

MATAGORDA COUNTY ECONOMIC RESILIENCE PROFILE

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Introduction

Economic resilience is the ability to withstand and prevent disruptions to the economy. The most common types of disruptions include downturns in the economy or in a key industry; the exit of a major employer; and natural or man made disasters.

Creating a resilient economy requires the ability to anticipate risk, evaluate how risk can impact economic assets, and build the capacity to respond to disruptions.

This profile is intended to provide an overview of the factors affecting the future growth, development and resilience of Matagorda County and it's economy by providing key data points on the economy, demographics, and other useful information.

Matagorda County Boundaries

-  Matagorda County
-  Other counties
-  Top 3 cities
-  Major roads

County Seat: Bay City
Largest City: Bay City



Matagorda County Overview

Matagorda County is a largely rural county on the Gulf of Mexico, with 32 percent of its total area of 1,613 square miles composed of East Matagorda Bay and Matagorda Bay. Its major watershed is the Colorado River. Matagorda County's estimated 2016 population of 37,187 has remained largely stable since 1980. Matagorda County has two cities, Bay City and Palacios. Bay City, the county seat, has a 2016 estimated population of 17,809. Palacios is a coastal city on Matagorda Bay with an estimated 4,682 residents. Other unincorporated communities include Blessing, Midfield, Markham, Wadsworth, Matagorda, Sargent, Pledger, and Van Vleck. Major transportation corridors include State Highways 35, 60, 71, and 111. The Gulf Intracoastal Waterway, a major maritime freight corridor, passes through the county, providing access to the Port of Palacios and the Port of Bay City on the Colorado River. Freight also passes through the county on the Burlington Northern Santa Fe and Union Pacific railroads.

Matagorda County's economy is based on power

generation, chemical production, tourism, and agriculture; the county's labor force is 16,984 workers. Matagorda's South Texas Nuclear Project Electric Generating Station, a power station on the Colorado River, was until recently, the largest set of nuclear reactors in the nation. Comprising nearly 20 square miles, the two reactors have a gross capacity of 2708 megawatts; two additional reactors were permitted in 2016. , The South Texas Nuclear Project employs 2,230 professionals. Matagorda County is home to two major chemical production facilities, employing approximately 150 employees each. The county is crossed by pipelines that deliver feedstock directly to potential industrial sites. Matagorda's coastal location brings in an array of tourism, from bird watching to fishing and hunting. Matagorda County is agriculturally productive. The annual value of agricultural production exceeded \$129,700,000, 41 percent of the total is from livestock sales and 59 crop sales. Rice and turf grass production make up a large portion of the total crop output. The County is the leader in the State of Texas for aquaculture (commonly known as fish or shrimp farming). The fisheries of the Matagorda Bay are economically significant; the Port of Palacios is home to over 300 commercial shrimping boats.



Matagorda's fisheries provide important employment opportunities.

Recent Disruptions to the Economy

Matagorda County's location makes it vulnerable to storms coming in off the Gulf of Mexico. Hurricane Harvey caused the Colorado River to top its banks, flooding parts of the county. At one point during the storm, a tornado touched down near the community of Sargent. A mandatory evacuation was issued for the entire county, and a curfew was put in place to prevent looting. Hurricane Harvey's impacts on the county are still being calculated. Fortunately, the Colorado River did not crest its levee and flood Bay City as forecasts had predicted.

The 2010-2012 Texas drought negatively affected cattle production, rice production, and fisheries. Matagorda Bay is more biologically productive when it has sufficient freshwater inflow, and drought can cause the fishery to lose productivity for several years. The 2014-2016 drop in the price of a barrel of oil did not affect the economy of the county to the same extent as the region; the one oil field services business in the county had to lay off workers, but did not close. Matagorda County also avoided the damages caused by the 2015 Memorial Day and 2016 Tax Day floods that other parts of the region experienced. Hurricane Ike in 2008 led to flooding and storm surge issues along the coast, especially in Palacios. Hurricane Ike could have been much more damaging, but the storm made landfall well to

the east. The national downturn in the economy during the Great Recession caused a knock-on effect in unemployment, which peaked in the county at 12.7 percent in January of 2011.

Economic Resilience Strategies

Had the Colorado River topped its levees during Hurricane Harvey, it is estimated that a 10-foot wall of water would have surged through Bay City. Fortunately, the Colorado River Authority worked to prevent that from happening. Matagorda County needs to investigate what it could do to create capacity to prevent future flooding events, in coordination with the upstream counties. There are no shovel-ready development sites available in the county, and sewer capacity is limited, which makes industrial developers responsible for treating their own waste outside of Bay City and Palacios. Bay City has made strides in enhancing the community's livability (see page XX for a case study on their efforts); Palacios is also undertaking efforts to enhance their community. Matagorda County is taking steps to enhance tourism, as the county has a largely undeveloped coastal area and ample opportunities for outdoor recreation. Matagorda County is the leader in aquaculture in Texas, and with the proper investments, could grow as an industry.

Recommendations

Matagorda County's economy will be better able to withstand, avoid, and recover from disruptions if it is able to:

Investigate structures for better coordinated countywide flood control strategies.

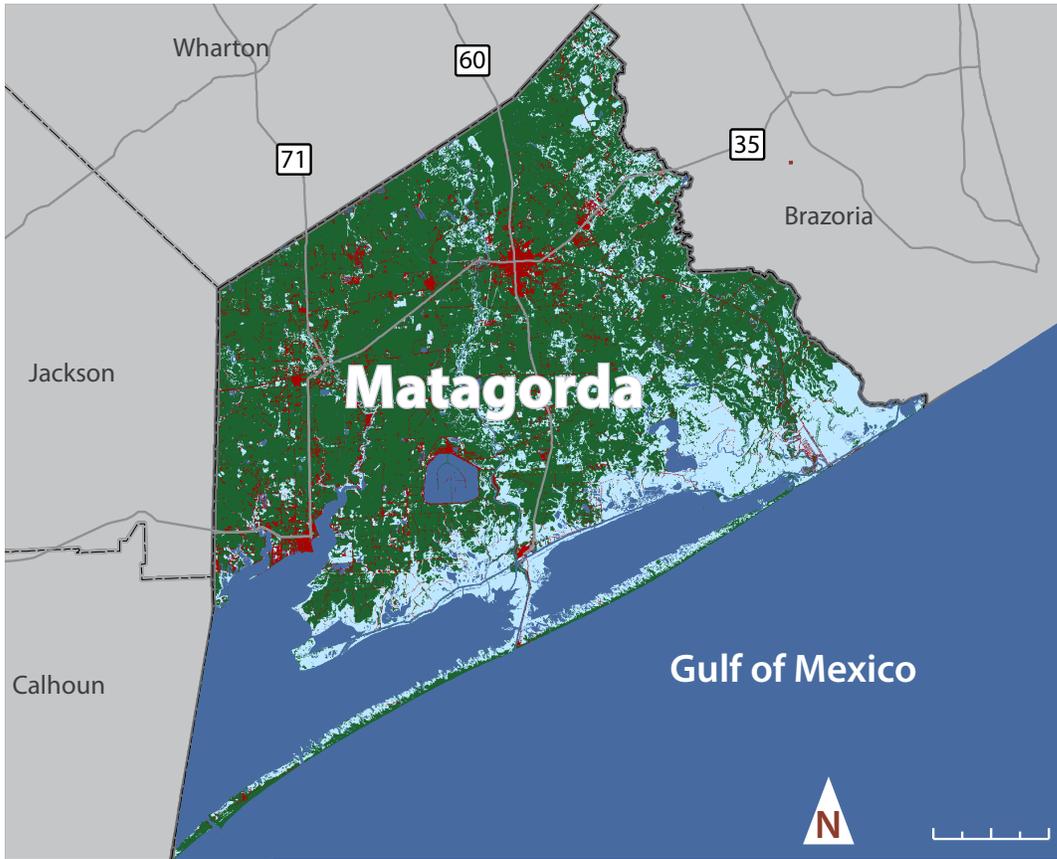
Continue and expand efforts to enhance the amenities of Matagorda's cities.

Conduct a cost benefit study on the creation of an industrial park in Matagorda County.

Encourage research and investment in the aquaculture sector.

Create a tourism development task force to increase the number of visitors to Matagorda County.

Land Use and Demographics



Matagorda County Land Use

- Other counties
- 9% Open water
- 6% Developed Land
- 22% Wetlands
- 63% Forest, shrubs, pasture, grasslands, barren lands and cultivated crops

Matagorda County has significant coastal resources, and plentiful farmland.

Population Growth Forecast

Matagorda County declined by 3% from 1980 to 2015 and is expected to reach 39,000 residents by 2040.



Municipal Populations

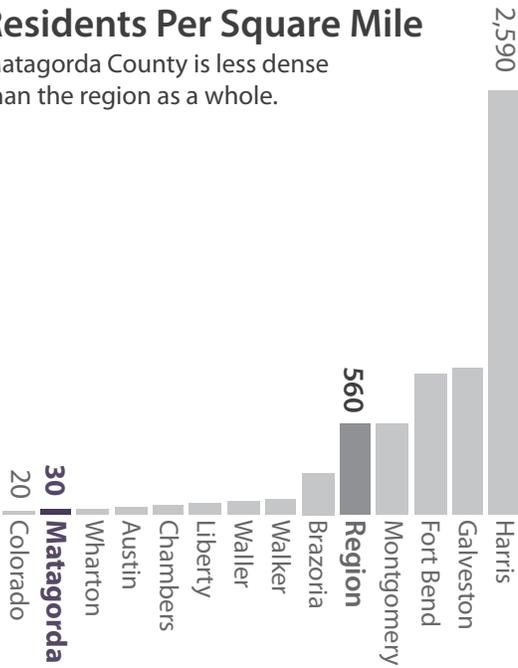
The City of Bay City is Matagorda County's largest incorporated municipality.

- 17,809 Bay City
- 4,682 Palacios
- 14,696 Unincorporated

Land Use and Demographics

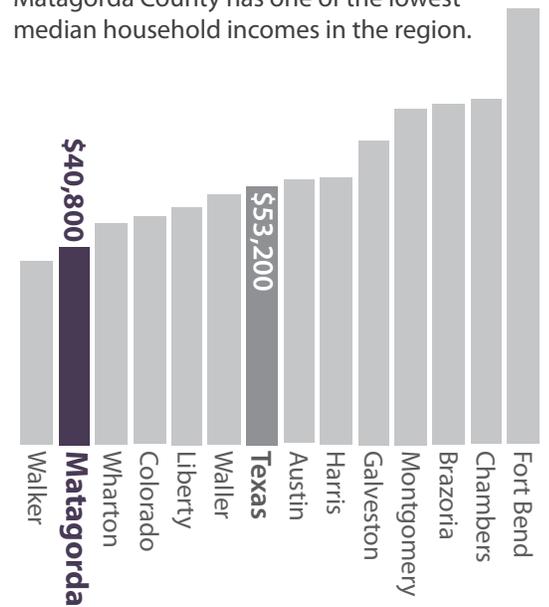
Residents Per Square Mile

Matagorda County is less dense than the region as a whole.



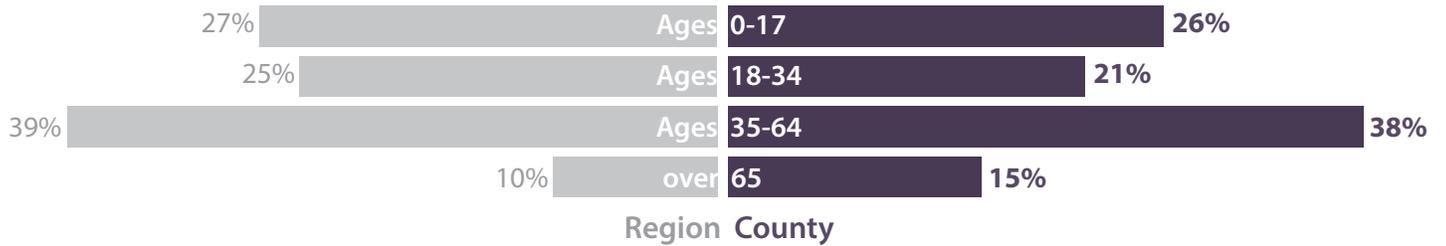
Median Household Income

Matagorda County has one of the lowest median household incomes in the region.



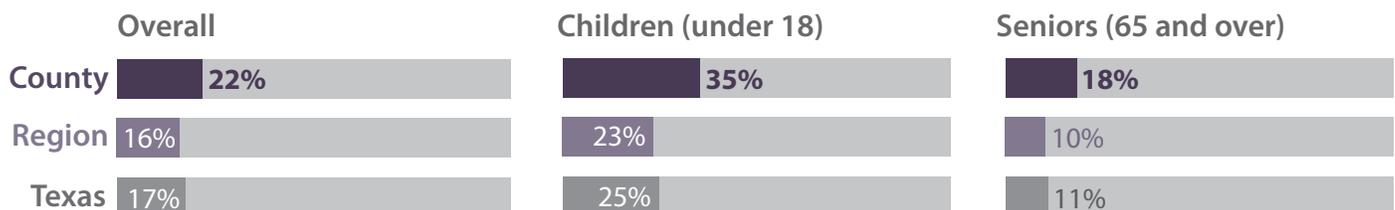
Age

Matagorda County is older than the region, with a higher portion of residents over 65.



Poverty Rate

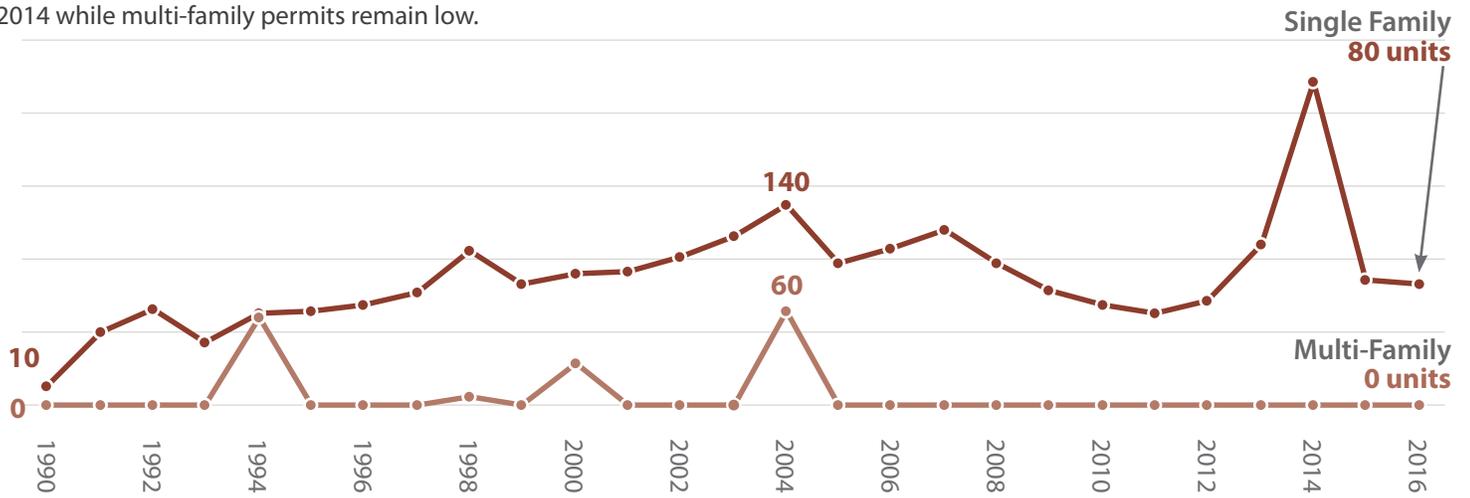
Matagorda County has a higher rate of poverty than the region, particularly for children.



Housing

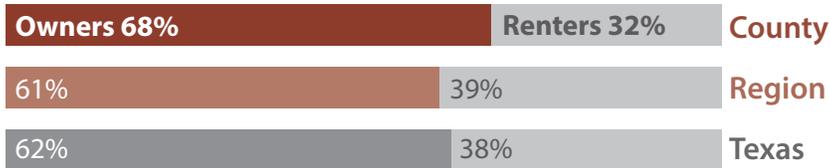
Building Permits Issued

Single-family construction has dropped from a spike in 2014 while multi-family permits remain low.



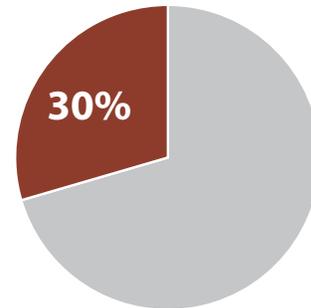
Housing Tenure

Matagorda County has a higher rate of homeownership than the region or the state.



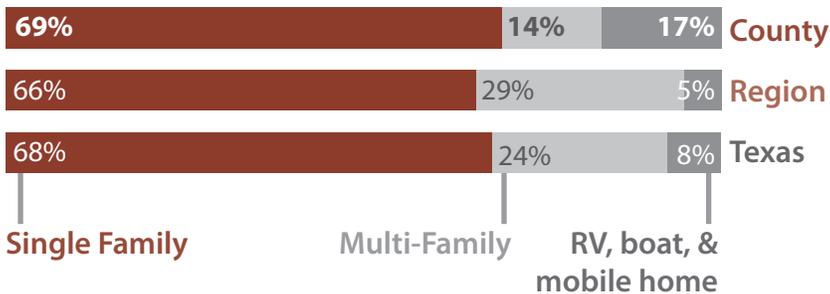
Vacant Housing Units

Around 30% of Matagorda County's housing units are vacant.



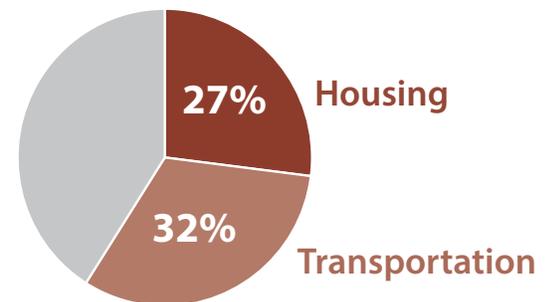
Housing Type

Matagorda County has a lower rate of multi-family homes and a higher rate of RV, boat and mobile homes than the region and state.



Living Costs

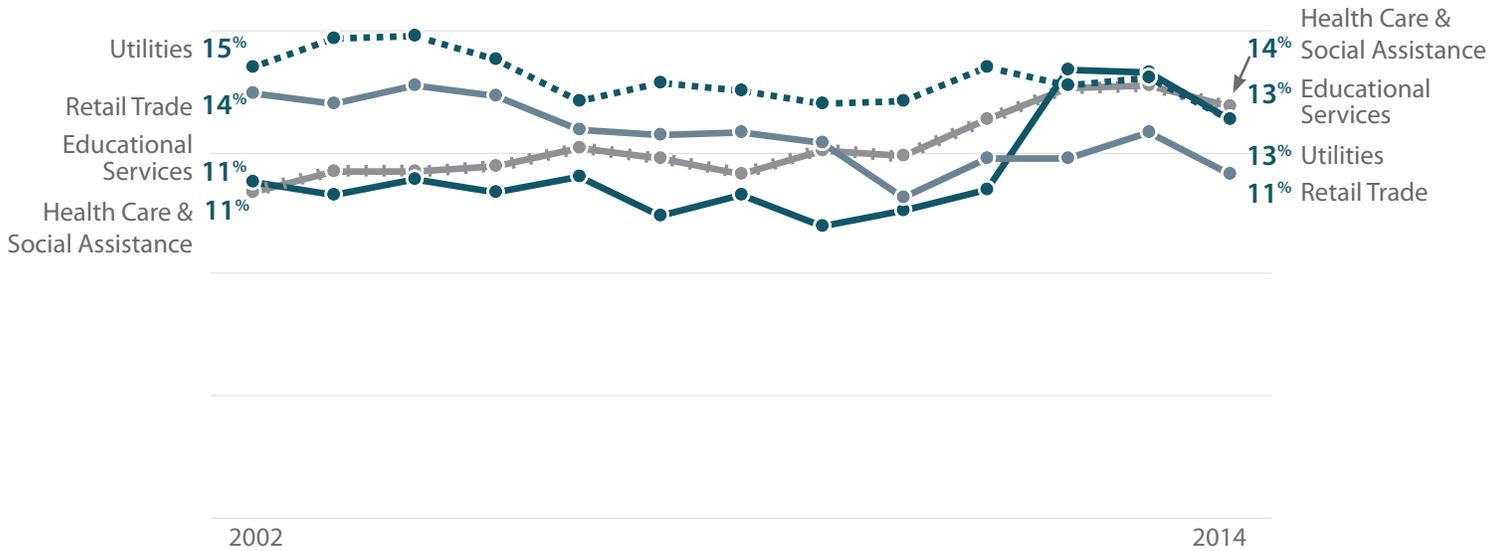
Matagorda County households spend 59% of their income on transportation and housing.



Economy

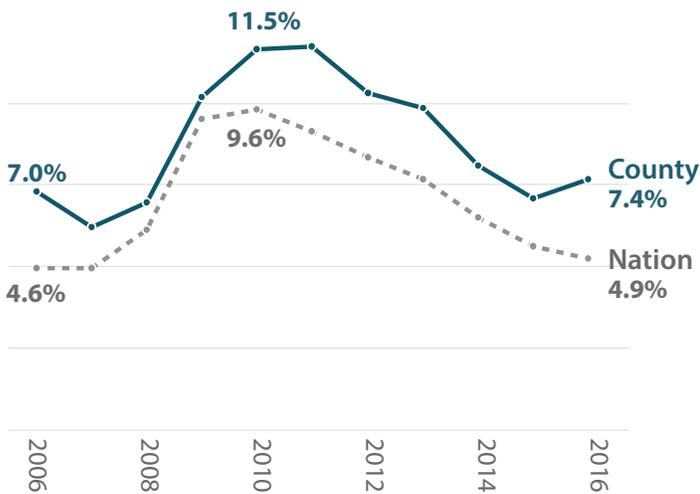
Top Industries by Percent of Overall Jobs

The industries in Matagorda County with the largest portion of employees remained consistent from 2002 to 2014 with a small jump for Health Care & Social Assistance employment.



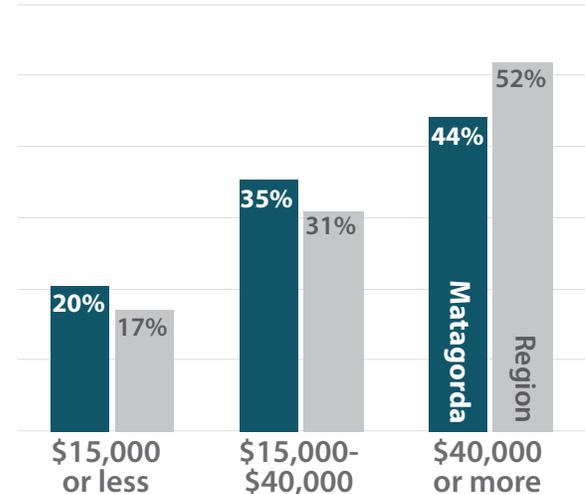
Unemployment Rate

Matagorda County's unemployment was higher than the national average between 2006 and 2016.



Earnings of Residents

Around 44% of Matagorda County residents earn more than \$40,000 annually, a lower percentage than the region.



Education, Hazard Risks, and Commute

Median Earnings by Educational Attainment

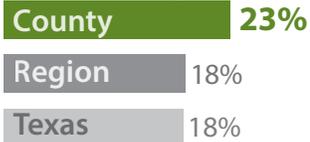
A Matagorda County resident with a graduate or professional degree makes, on average, \$60,300 more than a resident with less than a high school education annually.



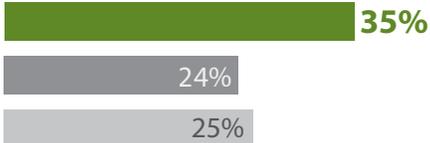
Educational Attainment

A lower percentage of Matagorda County residents have completed a bachelor's degree or more than the region or state.

Less than High School



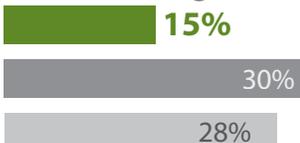
High School or Equivalent



Some College or Associate's

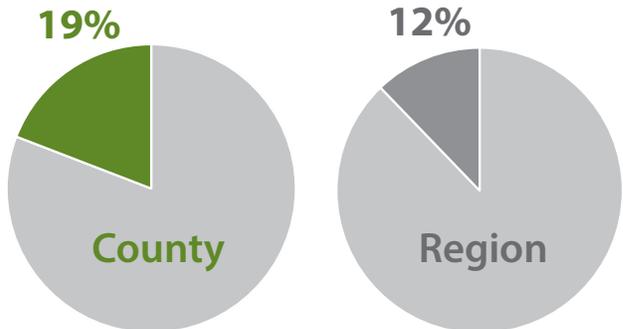


Bachelor's Degree or More



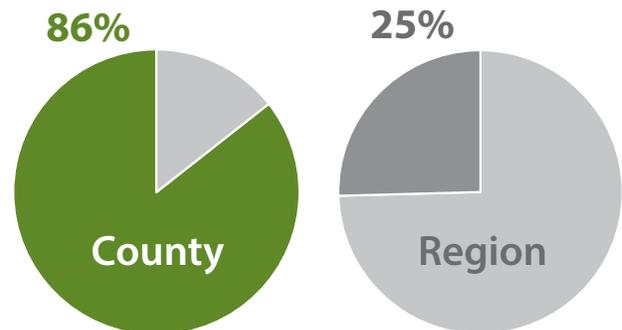
Residents in 100-year Floodplain

A larger percentage of Matagorda County residents live in a 100-year floodplain than the region.



Residents in Hurricane Evacuation Zone

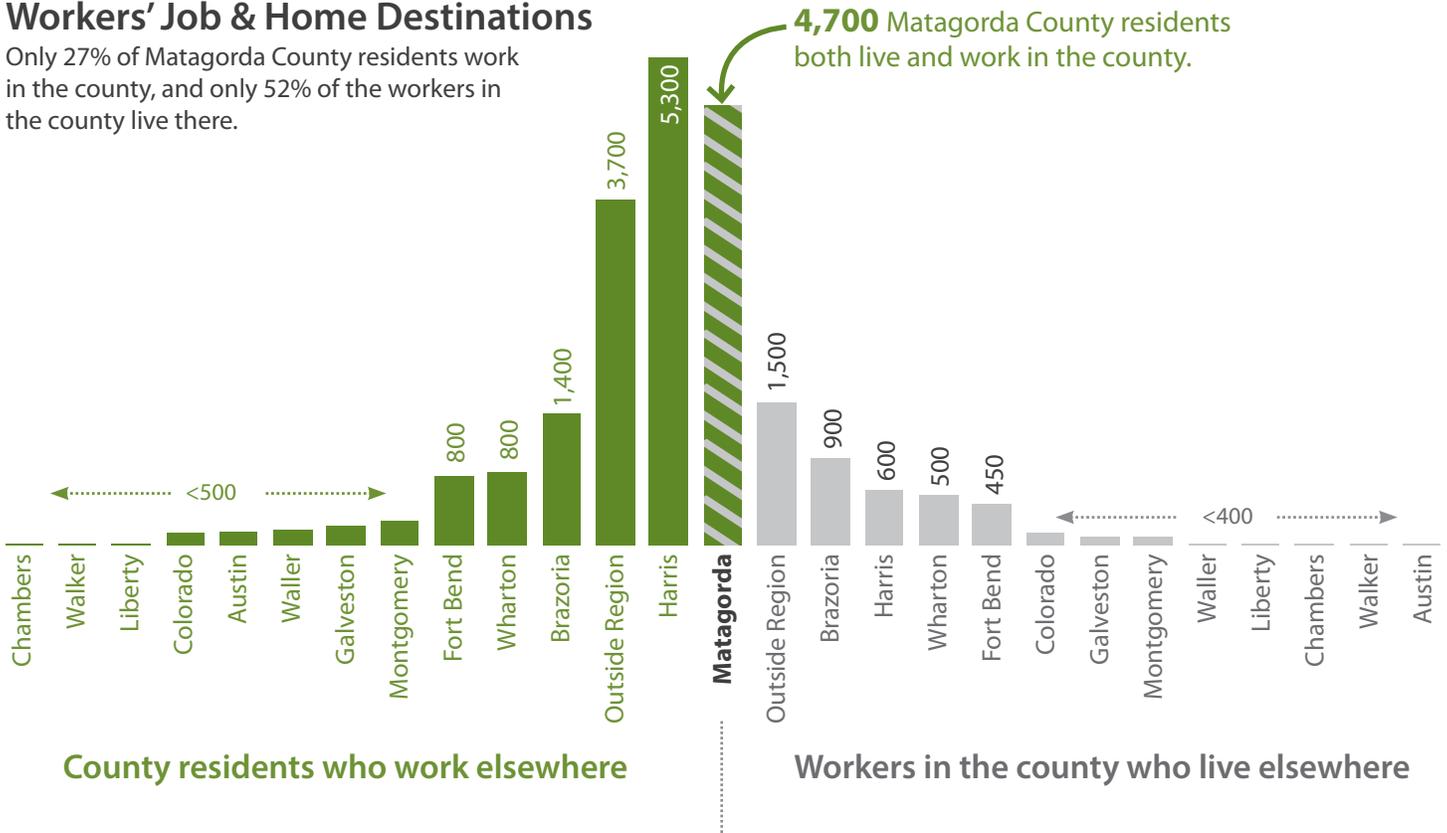
Around 86% of Matagorda County residents live in a hurricane evacuation zone, as opposed to 25% of the region.



Education, Hazard Risks, and Commute

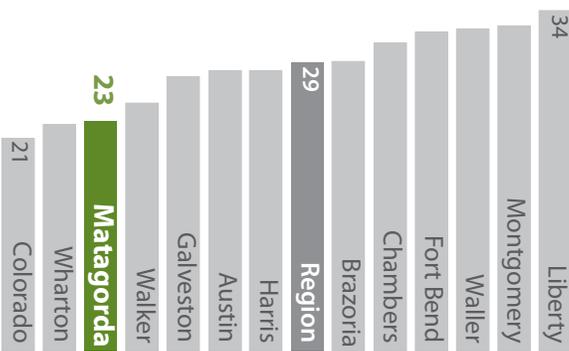
Workers' Job & Home Destinations

Only 27% of Matagorda County residents work in the county, and only 52% of the workers in the county live there.



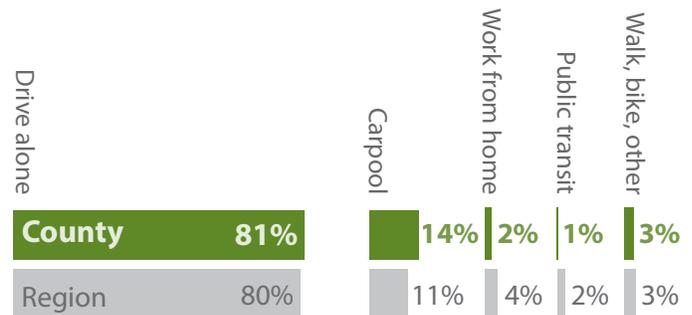
Mean Commute to Work (minutes)

Matagorda County workers have a shorter commute time than the region as a whole.



Commute Mode to Work

A similar percentage of Matagorda County workers drive to work compared to the region as a whole.



Economic Clusters

A cluster is a concentration of related businesses that make the area more competitive in those industries. Clusters exist where a set of related industries in a given location reach critical mass. Clusters enhance productivity and spur innovation by bringing together technology, information, specialized talent, competing companies, academic institution, and other organizations.

Traded clusters are groups of related industries that serve markets beyond the region in which they are located. Local clusters, in contrast, consist of industries that serve the local market. They are prevalent in every region of the country, regardless of the competitive advantages of a location.

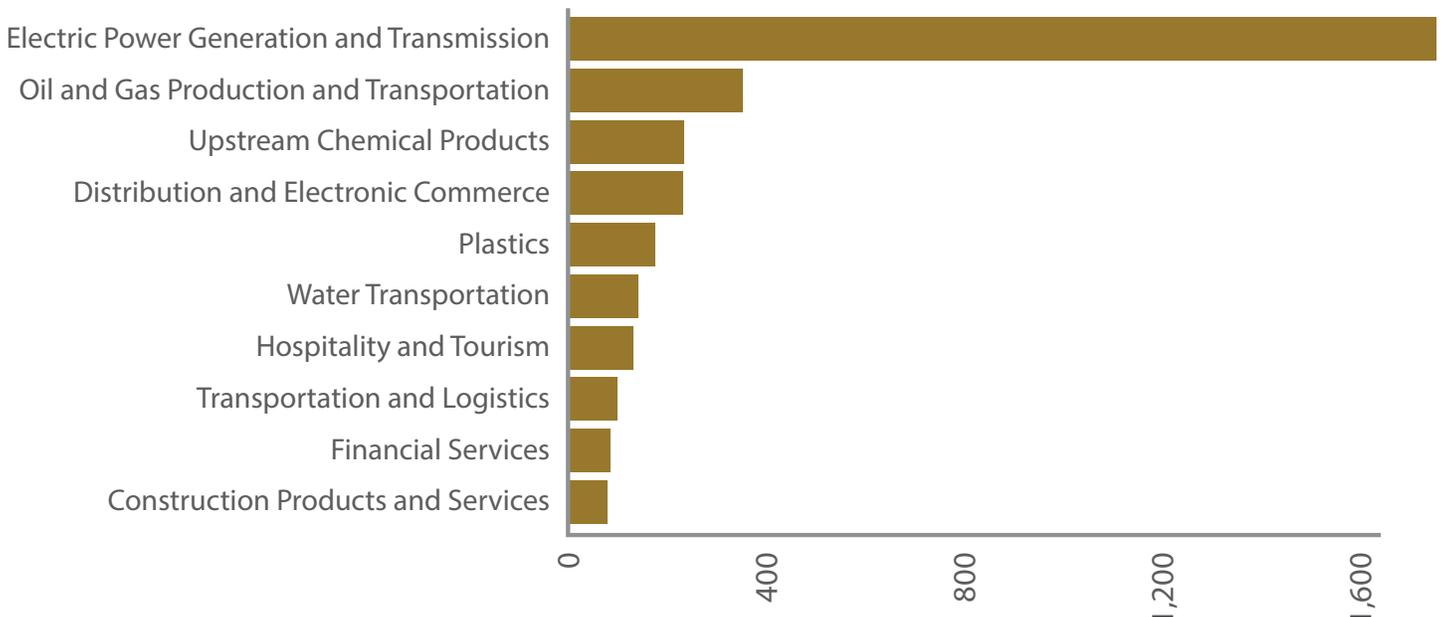
Traded v. Local Clusters

This diagram demonstrates the county's split between the traded and local sectors of the economy, based on 2014 data from the U.S. Census.



Employment by Cluster

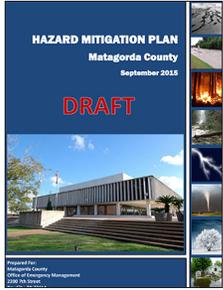
This bar graph demonstrates Matagorda County's employment by each cluster. It is based on 2014 data from the U.S. Census.



Local Planning

These plans highlight efforts in Matagorda County to plan for disaster recovery and economic resiliency.

Matagorda County Hazard Mitigation Plan



Matagorda County and its communities participated in previous hazard mitigation plans as part of the Texas Colorado River Floodplain Coalition (TCRFC). In 2004, the TCRFC developed a Hazard Mitigation Action Plan titled Creating a Disaster Resistant Lower Colorado River Basin. TCRFC completed the *TCRFC Multi-Jurisdictional Hazard*

Mitigation Plan Update 2011-2016 as a regional partnership of 15 counties (including Matagorda County) and 63 jurisdictions. This current plan is specific to Matagorda County and the City of Bay City and the City of Palacios. The plan identifies the top five mitigation actions for Matagorda County as the following:

- Install automated Flood Warning Systems
- Proper design criteria and promote tornado and hurricane safe rooms
- Waterproofing
- Install roofing material of stronger quality, enforce codes, engage in public education
- Build water reservoirs for water supply

Hazard mitigation is defined to alleviate the loss of life, personal injury, and property damage that can result from a disaster through long- and short-term strategies. Hazard mitigation involves strategies such as planning, policy changes, programs, projects, and other activities that can mitigate the impacts of hazards. The responsibility for hazard mitigation lies with many, including private property owners; business and industry; and local, state, and federal government.

Bay City North Downtown Plan



The *Bay City North Downtown Plan* presents a master plan for a 40-acre, primarily vacant area, north of Bay City's historic downtown. This area represents a potential site for a quality mixed-use development, offering a range

of housing choices that can respond to the emerging market demand and add to the city's tax base. The study recommends a phased approach to redeveloping this area, funded by a combination of public and private investments. The four-year plan includes projects such as building demolition and site clearing on city-owned properties; infrastructure upgrades; enhancements to waterways, parks, and trails; and streetscape updates, including sidewalks and plazas.

Vision Bay City 2040 Plan



In early 2014, the City of Bay City decided to move forward with the development of a Comprehensive Plan to identify a vision and develop a strategy to implement that vision. The result is the *Vision Bay City 2040 Plan*. This plan is

based on extensive public input and reflects the priorities of Bay City residents. It identifies key challenges facing the community and strategies to address those challenges. The plan is intended as a guide for city wide action, not just city government. This plan has a section focused on economic development. The plan recommends the design and implementation of a business retention and expansion program, a buy local campaign, and foster a strong environment for entrepreneurial development.

Data Sources

Brazoria County Overview

1. U.S. Census
2. U.S. Census
3. U.S. Census
4. Matagorda County Economic Development Corporation
5. Texas Energy Assurance Plan
6. International Atomic Energy Agency
7. U.S. Nuclear Regulatory Commission
8. Nuclear Energy Institute
9. USDA Census of Agriculture
10. USDA Census of Agriculture
11. USDA Census of Agriculture
12. Matagorda County Economic Development Corporation

Recent Disruptions to the Economy

13. Federal Reserve Bank of Saint Louis
14. Bureau of Labor Statistics

Graphics

- County Boundaries Map. Houston-Galveston Area Council, 2017.
- County Land Use Map. Houston-Galveston Area Council, 2017.
- Population Growth Forecast. Houston-Galveston Area Council, 2017.
- Residents Per Square Mile. Houston-Galveston Area Council, 2017.
- Age. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table B01001.
- Median Household Income. U.S. Census Bureau, 2011-2015 American

- Community Survey, 5-Year Estimates, Table S2503.
- Poverty Rate. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table S1701.
- Building Permits Issued. U.S. Census Bureau, Building Permits Survey, 1990-2015.
- Housing Tenure. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table DP04.
- Vacant Housing Units. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table DP04.
- Housing Type. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table DP04.
- Living Costs. Center for Neighborhood Technology 2013 H+T[®] Index.
- Top Industries by Percent of Overall Jobs. U.S. Census Bureau, 2002-2014, OnTheMap Application, Longitudinal-Employer Household Dynamics Program.
- Unemployment Rate. U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 2006-2016.
- Earnings of Residents. U.S. Census Bureau, 2014, OnTheMap Application, Longitudinal-Employer Household Dynamics Program.
- Median Earnings by Educational Attainment. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table B20004.
- Educational Attainment. U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table S1501.
- Residents in 100-year Floodplain. Houston-Galveston Area Council, 2017.
- Residents in Hurricane Evacuation Zone. Houston-Galveston Area Council, 2017.
- Workers' Job & Home Destinations. U.S. Census Bureau, 2014, OnTheMap Application, Longitudinal-Employer Household Dynamics Program.
- Mean Commute to Work (minutes). U.S. Census Bureau, 2011-2015 American Community Survey, 5-Year Estimates, Table S0802.