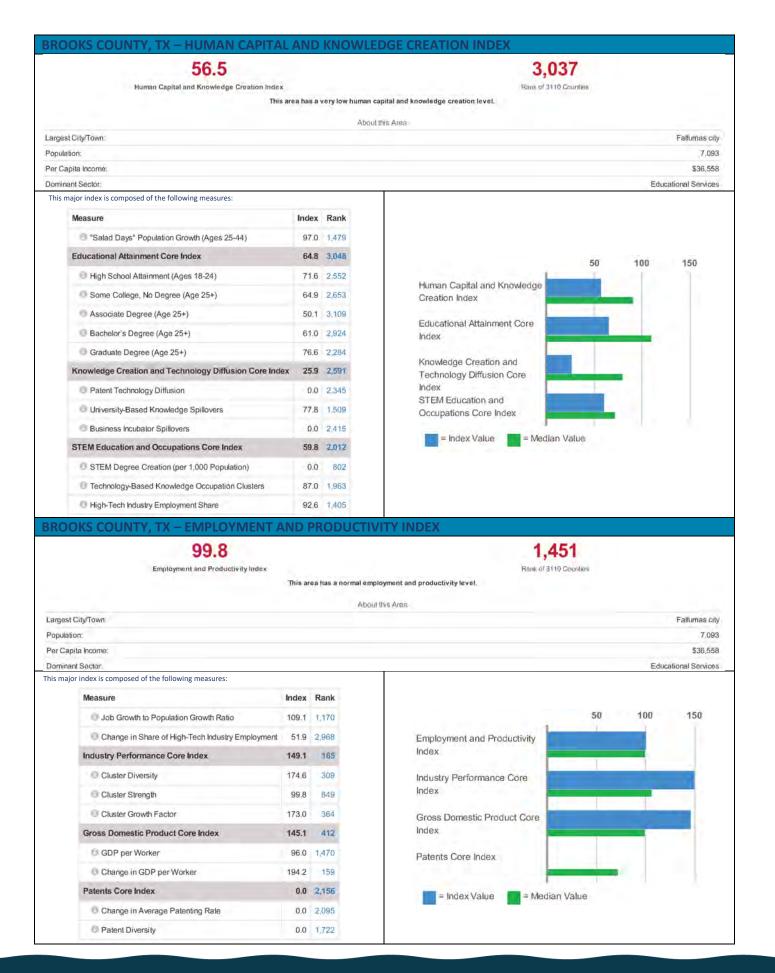




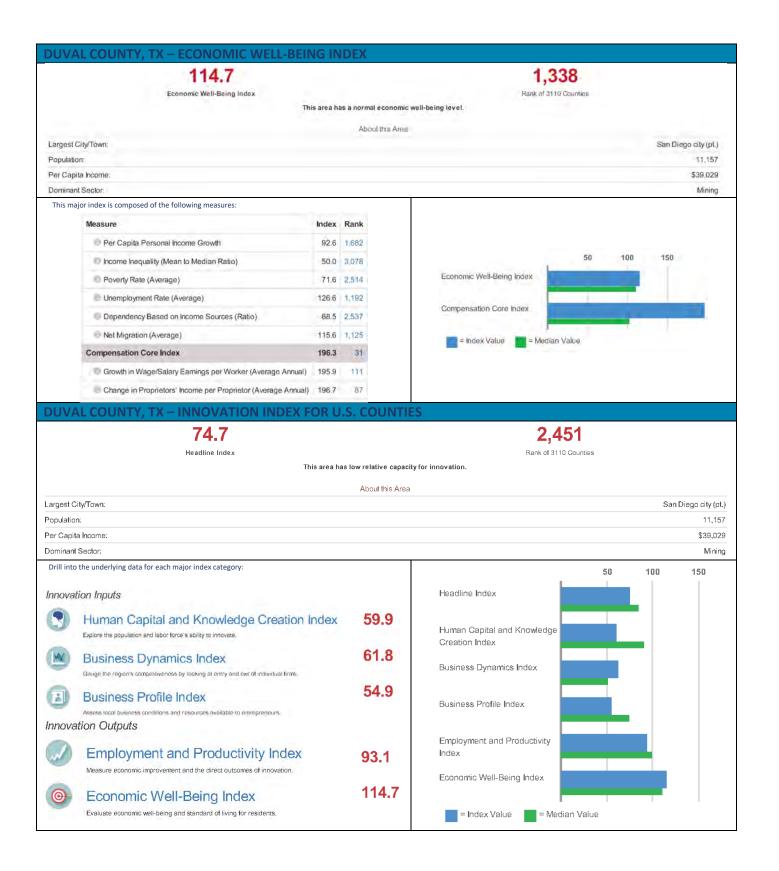




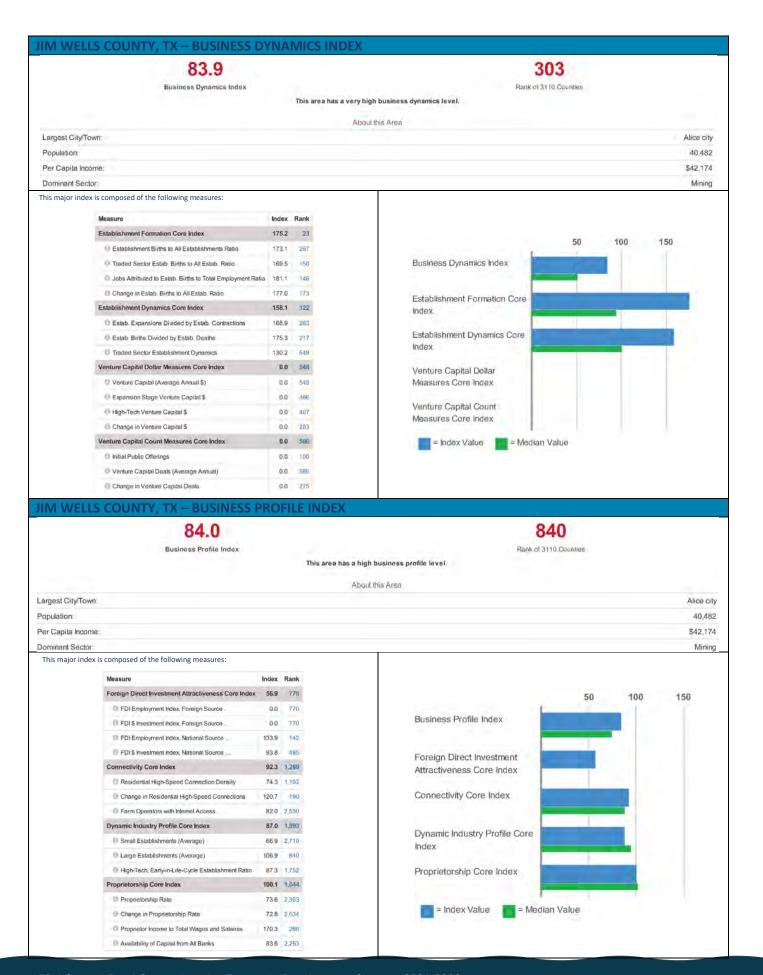


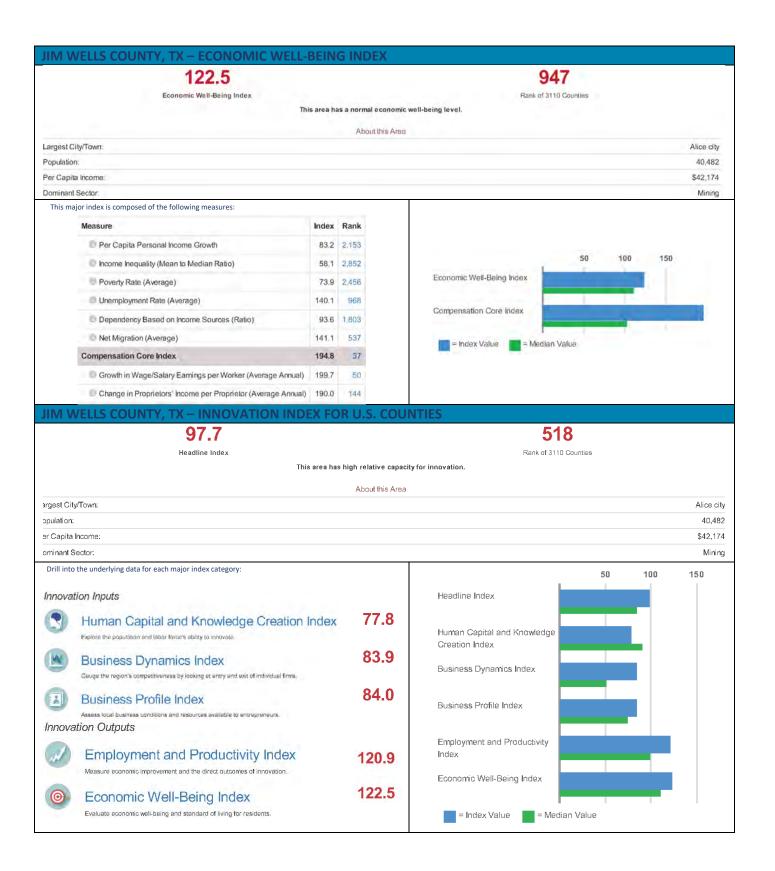






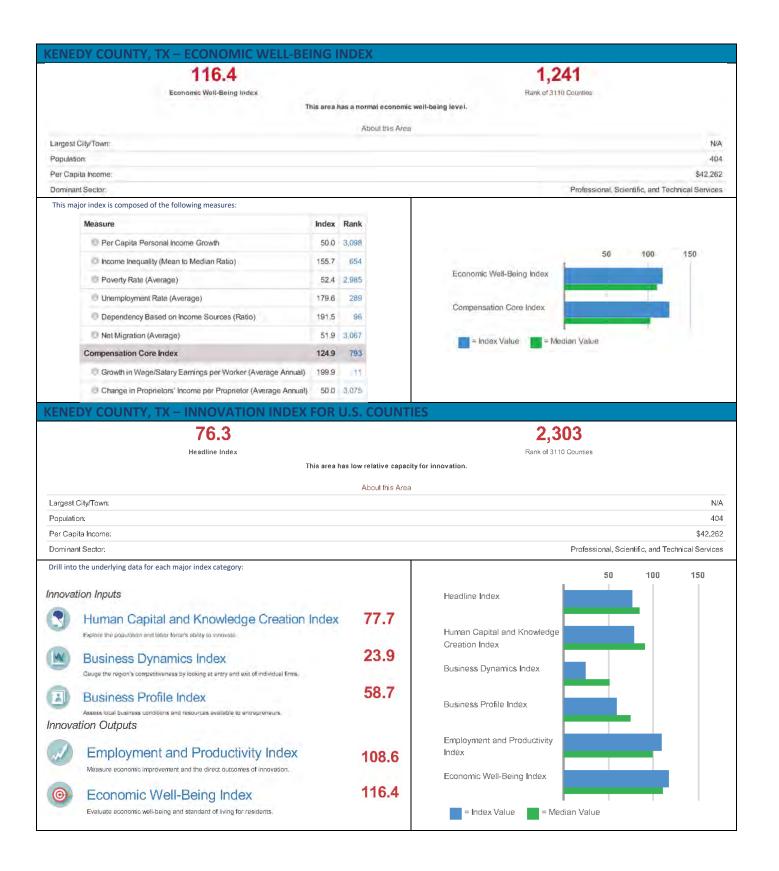
#### 2,987 59.9 Rank of 3110 Countles Human Capital and Knowledge Creation Index This area has a very low human capital and knowledge creation level. About this Area Largest City/Town: San Diego city (pt.) 11,157 Population: Per Capita Income: \$39,029 Dominant Sector Mining This major index is composed of the following measures: Measure Index Rank mail "Salad Days" Population Growth (Ages 25-44) 73.9 2.404 **Educational Attainment Core Index** 65.2 3,043 50 100 150 High School Attainment (Ages 18-24) 64.0 2,718 Human Capital and Knowledge Some College, No Degree (Age 25+) 76.8 2,273 Creation Index Associate Degree (Age 25+) 68.6 2,523 Educational Attainment Core Bachelor's Degree (Age 25+) 57.7 3.033 Index Graduate Degree (Age 25+) 58.8 3,100 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 25.4 2,608 Technology Diffusion Core Patent Technology Diffusion 0.0 2,345 Index STEM Education and University-Based Knowledge Spillovers 76.2 1,669 Occupations Core Index Business Incubator Spillovers 0.0 2.415 = Median Value = Index Value STEM Education and Occupations Core Index 80.9 1,253 STEM Degree Creation (per 1,000 Population) 802 0.0 Technology-Based Knowledge Occupation Clusters 171.2 336 High-Tech Industry Employment Share 71.4 2,768 **EMPLOYMENT AND PRODUCTIVITY INDEX** 93.1 1,932 **Employment and Productivity Index** Rank of 3110 Countles This area has a normal employment and productivity level. About this Area argest City/Town San Diego city (pt.) opulation: 11,157 er Capita Income. \$39,029 Mining ominant Sector This major index is composed of the following measures: Index Rank Measure 50 100 150 Job Growth to Population Growth Ratio 168.9 389 Change in Share of High-Tech Industry Employment 76.3 2,362 Employment and Productivity Industry Performance Core Index 101.9 1.725 58.5 2,899 Cluster Diversity Industry Performance Core Index Cluster Strength 96.3 1,149 Cluster Growth Factor 150.8 602 Gross Domestic Product Core Index Gross Domestic Product Core Index 143.7 436 GDP per Worker 97.0 1,415 Patents Core Index Change in GDP per Worker 190.5 197 Patents Core Index 0.0 2,156 = Index Value = Median Value Change in Average Patenting Rate 0.0 2,095 Patent Diversity 0.0 1.722



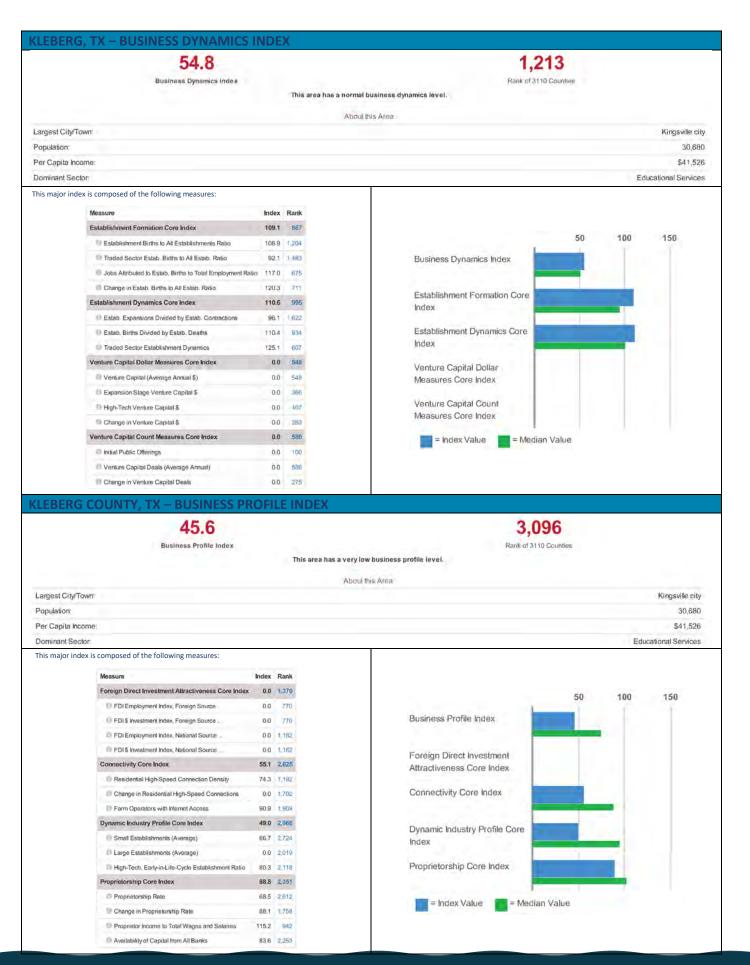


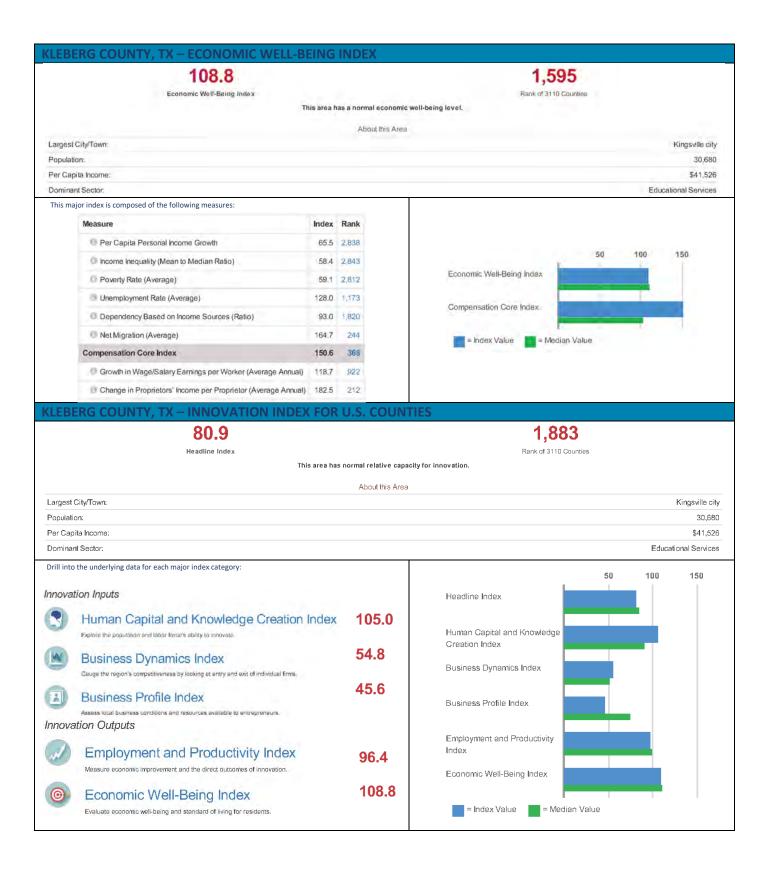
#### 77.8 2,245 Human Capital and Knowledge Creation Index Rank of 3110 Counties This area has a low human capital and knowledge creation level. About this Area Largest City/Town: Alice city Population: 40,482 \$42,174 Per Capita Income: Mining Dominant Sector This major index is composed of the following measures: Index Rank "Salad Days" Population Growth (Ages 25-44) 137.1 815 **Educational Attainment Core Index** 74.0 2,855 50 100 150 58.5 2,841 High School Attainment (Ages 18-24) Human Capital and Knowledge Some College, No Degree (Age 25+) 115.0 1,276 Creation Index Associate Degree (Age 25+) 60.5 2.808 Educational Attainment Core Bachelor's Degree (Age 25+) 60.8 2,933 Graduate Degree (Age 25+) 75.2 2,404 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 86.4 1,342 Technology Diffusion Core Patent Technology Diffusion 163.8 329 Index STEM Education and University-Based Knowledge Spillovers 95.5 848 Occupations Core Index Business Incubator Spillovers 0.0 2,415 = Index Value = Median Value 2,271 STEM Education and Occupations Core Index 55.B STEM Degree Creation (per 1,000 Population) 0.0 802 99.2 1,468 Technology-Based Knowledge Occupation Clusters High-Tech Industry Employment Share 68.2 2,953 TX – EMPLOYMENT AND PRODUCTIVITY INDEX 228 120.9 Rank of 3110 Countles **Employment and Productivity Index** This area has a very high employment and productivity level. About this Area Largest City/Town: Alice city 40,482 Population: Per Capita Income: \$42,174 Dominant Sector Mining This major index is composed of the following measures: Index Rank Measure 50 100 150 Job Growth to Population Growth Ratio 191.1 171 Change in Share of High-Tech Industry Employment 57.5 2,866 imployment and Productivity ndex Industry Performance Core Index 113.0 1,218 ndustry Performance Core Cluster Diversity 52.8 3,023 ndex Cluster Strength 91.6 1.724 Cluster Growth Factor 194.5 139 Bross Domestic Product Core ndex **Gross Domestic Product Core Index** 180.3 93 GDP per Worker 163.5 342 atents Core Index Change in GDP per Worker 197.2 111 Patents Core Index 70.2 1,572 = Index Value = Median Value Change in Average Patenting Rate 81.1 1,554 Patent Diversity 59.3 1,443

#### 3,077 23.9 Rank of 3110 Countles Business Dynamics Index This area has a very low business dynamics level. About this Area N/A Largest City/Town 404 Population: Per Capita Income: \$42,262 Professional, Scientific, and Technical Services Dominant Sector: This major index is composed of the following measures: Measure Index Rank Establishment Formation Core Index 61.9 2,811 50 100 150 III Establishment Births to All Establishments Ratio 72.6 2,604 Traded Sector Estab. Births to All Estab. Ratio 0.0 2,766 Business Dynamics Index Jobs Attributed to Estab. Births to Total Employment Ratio 0.0 2416 III Change in Estab. Births to All Estab. Ratio 183 1752 Establishment Formation Core Establishment Dynamics Core Index 28.9 3,100 Estab. Expansions Divided by Estab. Contractions Establishment Dynamics Core III Estab. Births Divided by Estab. Deaths. 86.8 1.962 Index III Traded Sector Establishment Dynamics 0.0 2,991 548 Venture Capital Dollar Measures Core Index 0.0 Venture Capital Dollar U Venture Capital (Average Annual \$) 0.0 548 Measures Core Index Expansion Stage Venture Capital \$ 0.0 366 Venture Capital Count High-Tech Venture Capital \$ Measures Core Index Change in Venture Capital \$ Venture Capital Count Measures Core Index = Index Value = Median Value II Initial Public Offerings 0.0 100 Venture Capital Deals (Average Annual) 0.0 586 Change in Venture Capital Deals 0.0 275 2,721 58.7 Rank of 3110 Counties Business Profile Index This area has a very low business profile level. About this Area N/Α Largest City/Town: 404 Population: Per Capita Income: \$42,262 Dominant Sector: Professional, Scientific, and Technical Services This major index is composed of the following measures: Foreign Direct Investment Attractiveness Core Index 100.0 81 50 100 150 @ FDIEmployment Index. Foreign Source 200.0 (1) FDI\$ Investment Index, Foreign Source . 200.0 Business Profile Index FDIEmployment Index, National Source 0.0 1,182 (1) FDI\$ Investment Index, National Source ... 0.0 1,182 Foreign Direct Investment 72.3 2,097 Connectivity Core Index Attractiveness Core Index Residential High-Speed Connection Density 74.3 1.192 (1) Change in Residential High-Speed Connections 0.0 1,702 Connectivity Core Index 6 Farm Operators with Internet Access 142.5 73 Dynamic Industry Profile Core Index 16.8 3,102 Dynamic Industry Profile Core 50.4 3,092 Small Establishments (Average) Index (Average) 0.0 2.019 Proprietorship Core Index High-Tech, Early-in-Life-Cycle Establishment Ratio 0.0 3.041 Proprietorship Core Index 42.6 3,110 Proprietorship Rate 66.6 2,706 = Index Value = Median Value Change in Proprietorship Rate 50.3 3,100 Proprietor Income to Total Wages and Salaries 53.6 3.109 Availability of Capital from All Banks 0.0 3.067

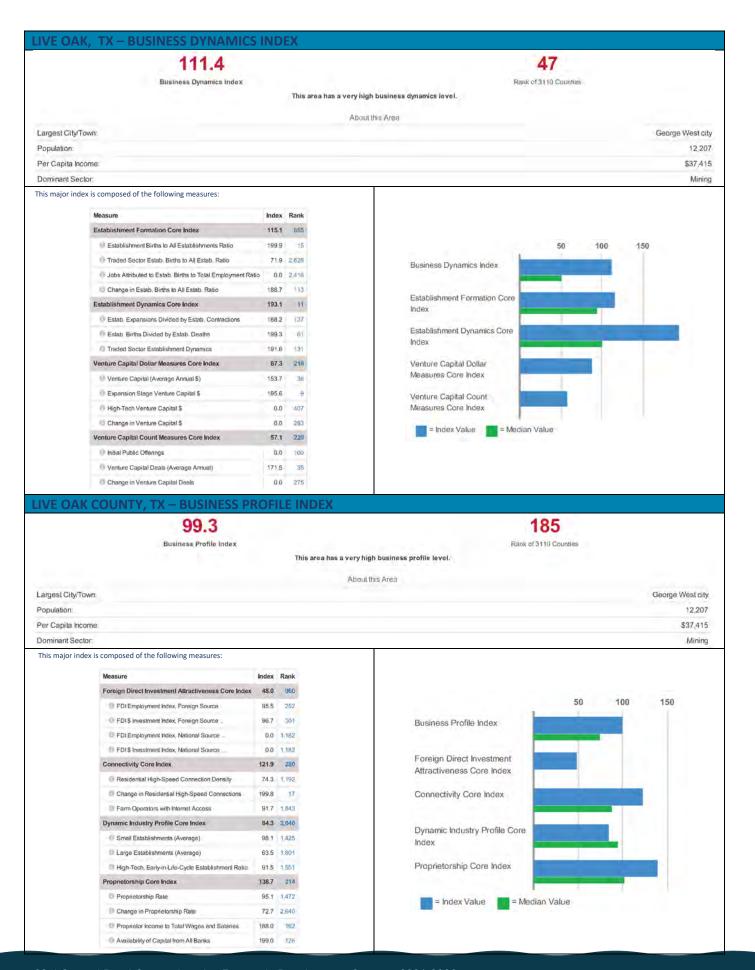


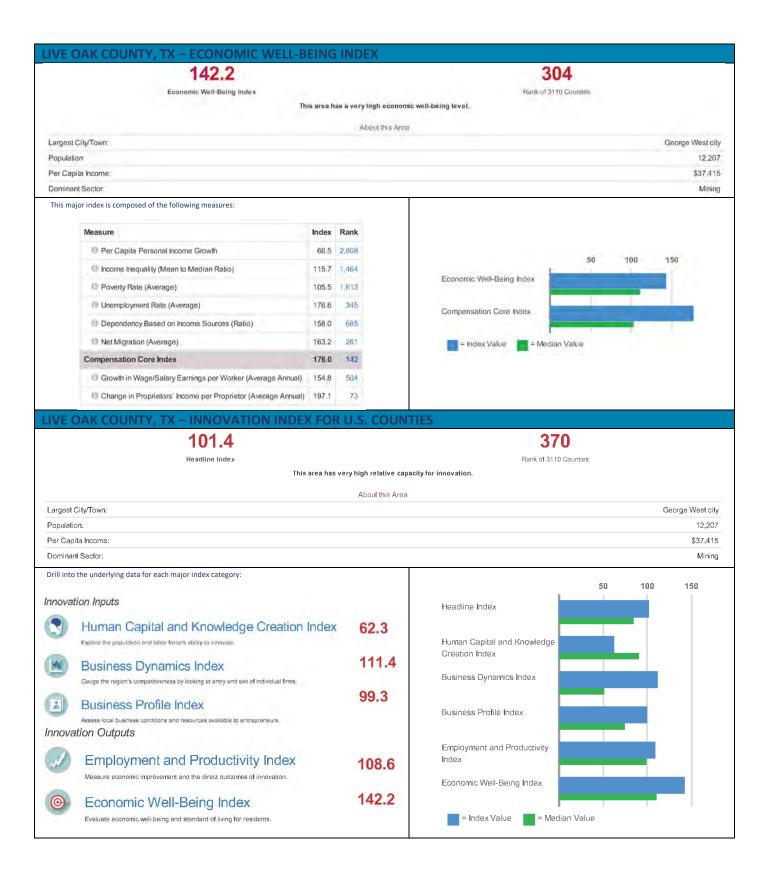
#### 2,254 77.7 Rank of 3110 Counties Human Capital and Knowledge Creation Index This area has a low human capital and knowledge creation level. About this Area N/A Largest City/Town: 404 Population: Per Capita Income: \$42,262 Dominant Sector Professional, Scientific, and Technical Services This major index is composed of the following measures: Index Rank Measure "Salad Days" Population Growth (Ages 25-44) 90.8 1,712 **Educational Attainment Core Index** 74.8 2.835 50 100 150 High School Attainment (Ages 18-24) 79.7 2,328 Human Capital and Knowledge 88.4 1,906 Some College, No Degree (Age 25+) Creation Index Associate Degree (Age 25+) 50.5 3.103 Educational Attainment Core Bachelor's Degree (Age 25+) 73.2 2,341 Index Graduate Degree (Age 25+) 82.3 1.869 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 25.7 2,600 Technology Diffusion Core 0.0 2.345 Patent Technology Diffusion STEM Education and University-Based Knowledge Spillovers 77.3 1,554 Occupations Core Index Business Incubator Spillovers 0.0 2.415 = Median Value = Index Value STEM Education and Occupations Core Index 130.1 288 STEM Degree Creation (per 1,000 Population) 0.0 802 58 Technology-Based Knowledge Occupation Clusters 197.5 High-Tech Industry Employment Share 192.8 149 108.6 788 Employment and Productivity Index Rank of 3110 Counties This area has a high employment and productivity level. About this Area Largest City/Town: N/A 404 Population: Per Capita Income: \$42,262 Dominant Sector Professional, Scientific, and Technical Services This major index is composed of the following measures: Measure Index Rank 1 Job Growth to Population Growth Ratio 200.0 50 100 150 Change in Share of High-Tech Industry Employment 0.0 3,018 Employment and Productivity Industry Performance Core Index Index 141.9 285 Cluster Diversity 189.5 73 Industry Performance Core Index Cluster Strength 160.5 142 Cluster Growth Factor 75.5 2,285 Gross Domestic Product Core Index **Gross Domestic Product Core Index** 176.0 115 B GDP per Worker 164.6 332 Patents Core Index Change in GDP per Worker 187.3 220 Patents Core Index 0.0 2,156 = Index Value = Median Value Change in Average Patenting Rate 0.0 2,095 Patent Diversity 0.0 1.722



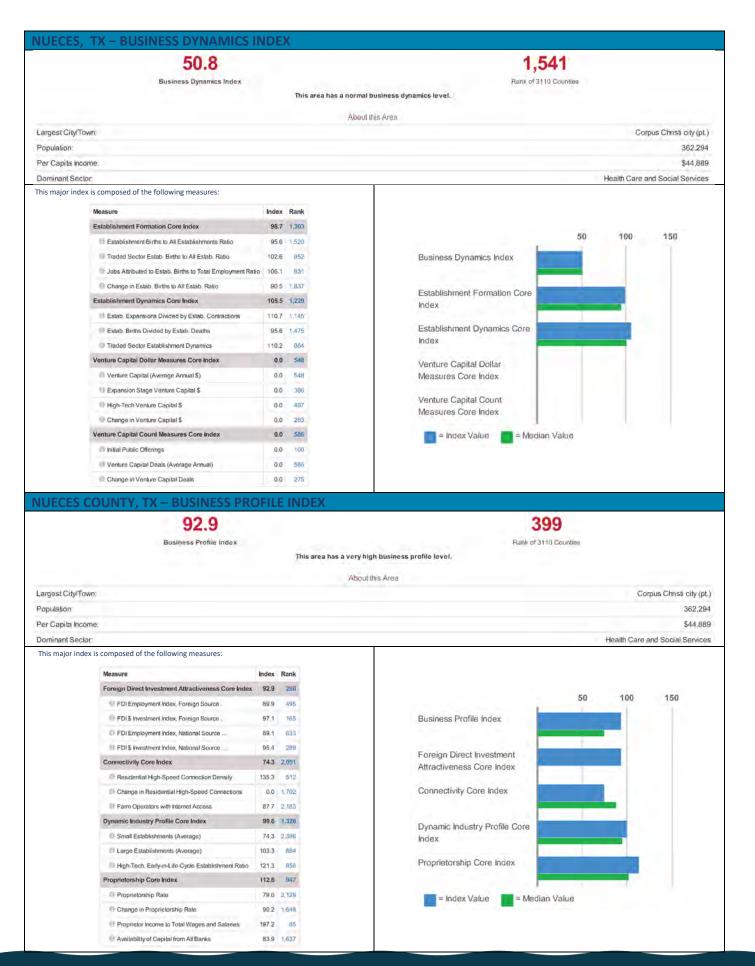


#### 105.0 901 Human Capital and Knowledge Creation Index Rank of 3110 Counties This area has a normal human capital and knowledge creation level. About this Area Largest City/Town: Kingsville city 30.680 Population: Per Capita Income: \$41,526 Dominant Sector: Educational Services This major index is composed of the following measures: Measure Index Rank "Salad Days" Population Growth (Ages 25-44) 123.6 1,016 **Educational Attainment Core Index** 113.2 1,401 50 100 150 High School Attainment (Ages 18-24) 119.9 1.346 Human Capital and Knowledge Some College, No Degree (Age 25+) 114.0 1,293 Creation Index Associate Degree (Age 25+) 66.3 2,604 Educational Attainment Core Bachelor's Degree (Age 25+) 149.7 664 Index Graduate Degree (Age 25+) 116.3 886 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 53.2 2,142 Technology Diffusion Core Index Patent Technology Diffusion 55.3 2.197 STEM Education and 104,4 645 University-Based Knowledge Spillovers Occupations Core Index Business Incubator Spillovers 0.0 2,415 = Index Value = Median Value STEM Education and Occupations Core Index 137.1 218 STEM Degree Creation (per 1,000 Population) 199.9 8 Technology-Based Knowledge Occupation Clusters 112.2 1,197 99.1 1,148 High-Tech Industry Employment Share 1,670 96.4 **Employment and Productivity Index** Rank of 3110 Countles This area has a normal employment and productivity level. About this Area Largest City/Town: Kingsville city Population: 30,680 Per Capita Income: \$41,526 Educational Services Dominant Sector This major index is composed of the following measures: Measure Index Rank 50 100 Job Growth to Population Growth Ratio 168.2 397 Change in Share of High-Tech Industry Employment 139.8 676 Employment and Productivity Index Industry Performance Core Index 95.0 2.040 Cluster Diversity 70.5 2,585 Industry Performance Core Index Cluster Strength 86.5 2,462 Cluster Growth Factor 128.0 918 Gross Domestic Product Core Index Gross Domestic Product Core Index 137.6 549 GDP per Worker 113.9 975 Patents Core Index Change in GDP per Worker 161.3 465 Patents Core Index 0.0 2,156 = Index Value = Median Value Change in Average Patenting Rate 0.0 2.095 Patent Diversity 0.0 1.722





#### 2,916 62.3 Human Capital and Knowledge Creation Index This area has a very low human capital and knowledge creation level. About this Area George West city Largest City/Town: Population: 12,207 \$37,415 Per Capita Income: Dominant Sector Mining This major index is composed of the following measures: Measure Index Rank "Salad Days" Population Growth (Ages 25-44) 140.4 762 **Educational Attainment Core Index** 86.5 2.403 50 100 150 High School Attainment (Ages 18-24) 67.1 2,655 Human Capital and Knowledge Some College, No Degree (Age 25+) 142.5 859 Creation Index Associate Degree (Age 25+) 56.9 2,929 Educational Attainment Core Bachelor's Degree (Age 25+) 82.9 1.900 Index Graduate Degree (Age 25+) 83.3 1,813 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 0.0 2,829 Technology Diffusion Core Patent Technology Diffusion 0.0 2,345 STEM Education and 0.0 2,124 University-Based Knowledge Spillovers Occupations Core Index Business Incubator Spillovers 0.0 2,415 = Index Value = Median Value STEM Education and Occupations Core Index 58.4 2.103 STEM Degree Creation (per 1,000 Population) 0.0 802 Technology-Based Knowledge Occupation Clusters 92.4 1,761 High-Tech Industry Employment Share 82.7 1,950 EMPLOYMENT AND PRODUCTIVITY INDEX 788 108.6 **Employment and Productivity Index** Rank of 3110 Counties This area has a high employment and productivity level. About this Area Largest City/Town: George West city Population: 12:207 Per Capita Income: \$37,415 Mining Dominant Sector: This major index is composed of the following measures: Measure Index Rank Job Growth to Population Growth Ratio 199.1 63 50 100 150 Change in Share of High-Tech Industry Employment 108.2 1,150 Employment and Productivity Index 948 Industry Performance Core Index 119.6 Cluster Diversity 2,958 55.9 Industry Performance Core Index Cluster Strength 102.9 756 Cluster Growth Factor 199.9 ġ Gross Domestic Product Core Index **Gross Domestic Product Core Index** 155.8 270 GDP per Worker 124.8 Patents Core Index Change in GDP per Worker 186.7 227 Patents Core Index 0.0 2,156 = Index Value = Median Value Change in Average Patenting Rate 0.0 2.095 Patent Diversity 0.0 1,722





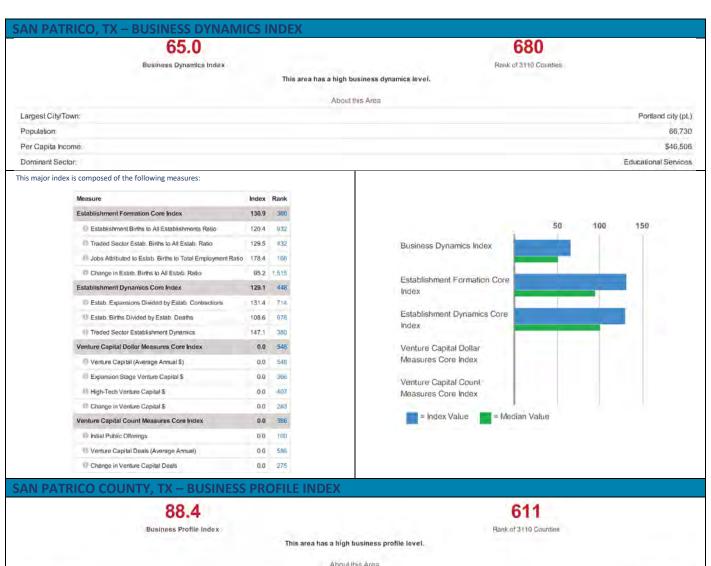


#### 108.7 778 Rank of 3110 Counties Human Capital and Knowledge Creation Index This area has a high human capital and knowledge creation level. About this Area Largest City/Town: Corpus Christi city (pt.) 362.294 Population: Per Capita Income: \$44.889 Health Care and Social Services Dominant Sector This major index is composed of the following measures: Measure Index Rank "Salad Days" Population Growth (Ages 25-44) 175.6 362 **Educational Attainment Core Index** 116.6 1.281 100 50 150 High School Attainment (Ages 18-24) 124.7 1,246 Human Capital and Knowledge Some College, No Degree (Age 25+) 160.7 585 Creation Index Associate Degree (Age 25+) 86.4 1,948 Educational Attainment Core Bachelor's Degree (Age 25+) 98.1 1,386 Index Graduate Degree (Age 25+) 113.2 926 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 67.2 1,839 Technology Diffusion Core Index Patent Technology Diffusion 97.4 1,243 STEM Education and University-Based Knowledge Spillovers 104.3 646 Occupations Core Index Business Incubator Spillovers 0.0 2,415 = Index Value = Median Value STEM Education and Occupations Core Index 114.7 482 STEM Degree Creation (per 1,000 Population) 83.1 494 Technology-Based Knowledge Occupation Clusters 128.9 915 High-Tech Industry Employment Share 132.2 671 288 118.7 Employment and Productivity Index Rank of 3110 Countles This area has a very high employment and productivity level. About this Area Largest City/Town: Corpus Christi city (pt.) 362.294 Population: Per Capita Income: \$44,889 Health Care and Social Services Dominant Sector This major index is composed of the following measures: Index Rank Measure Job Growth to Population Growth Ratio 143.7 664 50 100 150 Change in Share of High-Tech Industry Employment 93.7 1,609 Employment and Productivity Industry Performance Core Index 73.4 2.955 Index Cluster Diversity 63.0 2,800 Industry Performance Core Index Cluster Strength 84.0 2,805 Cluster Growth Factor 73.2 2,401 Gross Domestic Product Core Index Gross Domestic Product Core Index 176.7 113 Patents Core Index GDP per Worker 180.5 203 Change in GDP per Worker 173.0 357 = Index Value = Median Value 603 Patents Core Index 128.4 Change in Average Patenting Rate 87.0 1.232 Patent Diversity 169.7 382

#### 1,132 56.5 Business Dynamics Index Rank of 3110 Counties This area has a normal business dynamics level. About this Area Largest City/Town: Refugio town Population: 6.948 Per Capita Income: \$46,464 Dominant Sector Mining This major index is composed of the following measures: Index Rank 84.3 2.094 Establishment Formation Core Index 50 100 Establishment Births to All Establishments Ratio 76.7 2,424 Traded Sector Estab. Births to All Estab. Ratio 176.8 117 Business Dynamics Index Jobs Attributed to Estab. Births to Total Employment Ratio 0.0 2,416 Change in Estab, Births to All Estab, Ratio 83.6 2,290 Establishment Formation Core Establishment Dynamics Core Index 151.4 172 Index Estab. Expansions Divided by Estab. Contractions 162.2 318 Establishment Dynamics Core Estab. Births Divided by Estab. Deaths 95.2 1,510 Index Traded Sector Establishment Dynamics 548 0.0 Venture Capital Dollar Measures Core Index Venture Capital Dollar D Venture Capital (Average Annual \$) 0.0 548 Measures Core Index Expansion Stage Venture Capital \$ 0.0 366 Venture Capital Count 0.0 High-Tech Venture Capital \$ Measures Core Index Change in Venture Capital \$ 0.0 283 Venture Capital Count Measures Core Index 0.0 586 = Index Value = Median Value Initial Public Offerings 0.0 700 Venture Capital Deals (Average Annual) 0.0 Change in Venture Capital Deats 275 49.6 3,058 Rank of 3110 Counties Business Profile Index This area has a very low business profile level. About this Area Largest City/Town: Refugio town Population: 6.948 Per Capita Income 546,464 Mining Dominant Sector This major index is composed of the following measures: Index Rank Measure Foreign Direct Investment Attractiveness Core Index 0.0 1.370 50 100 150 FDI Employment Index, Foreign Source 0.0 770 FDI\$ Investment Index, Foreign Source 0,0 Business Profile Index 0.0 1.182 FDI Employment Index, National Source \_ FDI\$ Investment Index, National Source .... 0.0 1.182 Foreign Direct Investment 54.9 2.667 Connectivity Core Index Attractiveness Core Index Residential High-Speed Connection Density 74.3 1,192 @ Change in Residential High-Speed Connections 0.0 1,702 Connectivity Core Index Farm Operators with Internet Access 90.4 1,963 Dynamic Industry Profile Core Index 51.5 2,925 Dynamic Industry Profile Core Small Establishments (Average) 87.2 1858 Index Large Establishments (Average) 0.0 2.019 Proprietorship Core Index High-Tech, Early-in-Life-Cycle Establishment Ratio 67.4 2.696 Proprietorship Core Index 100.1 1,644 Proprietorship Rate = Index Value = Median Value Change in Proprietorship Rate 81.3 2,172 Proprietor Income to Total Wages and Salaries 122.3 825 Availability of Capital from All Banks 90.6 821



#### 2,749 67.5Rank of 3110 Counties Human Capital and Knowledge Creation Index This area has a very low human capital and knowledge creation level. About this Area Largest City/Town: Refugio town 6 948 Population: Per Capita Income \$46,464 Dominant Sector Mining This major index is composed of the following measures: Measure Index Rank "Salad Days" Population Growth (Ages 25-44) 69.4 2,598 **Educational Attainment Core Index** 103.0 1,814 100 50 150 High School Attainment (Ages 18-24) 91.8 1,983 Human Capital and Knowledge Some College, No Degree (Age 25+) 157.7 633 Creation Index Associate Degree (Age 25+) 134.2 968 Educational Attainment Core Bachelor's Degree (Age 25+) 62.4 2,855 Index Graduate Degree (Age 25+) 68.9 2,831 Knowledge Creation and Knowledge Creation and Technology Diffusion Core Index 25.2 2,629 Technology Diffusion Core Index Patent Technology Diffusion 0.0 2,345 STEM Education and University-Based Knowledge Spillovers 75.6 1.747 Occupations Core Index Business Incubator Spillovers 0.0 2,415 = Index Value = Median Value STEM Education and Occupations Core Index 49.9 2,674 STEM Degree Creation (per 1,000 Population) 0.0 B02 Technology-Based Knowledge Occupation Clusters 76.7 2,346 High-Tech Industry Employment Share 73.1 2,656 EMPLOYMENT AND PRODUCTIVITY INDEX 802 108.4 Employment and Productivity Index Rank of 3110 Counties This area has a high employment and productivity level. About this Area Largest City/Town Refugio town 6,948 Population: Per Capita Income: \$46,464 Dominant Sector. Mining This major index is composed of the following measures: Index Rank Measure Job Growth to Population Growth Ratio 188.9 189 50 100 150 Change in Share of High-Tech Industry Employment 55.0 2.915 **Employment and Productivity** Index Industry Performance Core Index 139.2 334 Cluster Diversity 117.2 1.361 Industry Performance Core Index Cluster Strength 101.6 798 Cluster Growth Factor 58 198.9 Gross Domestic Product Core Index **Gross Domestic Product Core Index** 157.2 255 GDP per Worker 120.2 855 Patents Core Index Change in GDP per Worker 194.3 156 Patents Core Index 0.0 2,156 = Index Value = Median Value Change in Average Patenting Rate 0.0 2,095 0.0 1,722 Patent Diversity

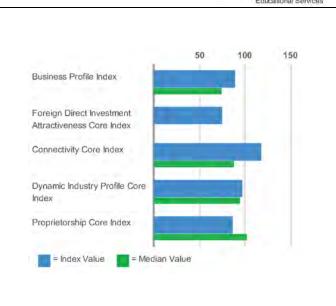


About this Area

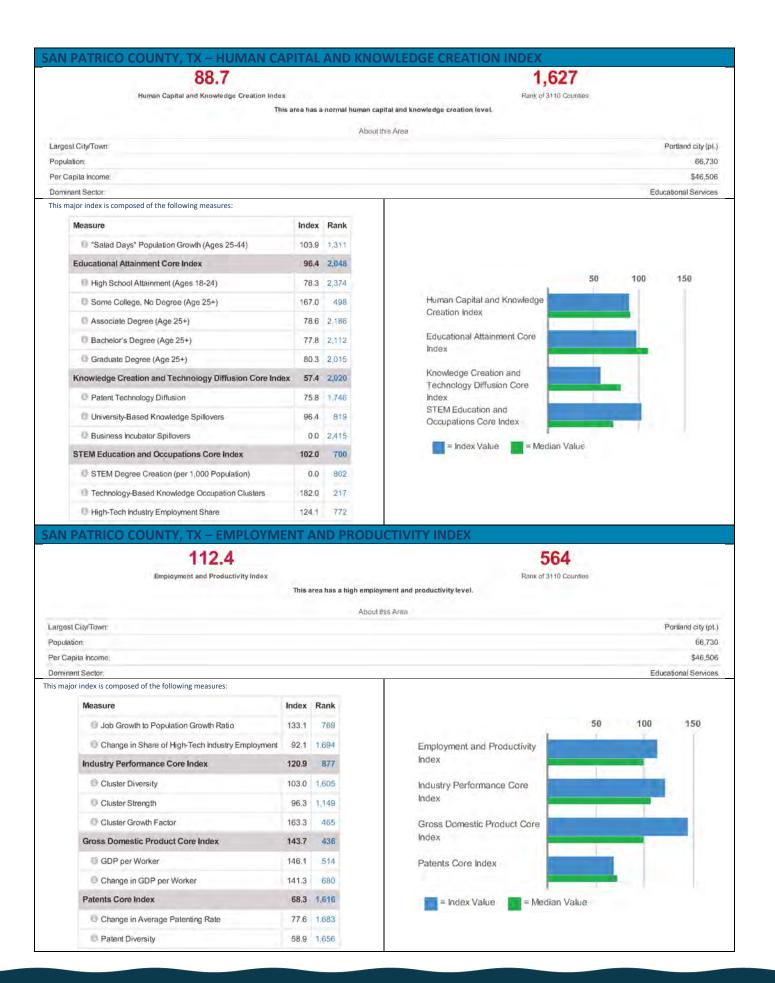
Largest City/Town. Portland city (pt.) Population: 66,730 Per Capita Income: \$46,506 Dominant Sector: Educational Services

This major index is composed of the following measures:

Measure	Index	Rank
Foreign Direct Investment Attractiveness Core Index	74.8	632
FDI Employment Index, Foreign Source	169,8	27
FDIS Investment Index, Foreign Source .	129.3	14
FDI Employment Index, National Source	0.0	1/182
FDIS Investment Index, National Source	0.0	1,182
Connectivity Core Index	117.1	357
Residential High-Speed Connection Density	135,3	512
Change in Residential High-Speed Connections	120.7	190
Farm Operators with Internet Access	95.4	1,478
Dynamic Industry Profile Core Index	96,5	1,453
Small Establishments (Average)	78.7	2,222
Large Establishments (Average)	77.5	1,450
High-Tech, Early-in-Life-Cycle Establishment Ratio	133,2	716
Proprietorship Core Index	86.0	2,550
Proprietorship Rate	85.4	1,859
Change in Proprietorship Rate	95.7	1,371
Proprietor Income to Total Wages and Salaries	79.5	2,330
Availability of Capital from All Banks	83.6	2,253







# **Economic Designations for Federal Funding**

## **U.S. Department of Housing and Urban Development (HUD)**

## **Difficult Development Counties:**

- Bee County
- Jim Wells County
- Kenedy County
- Kleberg County

# **U.S. Department of Transportation (USDOT)**

## **Persistent Poverty Counties:**

- Bee County
- Brooks County
- Duval County
- Jim Wells County
- Kleberg County

## **CEDS Committee: SWOT Analysis**

#### **STRENGTHS**

#### Infrastructure assets:

- Port of Corpus Christi / deep ship channel in the Texas Gulf
- Hub of pipeline networks for crude oil and natural gas from upstream production in as far as West Texas and New Mexico
- Established rail network
- 169 corridor in progress
- Availability of electricity and natural gas as fuel
- City of Corpus Christi has a record of proactively pursuing diversified water resources
- Strong healthcare system for acute care
- Higher education system
- Longest stretch of undeveloped beach and the dunes
- Land and abundant space

#### Strong existing sectors:

- By location quotient (LQ), "strongest" sectors are (1) mining, and oil and gas extraction, (2) construction, (3) health care and social assistance, and (2) accommodation and food services
- Portion of the regional workforce employed by the hotels/motels and restaurants collectively in the Coastal Bend is 25% greater than the U.S. average
- Diversification moving in the right direction with natural gas and manufacturing moving in
- Strong agricultural sector
- Military assets

#### Strong growth sectors:

- By employment growth rate 2011-2020: (1) management of companies (145%), (2) professional, scientific, and technical services (36%), and (3) arts, entertainment, and recreation (31%)
- Also: Agriculture; Manufacturing; Renewable energy; Staging offshore wind; Oyster aquaculture; UAV test center; Cybercommand; Logistics/Warehousing/shipping related to ecommerce

#### Influential actors:

- Elected officials, representatives.
- Local governments
- Economic Development Corporations, Chambers of Commerce
- Port of Corpus Christi Authority
- Workforce development agencies
- City Managers, Emergency Mgmt. Officials
- Academic Institutions
- Regional Resilience Partnership

#### Local partnerships to increase the export base:

- Port of Corpus Christi ranked #1 Free Trade Zone in the country
- Oil export terminals

#### Alignment of colleges, workforce boards, economic development agencies, and industry groups:

- Collaboration among v education and workforce training agencies, and major employers
- Workforce Solutions of the Coastal Bend provides and facilitates training programs
- In Corpus Christi, the City's Education and Workforce Stakeholder Group consists of K-16 representatives and all local economic and workforce development agencies
- Del Mar Workforce Training programs with private industry
- Higher education programs and alignment

#### Specialized workforce skills and higher education levels:

- Marine sciences, UAV center, Nursing, GIS
- Regional workforce educational attainment level relatively lower than the Texas and U.S. average at the Bachelor level; of those with advanced degrees, the following areas had the highest number of degrees:

- o Associates: Engineering, engineering related tech., health, precision production, science technician (2011-2015)
- o Bachelors: Computer and information sciences, engineering, engineering related tech., health, physical sciences, visual and performing arts (2010-2015)
- Masters: Health, computer and information sciences, business management and marketing, education, engineering (2011-2015)

Alignment of regional workforce strategy with the workforce strategy of local elected officials, the Workforce Investment Board, and education:

- Workforce Solutions and Del Mar update a list of Targeted Occupations
- The strategies and visions among Workforce Solutions, Del Mar, TAMUCC and ISDs are aligned
- Corpus Christi has strategic educational and workforce plan
- Education and workforce committee is working on a strategy toward an action plan

Workforce skills that are critically important to the region's economic growth strategy, and how they can be leveraged as competitive assets:

Hospitality; Welding; Engineering - civil, mechanical, electrical; Crafts / Trades - electricians, plumbers, carpenters; Ecological restoration and scientific monitoring; Agriculture/Ranching training for newer generations

Active engagement by businesses, industry associations, labor organizations in developing training curriculum or work-based learning opportunities:

- Major employers in the Port district have sponsored workforce training programs
- Workforce training programs at the Craft Training Center of the Coastal Bend

Agencies providing support and funding to build capacity for economic development activities:

- Community Foundations
- Type B Board
- Texas Workforce Commission and the Workforce Solutions of the Coastal Bend
- Opportunity Zones
- **General Land Office**
- Texas Dept. of Agriculture
- Texas Department of Housing and Community Affairs
- Other potential funders, depending on development activities: Department of Defense; Department of Energy; Health & Human Services; USDA; Private sector

Livability that makes this region where people want to settle and raise their families:

- Climate, beach to bay lifestyle opportunities near the coast; ranching/hunting inland
- Gauging solely by the rankings of public health, crimes, and individual financial health, the region fares relative to the U.S. average in terms of 'livability'
- Decent paying jobs that do not require a degree (oil & gas); cluster of higher academic institutions that offer a variety of degree programs, comprehensive healthcare, abundance of natural and recreational offerings
- Corpus Christi designated a Dementia Friendly City
- Additional strong factors from AARP livability index include: Housing affordability-cost/month (other than Nueces & San Patricio); Housing affordability-subsidized units (other than Kenedy); Lack of traffic congestion (other than Nueces); Air quality-roadway & industrial pollution (other than Jim Wells, Kleberg, Nueces, San Patricio); Social engagement-social involvement

#### WEAKNESSES

Livability as challenges in this region:

- Affordable/accessible housing options do not meet the need of aging / low-income populations
- Health challenges, as well as access to care in rural areas
- Financial fitness
- Degraded water infrastructure systems, street systems
- Coastal Bend additional challenging factors from AARP livability index include:

O Access to jobs by transit or auto (other than Nueces); Access to parks (other than Bee, Jim Wells, Nueces, Refugio); Mixed-use neighborhoods (other than Brooks, Nueces); Neighborhood quality (other than Nueces); Frequency of local transit service; Safe streets – speed limit and crash rate (other than Brooks, Duval, Kleberg, Nueces); Access to exercise opportunities (other than Aransas, Duval, Nueces); Access to healthcare (other than Kleberg, Nueces); Quality of healthcare (other than Aransas, Nueces); Voting rate (other than Aransas, Kenedy); Income inequality (other than Kenedy, Live Oak, Nueces, San Patricio); Jobs per worker (other than Jim Wells, Kenedy)

#### Areas most distressed:

- Oil and gas extraction sector due to historically low energy prices and declining production
- COVID-19 pandemic disproportionately impacted tourism and low-wage workers
- Finance and insurance, information, other occupations not well represented locally
- CDC Social Vulnerability Index lists following counties with high vulnerability (range 0-1): Bee (0.921); Refugio (0.8959); San Patricio (0.7781); Nueces (0.8204); Duval (0.9981); Jim Wells (0.9118); Kleberg (0.9850); Brooks (0.9990)

#### **Declining industries:**

- Oil and gas sector has been on a decades-long decline
- Outlook of less reliance on fossil fuels means the historical downtrend will prevail

#### Strategic needs to implement export investment:

- Short Term: Meeting the workforce needs of new large employers
- Short Term: No marketing plan or budget to broadcast efforts of Regional Workforce Strategy
- Long Term: Developing a skilled workforce that drives future regional economic growth
- Long Term: Providing innovative development opportunities requiring specialized skills
- Local "brain drain"

#### Access of the workforce to jobs and housing options:

- Much of the region's workforce is ill-prepared for the high-paying jobs of the future
- Hosing options are limited for low-income groups
- Region in need of workforce housing to support tourism industry
- Affordable and resilient housing is a big need there is not nearly enough new single-family housing under construction, and lots planned to meet the single-family demand

#### Agreement to the broadband/ telecommunications needs of the region:

- Need better broadband/fiber access in certain areas
- Need to incorporate planning for future fiber in public improvement projects (though there is a multi-jurisdiction agreement between Refugio, Aransas, Nueces, San Patricio and Victoria)
- Areas in particular need of broadband (lacking broadband access beyond the 25.4% average): Refugio (Austwell/Tivoli ISD-100%; WoodsborlSD-30%); Bee (Skidmore/Tynan-61.8%; Pettus ISD-100%; Pawnee ISD-100%); Live Oak (George West ISD-55.3%); Jim Wells (Orange Grove-66.8%); San Patricio (Sinton ISD-25.7%; Odem ISD-26%); Nueces (Banquete ISD-80.3%; Driscoll ISD-49.9%; Bishop-37.2%); Duval (San DiegISD-26%; Benavides ISD-32.2%; Freer ISD-99.1%; Ramirez CSD-56.4%); Jim Wells (La Gloria ISD-100%); Kleberg (Santa Gertrudis ISD-100%; Riviera ISD-92.7%; RicardISD-84.1%) Kenedy (Kenedy CSD-94.8%)

#### Active engagement from the region's vulnerable and/or underserved populations:

 The region's Inclusive Development Network has spearheaded initiatives aimed at promoting a level-playing field for the advancement of Hispanics and women in workforce and business.
 However, the IDN is primarily focused on the metro area. Also, lower income and Spanish-speaking residents are not well represented in public meetings

## <u>Using technology-based tools to widen the distribution of information and increase feedback from residents:</u>

- For the majority of the region such systems are lacking, however there are some strengths:
  - Upskill Coastal Bend (upskillcoastalbend.com) platform is an initiative aimed at promoting career planning and workforce training in the region
  - o Addition of 211
  - o Corpus Christi COVID-19 dashboard
  - o GIS platform under development for four counties (Aransas, Bee, Refugio, San Patricio)

#### **OPPORTUNITIES**

#### Drivers of job creation:

• Growth in traditional industries has occurred in large part to the "friendly" regulatory environment in Texas and the existing logistical advantages of the region with a deep-sea port

#### Drivers of economic gains:

- Secondary or spillover effects from the growing industries (exports and tourism)
- Making the Texas Triangle the Texas Star

#### Sources of exports, tourism, or foreign investment to bring wealth:

- Capitalize on birdiest city designation as well as vast ranchland
- Advance a "Regional-wares" website to make goods and services broadly available
- Promote opportunities zones- there are 17 in the Coastal Bend
- Legalization of the growth of industrial hemp

#### Industry sectors/clusters with growth potential:

 Healthcare; Manufacturing; Education; Logistics/ecommerce; Remote work occupations; Oyster aquaculture; Farm-to-Market business model; Ecological fields; Renewable energy

#### The region's target foreign markets:

- Exports of agriculture and petrochemical products
- Reshoring
- Shortened supply chain links with Mexico
- Export middle distillate and other fuels to Mexico
- Crude to Europe and Asia

#### Workforce strategies that lead to career pathways and credentials:

Develop green industry job training programs – such as renewable energy

#### Program evaluations and approach to continuous improvement:

- Regional Resilience Partnership could be expanded
- Annual homelessness survey largely Corpus Christi
- Regional hospitals conduct a health needs assessment and evaluation
- Social service agencies also do annual planning and assessment with input from end-users
- Coastal Bend Air Quality Partnership Group

# <u>Integration of land use, housing, economic development, transportation, and infrastructure planning to support regional prosperity</u>:

- Regional Resilience Partnership to strengthen improved use of data-driven strategies
- Framework for coordination Metropolitan Planning Organization, Regional Transportation Agency, local municipalities, Economic Development Corporations, large employers
- Identify employee needs and concerns to aide with talent retention and recruitment
- Identify employer workforce needs to focus housing and land use policy recommendations
- Streamlined process for developers/contractors/roofers
- Regionally promoted or standardized building codes
- Coordinated private and public transportation services for increased frequency and range
- Connecting cities with passenger rail San Antonio, Corpus, Dallas
- Affordable housing is both a huge need and opportunity consensus is needed

#### Opportunities to redevelop brownfields and vacant space:

- The ongoing Corpus Christi downtown revitalization process serves as a model
- Opportunity for collaboration with scientific community, engineering professionals, University researchers and municipal government on bioremediation, monitoring and redevelopment

#### Opportunities for distributed and advanced energy:

- Region lacks consensus among stakeholders to leverage Port's potential to export energy
- Manufacturing renewable energy technology
- Energy storage (e.g., battery fields)
- Offshore Wind energy-repurposing Platforms / Wind farms
- Energy transmission (limiting factor currently) and transition (part of the solution)

#### Planned future energy needs in light of changes in demand and climate:

- Desalination to meet water needs of the region, however less clear with respect to energy
- Need to diversify to keep up with global trends could be strongly positioned to take advantage of net-zero policy by 2050

#### **THREATS**

#### Threats to existing strong sectors:

- Newly developed industry in petrochemical and heavy manufacturing is subject to economy-wide risk as well as industry-specific risks
- Energy transmission is currently a limiting factor
- Base realignment and closure
- Rail and roadway connectivity to Mexico border congestion/bottlenecks are limiting factors
- Terminal expansion and ferries on water transportation
- Water quality (other than Aransas, Live Oak, Brooks), Air quality (other than Kleberg, Nueces)
- Climate change and increasing strength and frequency of tropical storms
- Future water supplies

#### Drivers of job losses:

- Shifts in energy sector/price oil
- Impacts of the COVID-19

#### Drivers of economic losses:

Region is subjected to external economic shocks arising from man-made or natural disasters

#### <u>Understanding of energy needs of the region:</u>

- Ongoing controversy over the construction of a desalination plant in the region
- Vulnerability of the environment needs to be part of the energy needs assessment

Regional hazard mitigation planning that takes into account future risk from events such as droughts, floods, storm surges and fires:

- Coastal Bend Mitigation Action Plan considers 18 different types of natural hazards for 7 counties of the Coastal Bend (Aransas, Bee, Live Oak, San Pat, Nueces, Kleberg, Jim Wells); however, does not rely on data/modeling to assess future risks
- Need to consider innovative risk mitigation approaches from around the country that could work well in the Coastal Bend

# The region's climate adaptation and hazard mitigation planning that integrates land use and workforce planning to ensure a resilient and prosperous region:

- There is no regional climate adaptation planning
- There is no regional land-use planning or common standards to be used such as building codes
- Unclear on the extent of integration in regional hazard mitigation
- Ozone air nonattainment is considered a threat to further industrial development
- Level of resilience planning varies across the Coastal Bend need to leverage capacity

# <u>Climate change's impact on flood risk, water supply, wildfire risk, sea levels and storm surges, extreme heat,</u> extreme precipitation, and other extreme weather events:

- Gulf coast is at risk for sea level rise as was recently reported in the NOAA Technical Report "Global and Regional Sea Level Rise Scenarios for the United States"
- Subsidence will also increase coastal flooding
- Warming climate can lead to wetter and bigger tropical storms and prolonged periods of drought
- Lack of natural drainage due to soil composition and topography
- Although projected changes in annual precipitation are uncertain, increases in extreme precipitation
  events are projected; higher temperatures will increase soil moisture loss during dry spells,
  increasing the intensity of naturally occurring drought

# Coastal Bend Economic Development District COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY 2021–2026

