

# LIBERTY 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.

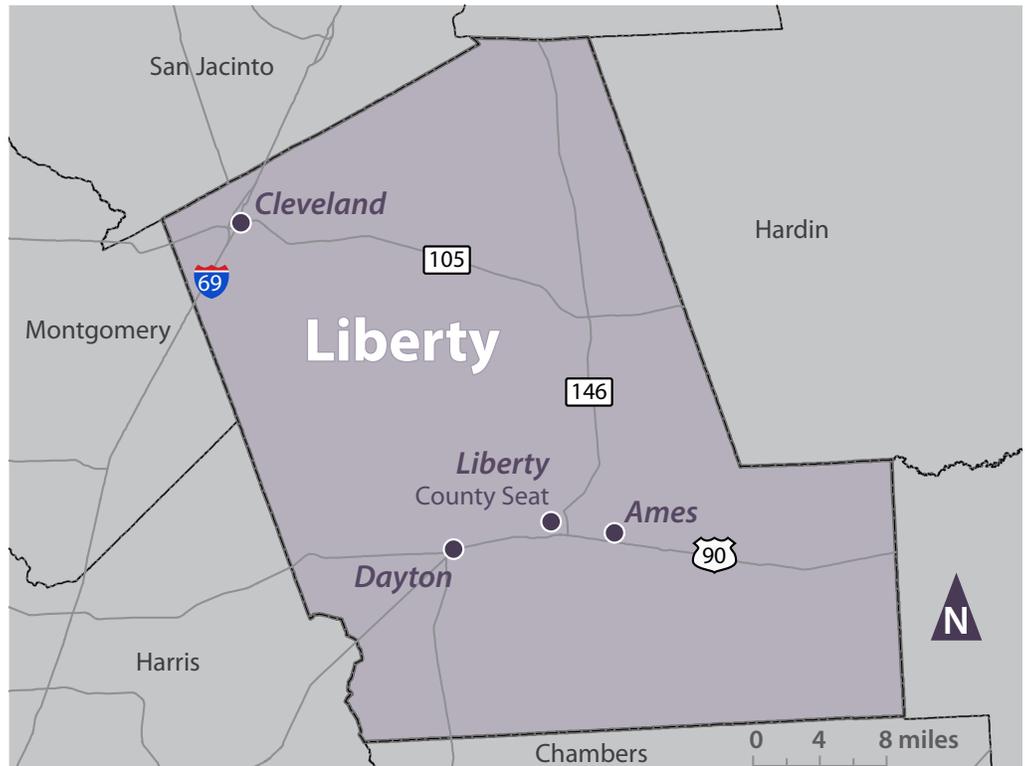
Creating a resilient economy requires the ability to anticipate risk, evaluate how risk can impact economic assets, and build the capacity to respond to disruptions.

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

## Liberty County Boundaries

- Liberty County
- Other counties
- Top 4 cities
- Major roads

County Seat: Liberty  
Largest City: Liberty



# Liberty County Overview

Liberty County is in the northeastern portion of the Houston metropolitan area, in the transition zone between the Texas' Gulf Coastal Plain and Piney Woods. Liberty County is divided approximately in half from north to south by the Trinity River, the primary waterway in the county, just downstream from the Lake Livingston dam. The east fork of the San Jacinto River flows through the northeast part of the county, just to the west of the City of Cleveland. Cleveland, Dayton, and Liberty (the county seat) are the three largest communities in the county. Liberty County is also home to the communities of Ames, Daisetta, Dayton Lakes, Devers, Hardin, North Cleveland, and Plum Grove. A small portion of the City of Old River-Winfree, extends into Liberty County from Chambers County.

The county's transportation corridors include U.S. Highway 90 and U.S. Highway 69 (which crosses the county in the far northwest). State Highways 146, 321, 1008, and 770, generally running north to south, are important to mobility in the county. These routes provide connections with other parts of the Houston metropolitan area. Liberty County is served by Union Pacific and the Burlington Northern Santa Fe railroads. Only 17 percent of Liberty County residents work in the county, and 15,900 Liberty County residents work in Harris County. The largest sector of the county's economy is retail; manufacturing is also a key sector. Between 41-50 percent of the land is considered prime farmland. Liberty County's rice production has decreased from more than 100 farmers in the 1970s to four producers today. The annual market value of agricultural production in 2012 was \$34.9 million; cattle and lumber, along with rice, are the principal agricultural products. In the 1990s four major corrections facilities began operations Liberty County, providing over 1,000 jobs.



The Liberty Economic Development Corporation has worked to pro-actively provide adequate fire protection service for industries in the county through the purchase of a tanker truck.

## Recent Disruptions to the Economy

Hurricane Harvey, the fifth federally declared flood disaster in Liberty County in 27 months, caused extensive flooding the county. Mandatory evacuations were ordered for more than 7,000 homes. The Trinity River overflowed its banks and backed up into the City of Liberty. The Trinity River Authority released a record 110,600 cubic feet of water per second from the Lake Livingston Dam. Flooding in the county has historically impacted residential areas more than businesses.

The 2014-2016 drop in the price of a barrel of oil negatively affected the oil field services companies in the county; there were few businesses that closed, but many companies were forced to lay off workers. The City of Cleveland lost over 650 jobs between 2008 and 2010 with the closure of the Georgia-Pacific paper plant and the closure of their hospital, which negatively impacted the county as a whole.

## Economic Resilience Strategies

Liberty County is expecting an influx of residents and retail development as the Houston-Galveston metropolitan area's population continues to grow. Liberty County serves as

a bedroom community for workers in the petrochemical complexes for both the east Harris/west Chambers County area, and in the Beaumont-Port Arthur area. With the construction of State Highway 99, several major master planned communities have been announced west of the Trinity River.

Petrochemical manufacturers and industrial services businesses are locating in the southern portion of Liberty County along State Highway 146, just north of the City of Mont Belvieu (the majority of Mont Belvieu is in Chambers County). Constraints for additional industrial manufacturing facilities include the Liberty County's status as a non-attainment area for federal air quality standards, the volume of water resources needed for manufacturing, and the need for Insurance Service Office (ISO)-rated fire service. While railroads are a critical part of the county's economy and infrastructure, extensive traffic delays are common at the street level railroad crossings, impacting the quality of life for residents. The lack of continuous sidewalks in the county's urbanized areas is an additional quality of life/infrastructure issue. Addressing the county's flooding and drainage issues are key concerns facing Liberty County's future growth and development.

## Recommendations

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

Develop a county-level flood protection and drainage plan for Liberty County.

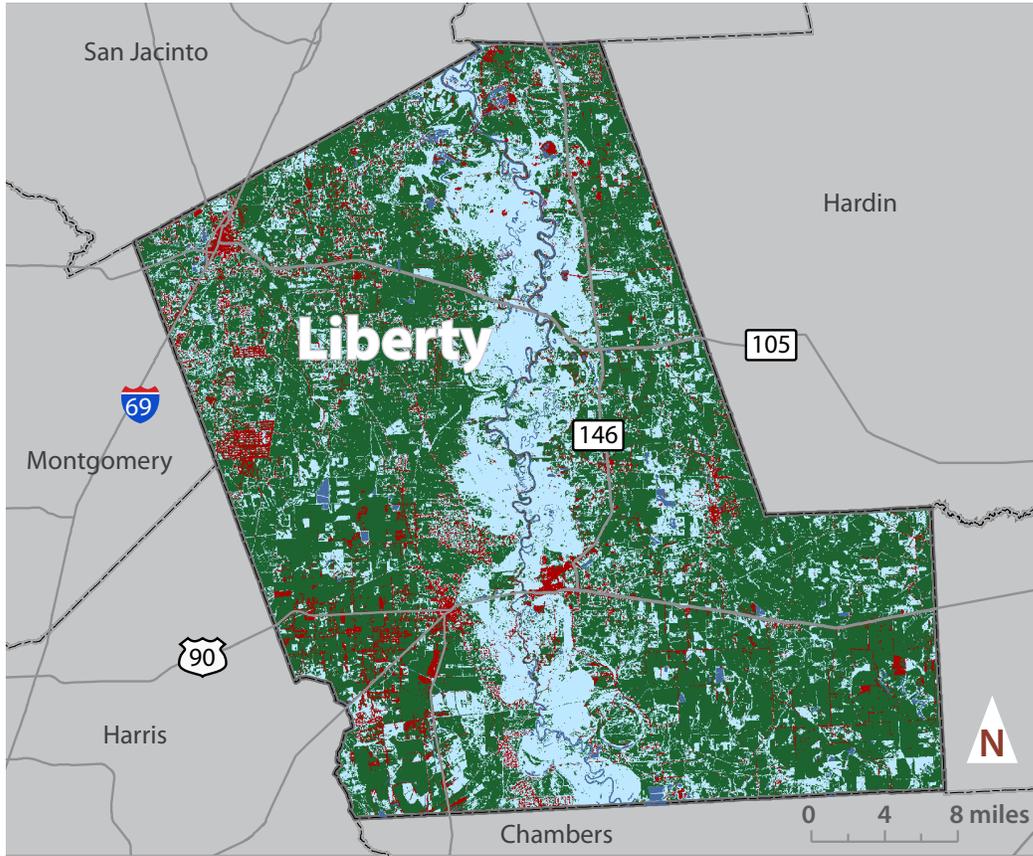
Create an infrastructure development plan for industrial development along the State Highway 146 corridor.

Coordinate with the Texas Department of Transportation (TxDOT), local municipalities, and railroads to create a plan to address traffic caused by street level (at grade) railroad crossings

Enhance the standards of the County's fire service to meet an Insurance Service Office (ISO) Public Protection Classification rating of 3 or 4.

Coordinate with TxDOT and local municipalities to create a sidewalk plan for Liberty County.

# Land Use and Demographics



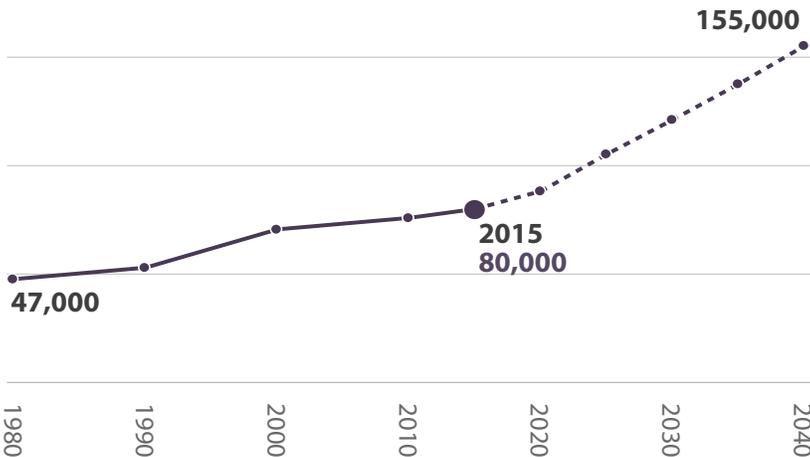
## Liberty County Land Use

- Other counties
- 1% Open water
- 8% Developed Land
- 32% Wetlands
- 60% Forest, shrubs, pasture, grasslands, barren lands and cultivated crops

Liberty County is bisected by the Trinity river, and the western half of the county is experiencing increased residential development.

## Population Growth Forecast

Liberty County grew by 69% from 1980 to 2015 and is expected to reach 155,000 residents by 2040.



## Municipal Populations

The City of Liberty is Liberty County's largest incorporated municipality.

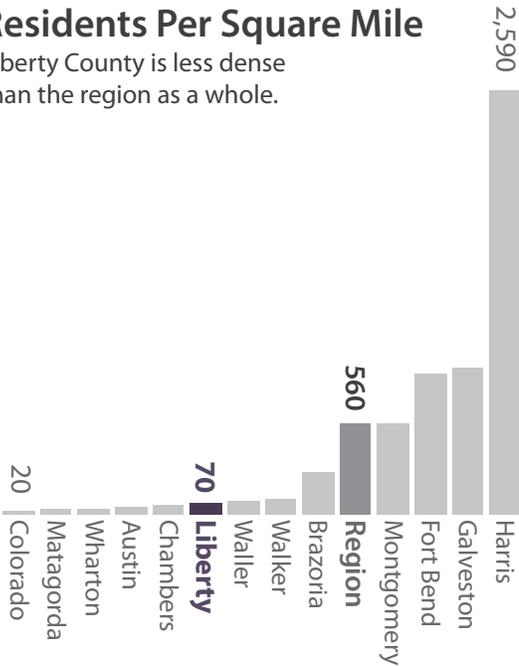
- 9,175 Liberty
- 8,095 Cleveland\*
- 7,734 Dayton
- 1,093 Ames
- 1,054 Daisetta
- 885 Hardin
- 654 Plum Grove
- 615 Kenefick
- 486 Devers
- 267 North Cleveland
- 157 Old River-Winfree\*
- 100 Dayton Lakes
- 51,389 Unincorporated

\*The municipality spans multiple counties. Only the population residing in Liberty County is shown here.

# Land Use and Demographics

## Residents Per Square Mile

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



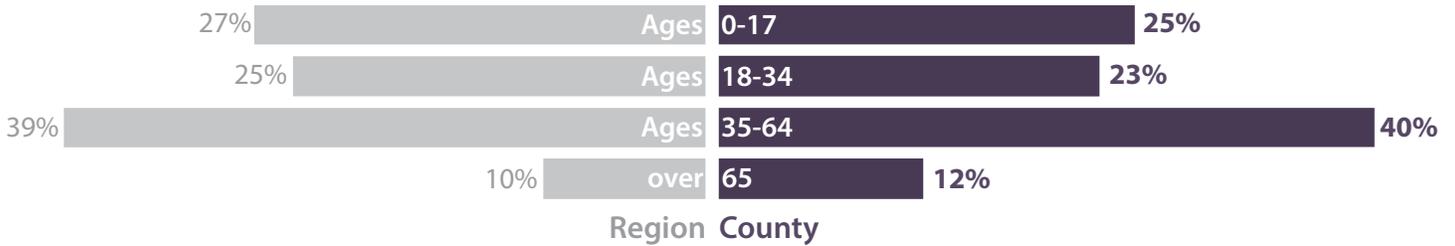
## Median Household Income

Liberty County has a lower median household income than the region.



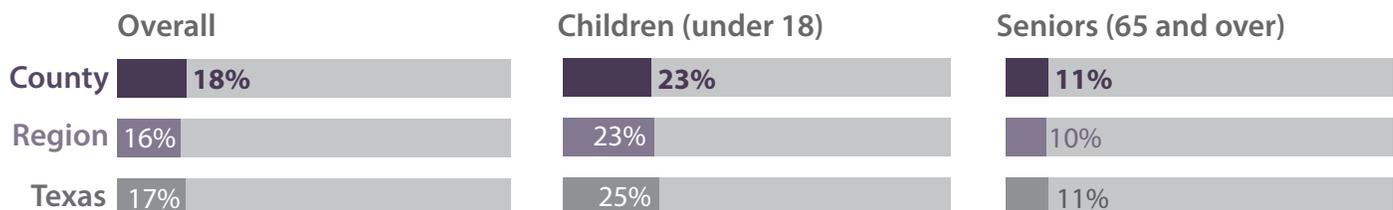
## Age

Liberty County has a similar age profile as the region.



## Poverty Rate

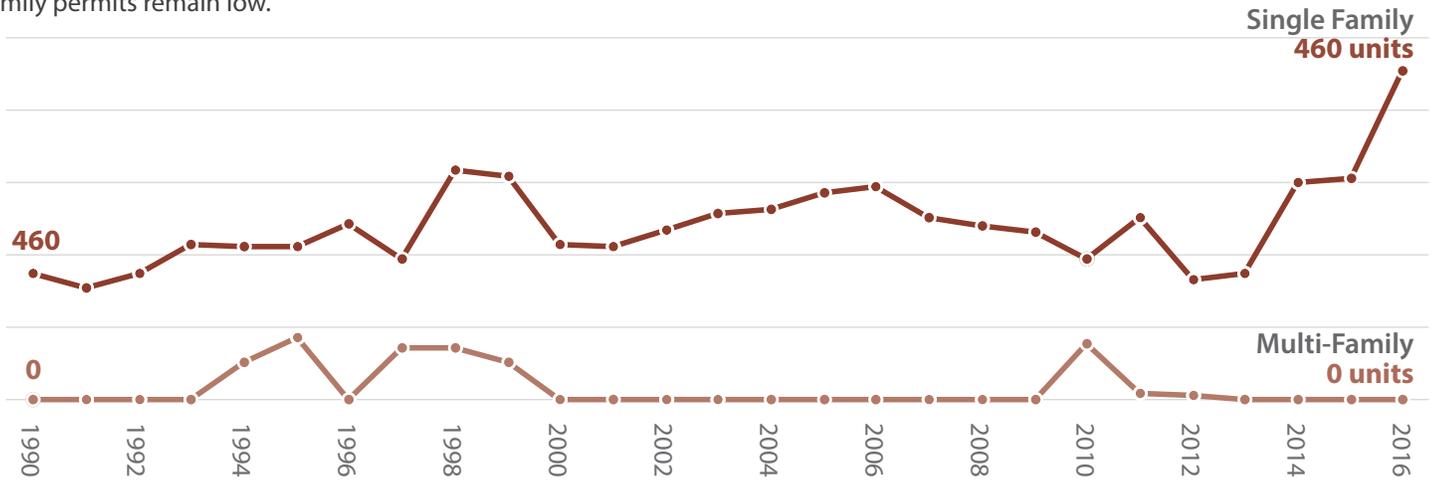
Liberty County has a similar poverty rate as the region.



# Housing

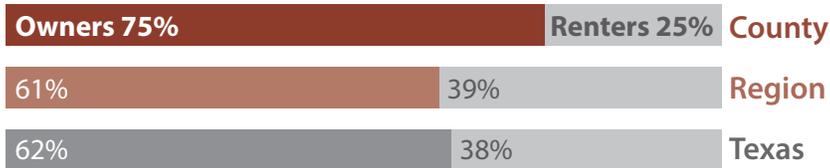
## Building Permits Issued

Single-family construction is rising rapidly, while multi-family permits remain low.



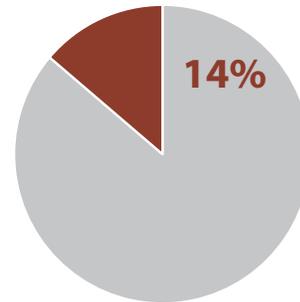
## Housing Tenure

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



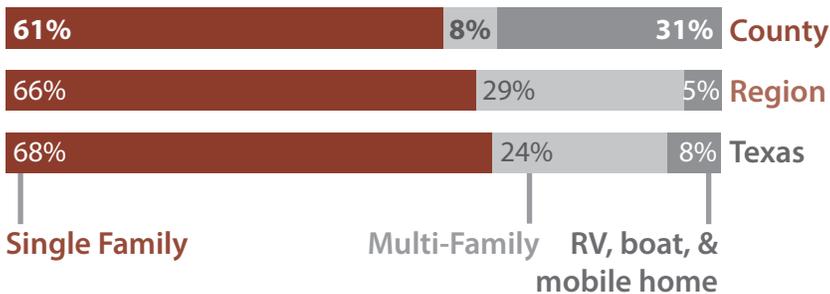
## Vacant Housing Units

Around 14% of Liberty County's housing units are vacant.



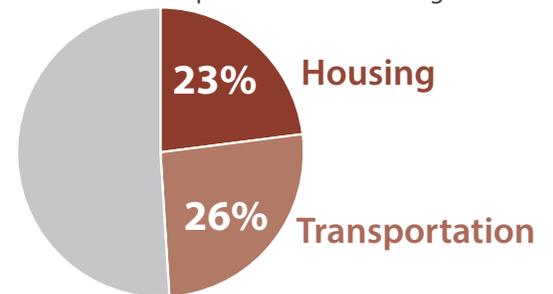
## Housing Type

Liberty County has a high rate of RV, boat and mobile homes.



## Living Costs

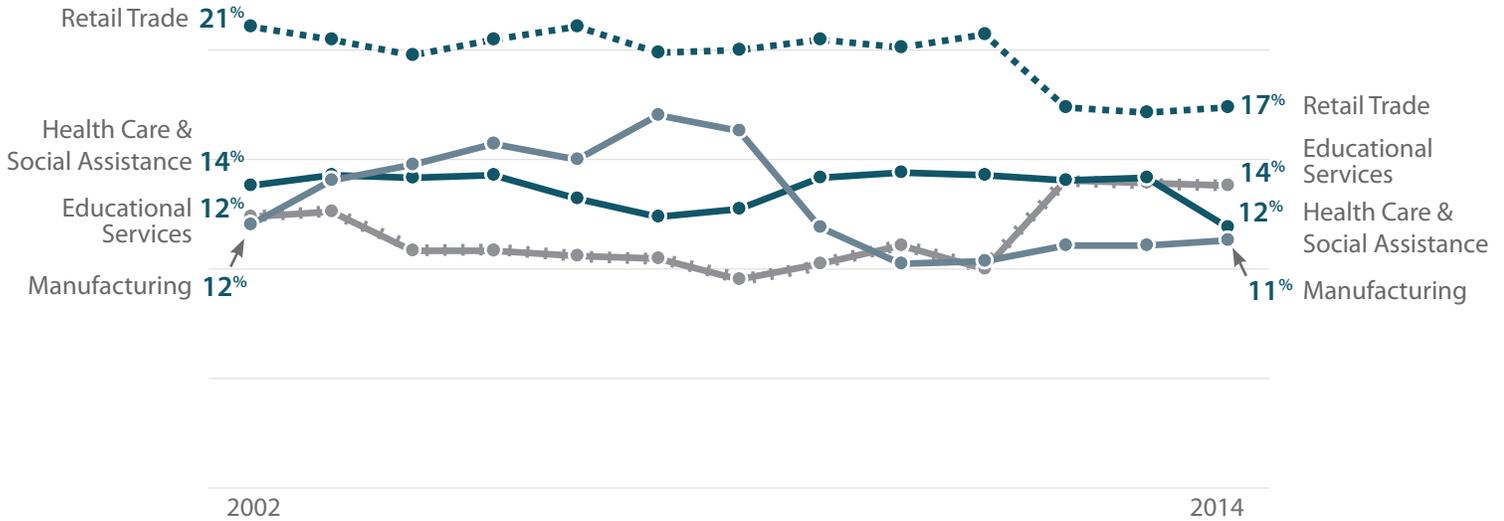
Liberty County households spend 49% of their income on transportation and housing.



# Economy

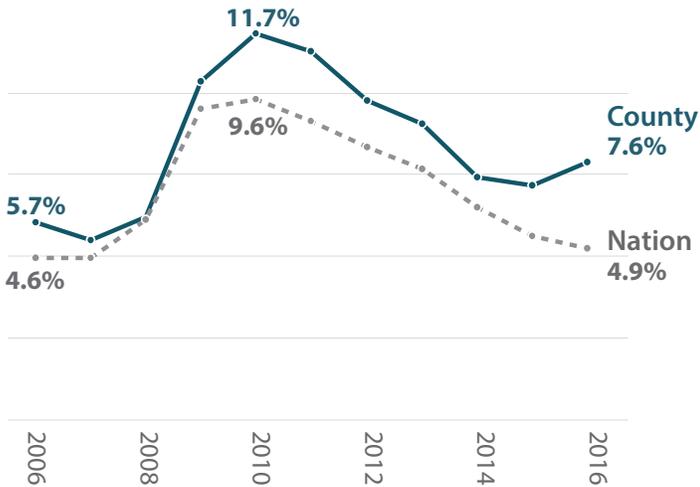
## Top Industries by Percent of Overall Jobs

Retail Trade has declined as a percent of overall jobs in Liberty County while other top industries retained a similar portion of employment in the county.



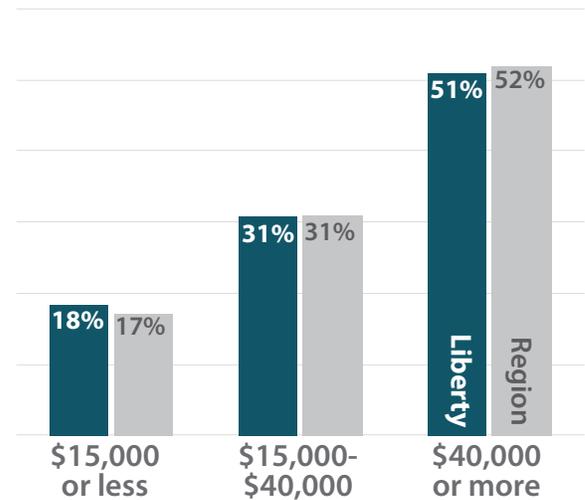
## Unemployment Rate

Liberty County's unemployment typically mirrors national trends, but is much higher in recent years.



## Earnings of Residents

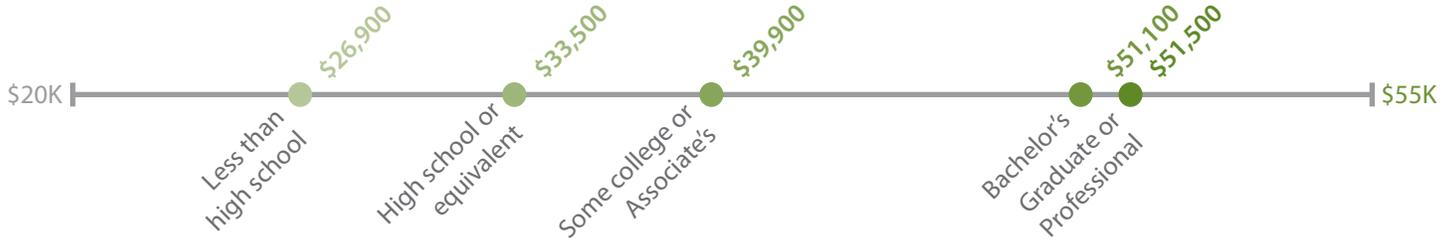
Half of Liberty County residents earn more than \$40,000 annually, a similar percentage as the region.



# Education, Hazard Risks, and Commute

## Median Earnings by Educational Attainment

A Liberty County resident with a graduate or professional degree makes, on average, \$24,600 more than a resident with less than a high school education annually.



## Educational Attainment

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

### Less than High School

**County** 24%

Region 18%

Texas 18%

### High School or Equivalent

**County** 38%

Region 24%

Texas 25%

### Some College or Associate's

**County** 29%

Region 28%

Texas 29%

### Bachelor's Degree or More

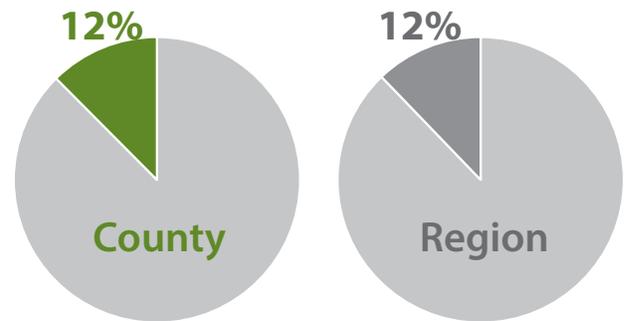
**County** 10%

Region 30%

Texas 28%

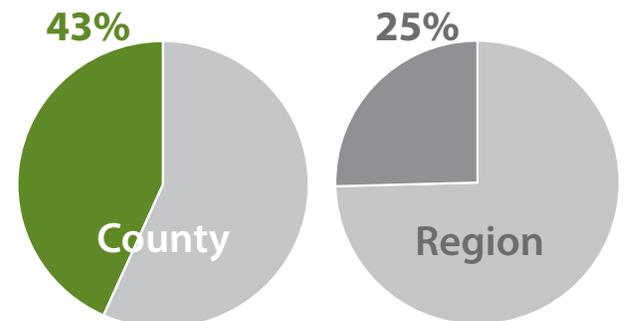
## Residents in 100-year Floodplain

A similar percentage of Liberty County residents live in a 100-year floodplain as the region.



## Residents in Hurricane Evacuation Zone

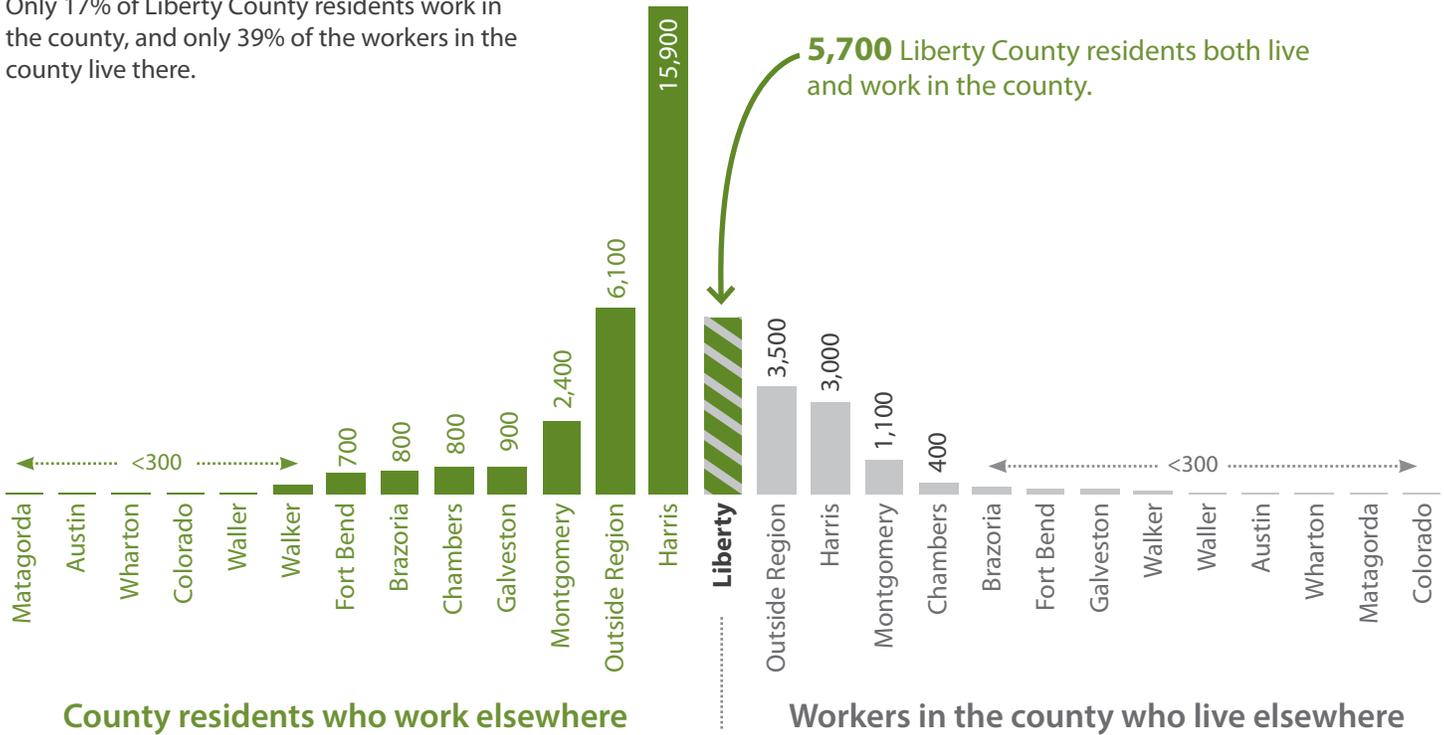
Over 40% of Liberty County residents live in a hurricane evacuation zone, as opposed to 25% of the region.



# Education, Hazard Risks, and Commute

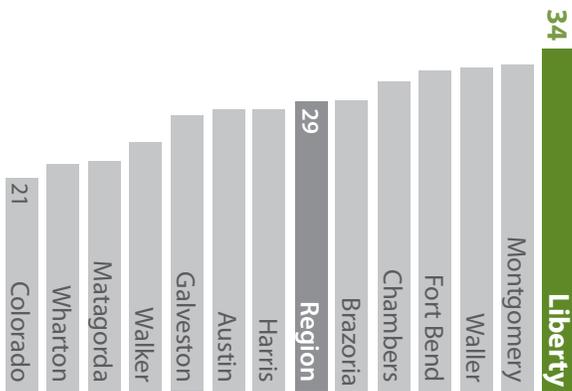
## Workers' Job & Home Destinations

Only 17% of Liberty County residents work in the county, and only 39% of the workers in the county live there.



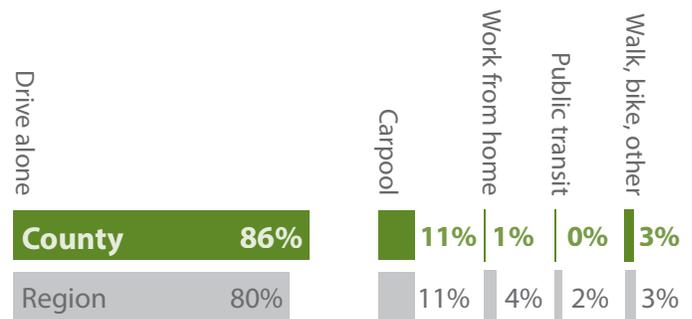
## Mean Commute to Work (minutes)

Liberty County workers have the longest average commute than any other county in the region.



## Commute Mode to Work

A higher percentage of Liberty 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.

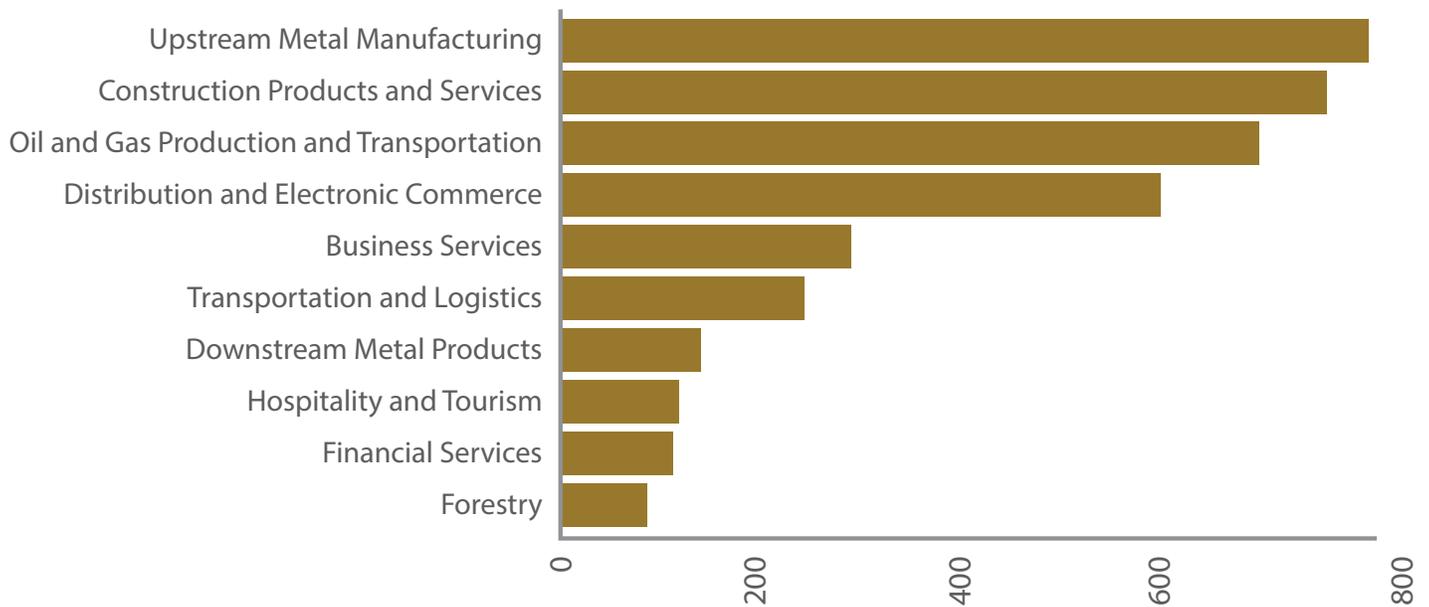
## Traded v. Local Clusters

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 Liberty County's employment by each cluster. It is based on 2014 data from the U.S. Census.



# Local Planning

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

## Liberty County Hazard Mitigation Plan



Liberty County is currently developing a Hazard Mitigation Plan for release in 2019. Liberty County participated in the 2011 Update of the Regional Hazard Mitigation Plan. The Regional Hazard Mitigation plan was created in 2006 by the Houston-Galveston Area Council, the Texas Division of Emergency Management, and 85 local

governments. The comprehensive plan identifies regional hazards and vulnerabilities, and includes over 300 mitigation projects that could be implemented within the region.

The plan identified six mitigation actions for Liberty County:

- Construct FEMA-approved tornado/hurricane-proof structure.
- Conduct structural engineering study on all public buildings.
- Complete a master drainage study on all watersheds.
- Rechannelize existing feeder creeks that flow from north to south and improve drainage for stormwater runoff.
- Establish a countywide drainage plan.
- Harden bridge, dam and spillway in Winter Valley Subdivision under TCEQ permit No. 366.

## Liberty Comprehensive Plan



The Liberty Comprehensive Plan is a planning document that will assist the City of Liberty in improving the living conditions of its residents. Information, analysis, and recommendations are given in the areas of base mapping, housing, population, land use, streets, thoroughfares, water, wastewater, parks and recreation, economic development, capital improvements, and storm

drainage. This plan is intended to give the residents of Liberty a guide for making decisions in the development of the community.

The plan analyzes the economic development of Liberty County, the plan analyzes the economic base, and provides goals for economic development. These goals include the following: assemble and maintain a marketing package that emphasizes the quality of life for residents of Liberty; seek to retain and expand existing businesses/employers and visit all new businesses/employers; actively recruit potential businesses to be located in the local area; expand water and sewer service into un-served areas; develop a Heritage Tourism Program; and identify public funding options and private investment opportunities in order to implement the objectives set forth in this plan.

# Data Sources

## Liberty County Overview

1. U.S. Census Bureau, 2014
2. OnTheMap Application
3. Longitudinal-Employer Household Dynamics Program
4. The Vindicator, June 30, 2016.
5. USDA Census of Agriculture

## 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.