Gulf Coast Workforce Board

## 2019 Workforce

# Report Card

The Gus S. Wortham Memorial Fountain, affectionately known as the "Dandelion," at Houston's Buffalo Bayou.

## Quality of Life

## Education

## Income

## Employment

## Labor Force

Economy

**A measure of progress** comparing the Gulf Coast's economy and labor market against those of similar metropolitan regions across the United States.

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Workforce Solutions

# Introduction

The Gulf Coast Workforce Board and its operating affiliate Workforce Solutions together are the public workforce system in the 13-county Houston-Galveston region. In everything that we do, we seek to assure the Gulf Coast region remains a great place to do business, work and live.

To meet the demands of the rapidly-changing world in which we work, we keep one foot firmly planted in today while keeping an eye steadily focused on what's to come. We are committed to strengthening the vibrancy of our region so that we can attract and retain the best employers, afford everyone the dignity of a job and remain indispensable to the global economy – today and tomorrow.

In February 2005, the Board produced the first Workforce Report Card as a tool to gauge the region's competitiveness in relation to similar metropolitan areas across the United States. Since then, the Board has produced periodic updates. This 2019 Workforce Report Card is the seventh edition, in which we examine key indicator data and then offer several issues for consideration in context of the future of work. Recognizing that the dramatic effects of advances in technology must be paralleled by advances in our workforce development efforts, we present potential future impacts and recommendations for managing them.

Since our last Workforce Report Card in 2015, we have experienced ups and downs in the regional economy. The Great Recession, officially spanning from late-2007 until mid-2009, and its local aftereffects, have largely faded. The shale oil "boom" powered up Houston's economy until late-2014 when a collapse in oil prices resulted in, by some measures, the most severe commodity-driven downturn since the 1980s.

After two years of no job growth in 2015 and 2016, signs of recovery began to appear in the first half of 2017 only to be interrupted by Hurricane Harvey. According to the National Oceanic and Atmospheric Administration, nearly 180,000 structures experienced flood damage leaving thousands of residents displaced.[1]

However, in a testament to the region's resilience, the overall economy and the job market saw minimal disruption as oil prices began to recover in the latter-part of 2017.

[1] https://www.nhc.noaa.gov/data/tcr/AL092017_Harvey.pdf – last retrieved April 23, 2019

## Impact of the 2014 Oil Downturn on Report Card Findings

Throughout this latest Workforce Report Card, readers will find that little to none of the nascent recovery is apparent from the indicators. Most of the data used to gauge the performance of the Gulf Coast relative to other regions uses a reference year of 2017, and in some cases a five-year period between 2012 and 2017. These were periods during which the lingering effects of the late-2014 downturn in oil continued to be felt locally. In contrast, long-time comparison areas Atlanta, Dallas, Denver, Miami, San Antonio and San Diego along with two new cities introduced for the first time in this Report Card, Phoenix and Seattle, enjoyed four additional years of strong economic growth. The net effect of these opposing trends caused the Gulf Coast to slip behind its peers on numerous indicators and therefore rankings. As a result, the region received lower letter grades on three of the **six families of measures** compared to the previous Report Card.

- **Macro Economy and Industry Dynamics (A to B)**
- **Employment & Unemployment (A to C)**
- **Labor Force Composition**
- **Income, Wealth and Poverty (B to C)**
- **Quality of Life**
- **Educational Achievement and Investment**

### Eight Comparison Areas

- Atlanta
- Dallas
- Denver
- Miami
- Phoenix *(new)*
- San Antonio
- San Diego
- Seattle *(new)*

## Gulf Coast Progress Despite the Oil Crash

The Region's relative decline in performance belies its absolute improvement on several indicators since 2015. In order to provide a more holistic view of these dynamics, pages 4 and 5 highlight 12 indicators on which the Gulf Coast improved between the previous and current Workforce Report Cards.

The first nine indicators cover metrics ranging from job and business growth to income and poverty to health insurance, all of which are more sensitive to the business cycle than the four remaining indicators related to educational attainment. In the case of the former group, were it not for the Gulf Coast Region's late-2014 downturn, even stronger outcomes would have been observed. In contrast, the education-related challenges facing the Gulf Coast, covered in detail in the 2015 Report Card, are more structural in nature and require interventions at all stages of the education pipeline.

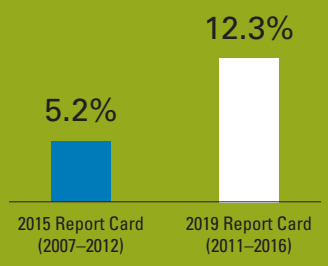
Nonetheless, the region saw increases in the shares of residents 25 and older with a high school diploma, an associate degree, or a bachelor's degree and higher indicating progress in this critical area. This was noteworthy given that the Gulf Coast Region represents roughly one-fourth of the state's population, jobs, and economic output and remains an integral part of the Texas 60x30 initiative's goals of increased postsecondary completions and a more educated population.[2]

[2] http://www.60x30tx.com/ – last retrieved May 1, 2019

# Gulf Coast Spotlight

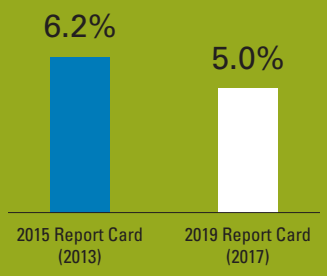
## Macro Economy & Industry Dynamics

**Five-year Percent Growth in Business Establishments** (CBP)

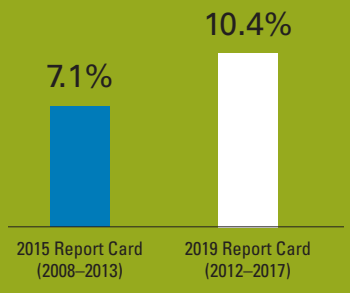



## Employment & Unemployment

**Unemployment Rate** (BLS)

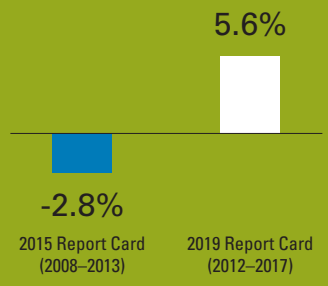



**Five-year Percent Rate of Job Growth** (BLS)

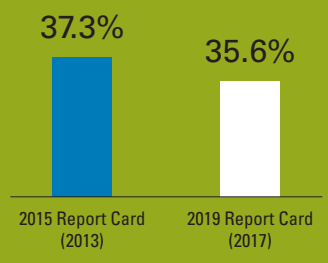



## Income, Wealth & Poverty

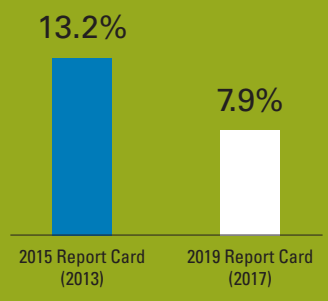
**Five-year Percent Change in Real Median Household Income** (ACS & BLS CPI-U)




**Percent in Poverty and Working – 16 Years and Over** (ACS)




**Percent of Families in Poverty** (ACS)

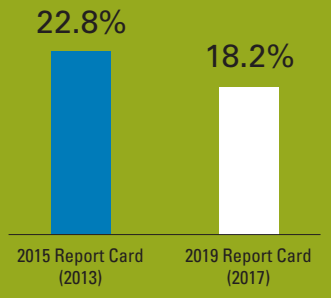



American Community Survey (ACS)
Bureau of Labor Statistics (BLS)
Consumer Price Index For All Urban Consumers (CPI-U)
County Business Patterns (CBP)

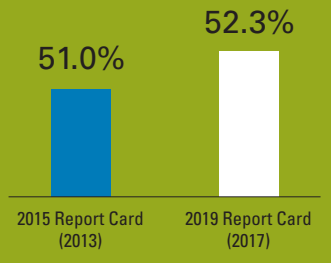
## Areas of Progress Since the 2015 Report Card

### Income, Wealth & Poverty

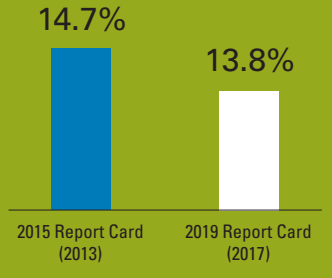
**Percent No Health Insurance** (ACS)




**Percent with Employer-provided Health Insurance** (ACS)

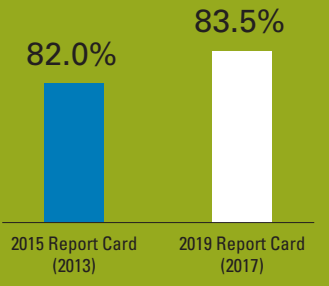



**Percent of Households Receiving Public Assistance** (ACS)

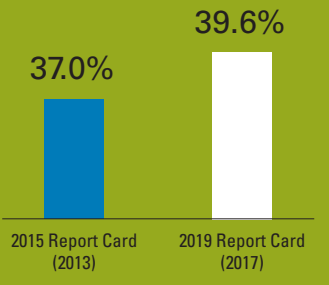



### Educational Achievement & Investment

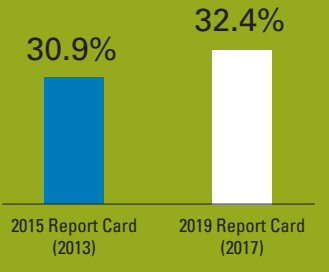
**Percent HS Diploma or Equivalent – Age 25 and Older** (ACS)




**Percent Associate or Higher – Age 25 and Older** (ACS)




**Percent Bachelor's or Higher – Age 25 and Older** (ACS)



## Other Considerations When Reading This Report

While the data in this report show the Gulf Coast lagging its peers, readers should be aware of the following developments that are likely to close some of the performance gap over the next few years. The year 2018 saw continued recovery from the late-2014 oil crash with job growth topping 73,000 and unemployment falling to nearly four percent after touching nearly six percent just 18 months earlier. This trend has extended through the first quarter of 2019 and remains poised to continue.

2018 and the first quarter of 2019 saw continued recovery from the late-2014 oil crash.

Given that nearly every aspect of the region's well-being is tied to employment, household income should once again rise as companies resume hiring, resulting in fewer workers without health insurance and fewer families in poverty. At the same time the total value of goods and services produced in the region has likely risen. While not guaranteed, improvement on these dimensions should raise the Houston area's standing with respect to its comparison regions.

Almost all our metrics are likely to benefit from stable oil prices and sustained positive momentum in the business cycle. The question is not if the region can recover, but rather how quickly can the Gulf Coast narrow the gap and reclaim its position as one of the best-performing metros. These contrasting economic trends are unprecedented in the history of the Workforce Report Card and as a result it may prove increasingly important to benchmark the region against itself as well as its peers to better gauge progress over time.

**For the 2019 Workforce Report Card, the Gulf Coast Region ranks:**

- In the middle on most measures with overall economic performance, job creation and wealth-accumulation weakening since the previous report card due to the local economic downturn of the past few years;
- Steady despite the downturn for labor force composition and quality of life measures;
- Toward the bottom of the comparison cities despite improvements on multiple measures of educational achievement.

Note that due to only slight differences in geography, the terms Gulf Coast and Houston are used interchangeably throughout this report.

# Regional Comparison Indicators

## Macro Economy and Industry Dynamics

Understanding the industrial make-up and growth trends of a region is critical to identifying the strengths, weaknesses and opportunities faced by businesses and workers alike. Ideally, the local economy will be composed of a wide range of industries and job types with high-skill, well-paying knowledge-based jobs serving as both an anchor for the overall labor market and as a catalyst for the creation of even more jobs. This is on top of the desire to see increasing numbers of businesses, rising employment and expanding economic activity over time.

In population, Texas metropolitan areas were the

**Fastest Growing**

**Population growth** is often perceived as one of the most basic indicators of a region's economic well-being. On one hand, a growing population signals that on some level the region can meet the needs of present and future residents while also providing opportunities for migrants. At the same time rapid growth can lead to strains on infrastructure and resources and magnify challenges such as crime and pollution. Among the comparison regions, all of which saw growth over the most recent five-year period of 2012–2017, Texas metropolitan areas were the fastest-growing led by the Gulf Coast, San Antonio and Dallas. In terms of absolute population growth, the Gulf Coast also dominated with a net increase of 709,000 new residents followed by Dallas and Atlanta. However, the strong five-year growth in the Gulf Coast obscures the most recent trend between 2016 and 2017 which saw population growth slow to 95,000 as a result of domestic net out-migration causing the local economic slowdown beginning in late-2014. This illustrates the trend over time that population growth or slowing tends to lag the job market/overall economy by one to two years.

**Metropolitan gross domestic product (MGDP)** served as one example of the Houston area's slowdown related to falling oil prices. It was also the single-largest cause of the region's diminished performance under the Macroeconomy and Industry Dynamics measure resulting in a letter grade-decline from an A to a B driven by a falling in rankings from first to ninth place. Of the nine comparison areas, the Gulf Coast saw the smallest percentage increase in MGDP. This stood in contrast to the previous Report Card covering 2008 to 2013 wherein the Gulf Coast had the fastest growth rate. At the upper end of the spectrum in the current Report Card were San Antonio, Seattle and Atlanta.

**Five-year Percent Growth in Population**
(Census 2012–2017)

| RANK | AREA | % |
|---|---|---|
| **1.** | **Gulf Coast** | **11.5** |
| 2. | San Antonio | 10.6 |
| 3. | Dallas | 10.3 |
| 4. | Phoenix | 9.6 |
| 5. | Denver | 9.1 |
| 6. | Seattle | 8.9 |
| 7. | Atlanta | 7.9 |
| 8. | Miami | 6.5 |
| 9. | San Diego | 5.0 |
| | U.S. | 3.7 |

**Five-year Percent Change Metropolitan GDP**
(BEA 2012–2017)

| RANK | AREA | % |
|---|---|---|
| 1. | San Antonio | 38.5 |
| 2. | Seattle | 33.3 |
| 3. | Atlanta | 32.3 |
| 4. | Miami | 29.4 |
| 5. | Dallas | 28.4 |
| 6. | Denver | 24.7 |
| 7. | Phoenix | 24.2 |
| 8. | San Diego | 22.6 |
| **9.** | **Gulf Coast** | **6.0** |
| | U.S. | 21.1 |

**Five-year Percent Growth in Business Establishments**
(CBP 2011–2016)

| RANK | AREA | % |
|---|---|---|
| 1. | Dallas | 13.6 |
| 2. | Denver | 12.3 |
| **3.** | **Gulf Coast** | **12.3** |
| 4. | Miami | 11.3 |
| 5. | San Antonio | 11.0 |
| 6. | San Diego | 9.6 |
| 7. | Atlanta | 9.3 |
| 8. | Phoenix | 9.3 |
| 9. | Seattle | 8.5 |
| | U.S. | 5.5 |

The **growth in the number of business establishments** showed more variety than MGDP with the Gulf Coast virtually tying with Denver for second-place and preceded only by Dallas. In contrast, the Houston area ranked first on this indicator in the 2015 Report Card. As with many indicators throughout the current Report Card, the most likely cause of the comparatively weaker performance lay in the decline in oil prices a few years earlier. The loss of two spots in the rankings contributed to the region's lower letter grade in Macroeconomy and Industry Dynamics although to a lesser extent than the change in MGDP noted previously. A final observation was that all the nine comparison areas exceeded the national rate of business establishment growth of 5.5 percent.

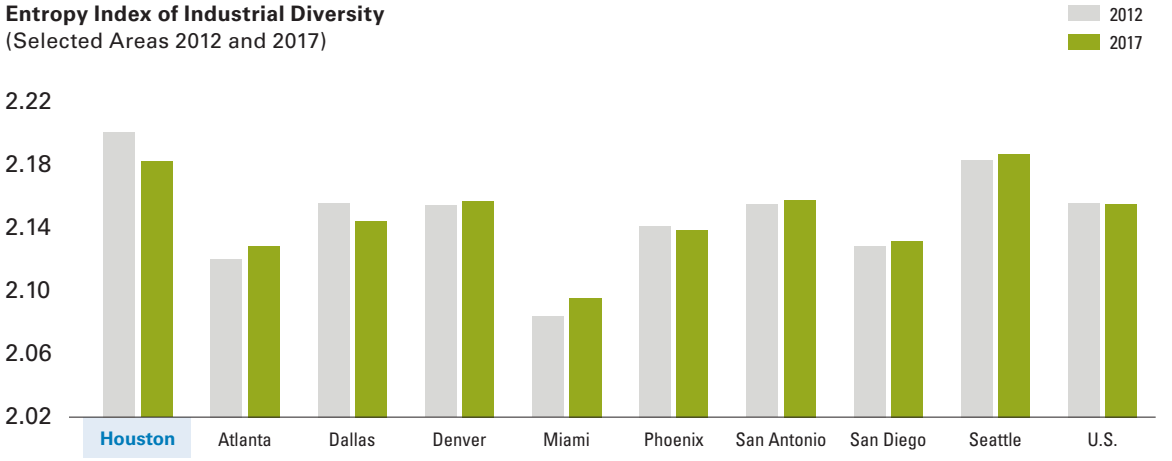
Business establishment growth in all nine comparison areas

## Exceeded National Rate

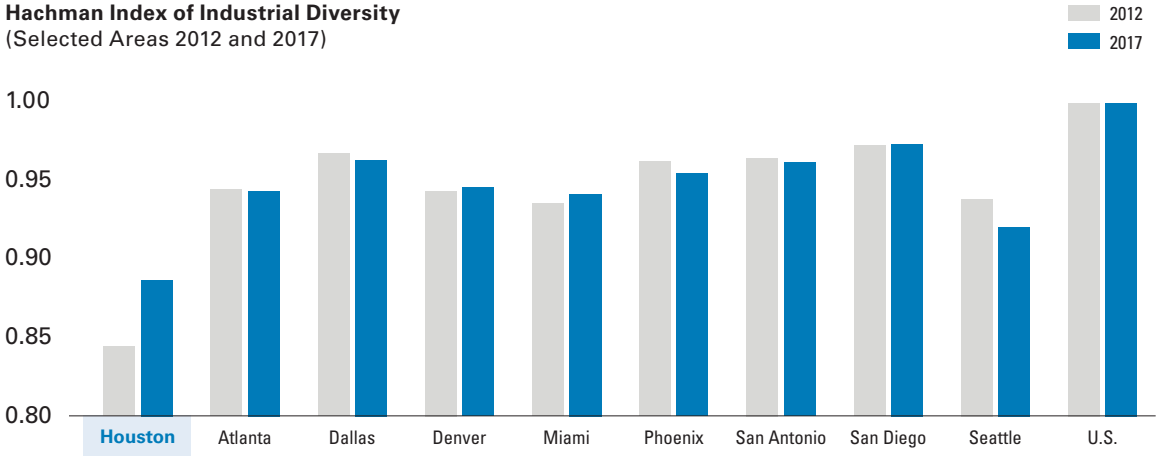
**Industrial diversity** attempts to measure the extent to which an area is insulated from a downturn across its entire economy as a result of a decline in one of its key industries. One widely recognized approach known as an **entropy index** measures how evenly employment is distributed across industries for a chosen area. Another known as the **Hachman Index** determines local area similarity to the national mix of industries. On the first measure, the Gulf Coast demonstrated the second-most evenly distributed employment across industries of the nine comparison areas after Seattle. However, when benchmarking our region's industrial composition to the nation, the area was the most dissimilar making it the least industrially diverse metropolitan area of this same group. In short, jobs in the Gulf Coast were spread relatively evenly across the local mix of industries yet this mix of industries differed from the U.S. profile.

The Houston area's falling entropy score suggests that the distribution of jobs became slightly less even as a result of the downturn in oil and gas while the region's Hachman Index rose the most of any of the comparison areas. This suggests that the Gulf Coast mix of industries became more like the U.S. as a result of oil and gas's share of employment shrinking. Neither measure of industrial diversity can account for situations where an area relies heavily on a single industry that has a high multiplier effect and permeates other sectors of the economy such as manufacturing and professional services. Furthermore, the forces driving diversification are perhaps equal in importance to the degree of diversification as illustrated by the cause of the change in Hachman Index since the last Report Card. The recent diversification exhibited in the Houston area was "passive" in the sense that it was an artifact of the oil downturn rather than an "active" process as result of conscious economic planning.

**Entropy Index of Industrial Diversity**
(Selected Areas 2012 and 2017)




**Hachman Index of Industrial Diversity**
(Selected Areas 2012 and 2017)



# Employment and Unemployment

## When assessing an area's labor market, the two most basic metrics used to gauge competitiveness are employment and unemployment.

The **five-year rate of job growth** across the Gulf Coast, consistent with the metropolitan gross domestic product, was the slowest of the comparison areas, up 10.4 percent. While this was above the U.S. rate of 9.3 percent, all other comparison areas saw rates above 13 percent with Denver growing the fastest followed by Dallas and San Antonio.

**Five-year Rate of Job Growth**
(BLS 2012–2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 17.0 |
| 2. | Dallas | 16.7 |
| 3. | San Antonio | 16.3 |
| 4. | Atlanta | 15.7 |
| 5. | Phoenix | 15.6 |
| 6. | Seattle | 15.4 |
| 7. | Miami | 15.0 |
| 8. | San Diego | 13.1 |
| **9.** | **Gulf Coast** | **10.4** |
| | U.S. | 9.3 |

The below average job growth observed in the Gulf Coast region was also reflected in the area's above average **unemployment rate**. The Gulf Coast posted the highest unemployment rate of the comparison areas at 5.0 percent, although this was down from a cycle high of 5.3 percent recorded in 2016. Nevertheless, the fall from second-place to ninth in this indicator contributed to the region's overall lower performance on the employment and unemployment measure. Denver had the lowest unemployment rate followed by San Antonio and Dallas.

Closely related to the concept of unemployment is the proportion of individuals **not in the labor force**, which measures the adult working age population that is "unattached" to the labor force – meaning they are not working or looking for work. Expressed as a percentage of the total civilian population, this indicator is the converse of the more commonly known participation rate. Denver was again the top performer in terms of labor market metrics with the smallest percentage of individuals not in the labor force followed by Dallas and Seattle. The Gulf Coast came in sixth while Miami came in last place among the comparison areas. In the previous Report Card, the Houston area came in third. The fact that working-age residents in the region remained engaged in the job market despite being more likely to face unemployment reinforces the notion that Houston's performance was more a reflection of the local commodities business cycle rather than long-term disengagement from the labor force.

**Unemployment Rate**
(BLS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 2.7 |
| 2. | San Antonio | 3.5 |
| 3. | Dallas | 3.6 |
| 4. | San Diego | 4.0 |
| 5. | Seattle | 4.1 |
| 6. | Phoenix | 4.2 |
| 7. | Miami | 4.3 |
| 8. | Atlanta | 4.5 |
| **9.** | **Gulf Coast** | **5.0** |
| | U.S. | 4.4 |

**Percent Not in the Labor Force**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 28.8 |
| 2. | Dallas | 31.6 |
| 3. | Seattle | 31.6 |
| 4. | Atlanta | 32.6 |
| 5. | San Diego | 33.7 |
| **6.** | **Gulf Coast** | **34.0** |
| 7. | San Antonio | 36.5 |
| 8. | Phoenix | 37.2 |
| 9. | Miami | 37.6 |
| | U.S. | 36.8 |

Houston's performance was more a reflection of the local commodities business cycle rather than long-term disengagement from the labor force.

# Labor Force Composition

For the Gulf Coast Region, the Labor Force Composition family of indicators saw relatively little movement. Such metrics may be influenced by long-term structural shifts in the economy, but are unlikely to experience meaningful change resulting from cyclical downturns.

The percentage of **managerial, professional, and related jobs** serves as a proxy for the share of "knowledge jobs" in a region's economy and is key to providing value-added goods and services and spurring innovation. Surprisingly, despite the downturn in oil and gas, the share of these jobs in the Houston area rose slightly compared to the previous Report Card. However, all other areas saw larger increases of two percentage points or more leaving the Gulf Coast in only sixth place. Given the severity of the most recent local downturn and the region's concentration of high-paying professional jobs related to oil and gas, the region's resilience on this metric is encouraging.

In labor force population, the Gulf Coast remains the

## Most Ethnically Diverse

The **Simpson Index of Diversity** measures the likelihood that two individuals of a population will be from different racial or ethnic groups. The result is a number between zero and one, with a higher number indicating more diversity. This measure saw increases of various magnitudes across most regions with the exceptions of Miami and San Antonio. However, the Gulf Coast remains the most diverse area followed by Dallas and San Diego. Denver remained the least diverse of the comparison areas.

While Miami saw its diversity-measure decline slightly between 2013 and 2017, its **percentage of foreign-born individuals** remained the highest of any comparison region. The Gulf Coast had the second-highest rate. Since the last Report Card, San Antonio has emerged as the comparison area with the lowest percentage of foreign-born residents, a position previously held by Denver.

As a proxy for the pipeline of future talent, the **balance between entering and exiting** indicator measures the balance of 15- to 24-year-olds to 55- to 64-year-olds in a population. The former age group is presumed to be entering or already participating in the workforce while the latter group is presumed to consist of late-career individuals or those already in retirement. Positive values suggest a labor force with a growing proportion of relatively young, working-age individuals, which may reduce future talent shortages.

The Gulf Coast has a future talent of

## Positive Value 2.1

Positive value suggests a labor force with a growing proportion of relatively young, working-age individuals, which may reduce future talent shortages.

This trend was demonstrated by all areas with the youngest skewing workforce in San Antonio and the oldest in Miami. The Houston-area came in third. Miami's relatively older workforce was reflected in its **median age**, the highest among the comparison regions while the Gulf Coast region had the lowest median age. In contrast to the last Report Card, all comparison areas saw their balances decrease.

Regional economies that work well for their residents should maintain a balance between the supply and demand for jobs and workers. **Job growth-labor force growth alignment** measures this by comparing the number of jobseekers to the number of jobs available. The previous timeframe 2003–2013 overlapped with some of the severest parts of the Great Recession as well as the strongest years of the recovery. The current 10-year period of 2007–2017 saw a mixture of positive and negative alignment among comparison areas with Denver experiencing the largest positive change, indicating more jobs than workers, while Phoenix saw the largest negative change indicating more workers than jobs, and possibly reflecting the severity of the Great Recession on the area's housing market. The Gulf Coast saw negative alignment comparable to Phoenix as a result of the late-2014 downturn related to falling oil prices.

**Managerial, Professional & Related Jobs**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Seattle | 46.0 |
| 2. | Denver | 43.8 |
| 3. | San Diego | 41.9 |
| 4. | Atlanta | 41.2 |
| 5. | Dallas | 39.3 |
| **6.** | **Gulf Coast** | **38.0** |
| 7. | Phoenix | 37.4 |
| 8. | San Antonio | 35.7 |
| 9. | Miami | 34.8 |
| | U.S. | 38.2 |

**Simpson Index of Racial & Ethnic Diversity**
(ACS 2017)*

| RANK | AREA | |
|---|---|---|
| **1.** | **Gulf Coast** | **0.70** |
| 2. | Dallas | 0.67 |
| 3. | San Diego | 0.66 |
| 4. | Miami | 0.66 |
| 5. | Atlanta | 0.65 |
| 6. | Phoenix | 0.59 |
| 7. | San Antonio | 0.58 |
| 8. | Seattle | 0.56 |
| 9. | Denver | 0.53 |
| | U.S. | 0.58 |

**Percent Foreign Born**
(ACS 2017)*

| RANK | AREA | % |
|---|---|---|
| 1. | Miami | 41.0 |
| **2.** | **Gulf Coast** | **23.6** |
| 3. | San Diego | 23.3 |
| 4. | Seattle | 18.8 |
| 5. | Dallas | 18.7 |
| 6. | Phoenix | 14.2 |
| 7. | Atlanta | 14.1 |
| 8. | Denver | 12.3 |
| 9. | San Antonio | 11.6 |
| | U.S. | 13.7 |

**Balance Between Entering & Exiting Workforce**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | San Antonio | 3.1 |
| 2. | Dallas | 2.3 |
| **3.** | **Gulf Coast** | **2.1** |
| 4. | San Diego | 2.1 |
| 5. | Phoenix | 1.7 |
| 6. | Atlanta | 1.6 |
| 7. | Denver | -0.2 |
| 8. | Seattle | -0.7 |
| 9. | Miami | -1.2 |
| | U.S. | 0.4 |

**Median Age**
(ACS 2017)*

| RANK | AREA | AGE |
|---|---|---|
| 1. | Miami | 41.0 |
| 2. | Seattle | 37.1 |
| 3. | Phoenix | 36.7 |
| 4. | Denver | 36.6 |
| 5. | Atlanta | 36.4 |
| 6. | San Diego | 35.8 |
| 7. | Dallas | 34.9 |
| 8. | San Antonio | 34.7 |
| **9.** | **Gulf Coast** | **34.4** |
| | U.S. | 38.1 |

**Ten-year Job Growth-labor Force Growth Alignment**
(BLS 2007–2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 1.3 |
| 2. | Dallas | 0.8 |
| 3. | San Antonio | 0.7 |
| 4. | San Diego | 0.6 |
| 5. | Atlanta | -0.1 |
| 6. | Seattle | -0.5 |
| 7. | Miami | -0.9 |
| **8.** | **Gulf Coast** | **-1.0** |
| 9. | Phoenix | -1.1 |
| | U.S. | 0.3 |

* Included for informational purposes only. Not used in scoring.

# Income, Wealth & Poverty

## The ability to earn income and accumulate wealth over time reflects how well regional economies and labor markets work for their residents. On nearly every indicator in this group the Gulf Coast improved since the last Report Card, however most comparison areas made more progress.

Measuring household income is important as the starting point for assessing household purchasing power at a given point in time. **Nominal median household income** ranged from a low of $54,000 in Miami to a high of $82,000 in Seattle with the Gulf Coast appearing in sixth place at nearly $64,000.

After adjusting each region's income by its respective rate of inflation between 2012 and 2017, **real median household income** increased by as little as 4.2 percent in San Antonio to as much as 14.7 percent in San Diego. The Gulf Coast region saw modest real wage growth over the five-year period as well, posting an increase of only 5.6 percent.

**Nominal Median Household Income in 2017**
(ACS 2017)*

| RANK | AREA | $ |
|---|---|---|
| 1. | Seattle | $ 82,133 |
| 2. | Denver | $ 76,643 |
| 3. | San Diego | $ 76,207 |
| 4. | Dallas | $ 67,382 |
| 5. | Atlanta | $ 65,381 |
| **6.** | **Gulf Coast** | **$ 63,802** |
| 7. | Phoenix | $ 61,506 |
| 8. | San Antonio | $ 56,774 |
| 9. | Miami | $ 54,284 |
| | U.S. | $ 60,336 |

**Five-year % Change in Real Median Household Income**
(ACS & BLS CPI-U 2012–2017)

| RANK | AREA | % |
|---|---|---|
| 1. | San Diego | 14.7 |
| 2. | Seattle | 13.6 |
| 3. | Phoenix | 11.6 |
| 4. | Dallas | 11.0 |
| 5. | Denver | 9.8 |
| 6. | Atlanta | 9.4 |
| 7. | Miami | 6.6 |
| **8.** | **Gulf Coast** | **5.6** |
| 9. | San Antonio | 4.2 |
| | U.S. | 10.0 |

Gulf Coast median household income is higher than the U.S. national median.

* Included for informational purposes only. Not used in scoring.

Another measure of financial well-being is captured by the income needed for a family to attain a secure, yet modest standard of living based on local, typical living expenses, or what might be termed a "**living wage.**" Developed and maintained by the Economic Policy Institute, living wage thresholds are intended as a more accurate measure of economic security compared to the federal poverty line or Supplemental Poverty Measure. Assuming a family unit composed of two parents and two children, the annual total income needed to comfortably meet basic needs ranged from $72,300 in San Antonio to $98,200 in Denver. Houston required the second-smallest annual income at $74,700. Comparing these figures to nominal household income revealed a wide-range of shortfalls in income relative to the amount needed to cover typical living expenses.

**Monthly Cost for a Family with Two Parents and Two Children 2017***

| | Houston | Atlanta | Dallas | Denver | Miami | Phoenix | San Antonio | San Diego | Seattle |
|---|---|---|---|---|---|---|---|---|---|
| Housing | $ 1,066 | $ 1,031 | $ 1,077 | $ 1,418 | $ 1,351 | $ 1,013 | $ 1,001 | $ 1,682 | $ 1,527 |
| Food | $ 718 | $ 772 | $ 723 | $ 805 | $ 853 | $ 748 | $ 674 | $ 847 | $ 854 |
| Child Care | $ 1,044 | $ 968 | $ 1,044 | $ 1,682 | $ 1,123 | $ 1,409 | $ 984 | $ 1,281 | $ 1,691 |
| Transportation | $ 1,125 | $ 1,159 | $ 1,115 | $ 1,208 | $ 1,052 | $ 1,154 | $ 1,135 | $ 1,249 | $ 1,230 |
| Health Care | $ 935 | $ 1,010 | $ 973 | $ 966 | $ 1,027 | $ 1,531 | $ 974 | $ 903 | $ 849 |
| Other Necessities | $ 720 | $ 727 | $ 726 | $ 897 | $ 889 | $ 710 | $ 676 | $ 1,021 | $ 961 |
| Taxes | $ 620 | $ 893 | $ 632 | $ 1,208 | $ 786 | $ 1,020 | $ 580 | $ 1,146 | $ 984 |
| Monthly Total | $ 6,228 | $ 6,560 | $ 6,290 | $ 8,184 | $ 7,081 | $ 7,585 | $ 6,024 | $ 8,129 | $ 8,096 |
| Annual Total | $ 74,736 | $ 78,720 | $ 75,480 | $ 98,208 | $ 84,972 | $ 91,020 | $ 72,288 | $ 97,548 | $ 97,152 |

Source: EPI Family Budget Calculator

Income measures such as a living wage can be useful for determining the dollar amount needed to fulfill basic needs, yet they fail to capture the differences in the cost of living between areas. The Regional **Purchasing Power Parity** index allows for comparisons between any two areas with the U.S. serving as the benchmark. In 2016 Houston registered a value of 101.6 indicating that the cost of living in the Gulf Coast was 1.6 percent higher than the nation. San Antonio had the lowest index while San Diego had the highest.

* Included for informational purposes only. Not used in scoring.

The **percentage of families in poverty** decreased in all comparison regions for which comparable data were available since the last Report Card. The Gulf Coast had the highest percentage of families in poverty.[3] Denver and Seattle tied for the lowest rates. Note that poverty thresholds are as of 2017 and range from $12,488 a year for a one-person household to $47,389 for a household of nine or more related individuals.[4]

A related metric, **the percentage of households receiving public assistance** decreased across all regions since the last Report Card. Miami had the highest percentage of households receiving public assistance and was the only region with a higher percentage than the nation. The Gulf Coast had the second-highest percentage. As was the case in the previous Report Card, Denver had the lowest percentage of households receiving assistance of any comparison area, the only area with a rate below 10 percent.

Both poverty and public assistance percentages decreased across all regions.

The **percentage of individuals 16 years and over in poverty and working** also saw declines compared to the previous Report Card. In contrast to the other poverty indicators, Denver had the highest percentage of working individuals in poverty, maintaining its rank from the previous Report Card. The Gulf Coast had the second-highest rate followed by Dallas and Atlanta while Miami continued to have the lowest rate.

Individuals who do not have health insurance coverage face insufficient access to medical care and greater financial risk from medical expenses. Seattle had the lowest percentage of individuals with no **health insurance** and the highest percentage with **employer-provided health insurance**. The Gulf Coast had the highest percentage without health insurance and the second-lowest rate of employer-provided coverage. As noted throughout this report, the Gulf Coast's ranking on this measure may be related to large numbers of individuals experiencing layoffs between 2014 and 2017 resulting in a loss of insurance coverage, employer-provided or otherwise.

[3] Due to definitional changes in the geography comprising Denver and the absence of Phoenix and Seattle in the previous Report Card, statements about changes in the percentage of families could not be made with certainty.

[4] https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html — last retrieved April 30, 2019

**Regional Purchasing Parity**
(BEA 2016)

| RANK | AREA | |
|---|---|---|
| 1. | San Antonio | 94.4 |
| 2. | Atlanta | 96.3 |
| 3. | Phoenix | 97.1 |
| 4. | Dallas | 100.2 |
| **5.** | **Gulf Coast** | **101.6** |
| 6. | Denver | 106.0 |
| 7. | Miami | 107.6 |
| 8. | Seattle | 110.5 |
| 9. | San Diego | 116.3 |
| | U.S. | 100.0 |

**Percent of Families in Poverty**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 3.6 |
| 2. | Seattle | 3.6 |
| 3. | San Diego | 5.4 |
| 4. | Dallas | 5.8 |
| 5. | Atlanta | 6.0 |
| 6. | Phoenix | 6.2 |
| 7. | Miami | 7.1 |
| 8. | San Antonio | 7.8 |
| **9.** | **Gulf Coast** | **7.9** |
| | U.S. | 6.2 |

**Percent of Households Receiving Public Assistance**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 8.3 |
| 2. | Dallas | 10.3 |
| 3. | San Diego | 10.3 |
| 4. | Phoenix | 11.1 |
| 5. | Atlanta | 11.9 |
| 6. | San Antonio | 13.2 |
| 7. | Seattle | 13.3 |
| **8.** | **Gulf Coast** | **13.8** |
| 9. | Miami | 19.8 |
| | U.S. | 14.7 |

**Percent in Poverty and Working – 16 Years and Over**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Miami | 27.8 |
| 2. | San Antonio | 30.6 |
| 3. | Seattle | 31.0 |
| 4. | Phoenix | 31.6 |
| 5. | San Diego | 33.5 |
| 6. | Atlanta | 35.0 |
| 7. | Dallas | 35.3 |
| **8.** | **Gulf Coast** | **35.6** |
| 9. | Denver | 38.5 |
| | U.S. | 31.1 |

**Percent No Health Insurance**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Seattle | 5.6 |
| 2. | Denver | 7.2 |
| 3. | San Diego | 7.7 |
| 4. | Phoenix | 10.2 |
| 5. | Atlanta | 13.0 |
| 6. | San Antonio | 14.5 |
| 7. | Miami | 15.5 |
| 8. | Dallas | 16.5 |
| **9.** | **Gulf Coast** | **18.2** |
| | U.S. | 8.7 |

**Percent with Employer-provided Health Insurance**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Seattle | 62.0 |
| 2. | Denver | 60.0 |
| 3. | Atlanta | 57.3 |
| 4. | Dallas | 56.1 |
| 5. | Phoenix | 53.1 |
| 6. | San Diego | 52.7 |
| **7.** | **Gulf Coast** | **52.3** |
| 8. | San Antonio | 50.9 |
| 9. | Miami | 41.5 |
| | U.S. | 55.0 |

# Quality of Life

The overall desirability of a region as a place to live has an impact on the region's competitiveness and health of its labor market. Regions that are perceived as being economically vibrant, culturally diverse, affordable, and safe have an advantage in attracting and retaining the best employers and talent.

Among the nine comparison areas, **median home values**, ranged from a low of $170,100 in San Antonio to a high of $563,800 in San Diego. The Gulf Coast had the second-lowest median home value, which was roughly 11 percent below the national average of $217,600.

In general, rising home values are a desirable outcome. However rapid appreciation in values compared to wages can result in housing costs that consume a disproportionate amount of income and hamper affordability. Furthermore, when home value appreciation outpaces wage gains, this can serve as a barrier to homeownership for new entrants into the housing market. The five-year **average home appreciation rate**

**Median Home Value**
(ACS 2017)*

| RANK | AREA | $ |
|---|---|---|
| 1. | San Diego | $ 563,800 |
| 2. | Seattle | $ 439,800 |
| 3. | Denver | $ 386,800 |
| 4. | Miami | $ 278,700 |
| 5. | Phoenix | $ 246,900 |
| 6. | Atlanta | $ 215,100 |
| 7. | Dallas | $ 214,900 |
| **8.** | **Gulf Coast** | **$ 192,900** |
| 9. | San Antonio | $ 170,100 |
| | U.S. | $ 217,600 |

**Average Home Appreciation, 5 years through Q4**
(2012–2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Seattle | 68.9 |
| 2. | Denver | 67.9 |
| 3. | Miami | 62.0 |
| 4. | Phoenix | 59.4 |
| 5. | Dallas | 56.8 |
| 6. | San Diego | 51.7 |
| 7. | Atlanta | 48.1 |
| **8.** | **Gulf Coast** | **40.8** |
| 9. | San Antonio | 34.3 |
| | U.S. | 30.4 |

**40%**

increase in average home appreciation in the Gulf Coast.

* Included for informational purposes only. Not used in scoring.

**30%**

or less of an individual's gross monthly income is the recommended spend for housing, whether owned or rented.

from 2012 to 2017 rose in all nine comparison regions. Seattle saw the largest increase followed by Denver and Miami. The Gulf Coast saw the second-lowest increase after San Antonio. The nominal pace of home appreciation outstripped nominal wage growth across all nine areas.

A general rule of thumb suggests that spending on housing whether owned or rented should not exceed 30 percent of gross monthly income. If a growing percentage of a region's population is surpassing this threshold it could serve as a drag on overall growth due to less discretionary income and less financial resilience during an economic downturn. The Gulf Coast had the fourth-lowest **percentage of housing units with monthly home ownership costs greater than 30 percent**.

Another way of evaluating housing affordability lies in the relationship between a home's value and its owner's income. Of the comparison regions, the Gulf Coast and San Antonio tied for the title of lowest **ratio of home value to annual income**, however this was above the ratio recommended by many mortgage lenders and financial advisors. This also marked an increase in the Gulf Coast's ratio since 2013, suggesting that housing affordability has declined in recent years.

The decision to buy a home rather than rent remains one of the most important financial decisions that one can make. Home ownership rates remain low compared to historical trends. Since the last Report Card, the **percentage of housing units owned versus rented** rose in some areas while it declined in others. Houston saw a slight increase in this indicator between 2013 and 2017, leaving it in the middle of the pack. Denver posted the highest percentage of owned housing units while San Diego had the lowest rate, reflecting that area's relatively high cost of housing.

Another factor besides housing affordability that can affect the desirability of a region is transportation. Given that most individuals commute between home and work daily, the time spent traveling can impact one's quality of life. The longest **mean travel time to work** was found in Atlanta followed by Seattle. The Gulf Coast region and Miami both clocked in at 29.9 minutes. San Diego had the shortest commute time. Since the last Report Card, commute times rose across most areas with Atlanta seeing the largest increase. The Gulf Coast saw the smallest increase.

One might assume that longer commute times to work would result in increased use of alternative forms of transportation. This relationship proved less than straightforward when examining **usage rates of public transportation** or **carpooling** compared to commute time. For example, Seattle had a comparatively long average commute time and the highest usage of public transit or carpooling. On the other hand, Atlanta residents had the longest commute times, but low public transit use. The Gulf Coast came in sixth place in terms of public transit use and fourth place when it came to carpooling.

The 2019 Report Card marks the second in which we include an indicator for crime. The Gulf Coast registered the highest ratio of **violent crime per 100,000 residents** followed by San Antonio and Phoenix. San Diego had the lowest rate.

**Percent Monthly Home Ownership Cost Greater than 30%** (ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | San Antonio | 20.4 |
| 2. | Dallas | 20.5 |
| 3. | Atlanta | 20.6 |
| **4.** | **Gulf Coast** | **20.7** |
| 5. | Phoenix | 21.9 |
| 6. | Denver | 22.8 |
| 7. | Seattle | 24.8 |
| 8. | San Diego | 31.4 |
| 9. | Miami | 32.3 |
| | U.S. | 22.1 |

**Ratio of Home Value to Annual Income** (ACS 2017)

| RANK | AREA | |
|---|---|---|
| **1.** | **Gulf Coast** | **3.0** |
| 2. | San Antonio | 3.0 |
| 3. | Dallas | 3.2 |
| 4. | Atlanta | 3.3 |
| 5. | Phoenix | 4.0 |
| 6. | Denver | 5.0 |
| 7. | Miami | 5.1 |
| 8. | Seattle | 5.4 |
| 9. | San Diego | 7.4 |
| | U.S. | 3.6 |

**Percent Housing Units Owned versus Rented** (ACS 2017)*

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 64.1 |
| 2. | Phoenix | 63.7 |
| 3. | San Antonio | 63.3 |
| 4. | Atlanta | 63.0 |
| **5.** | **Gulf Coast** | **60.7** |
| 6. | Seattle | 60.0 |
| 7. | Dallas | 59.7 |
| 8. | Miami | 59.5 |
| 9. | San Diego | 53.5 |
| | U.S. | 63.9 |

**Mean Travel Time to Work in Minutes** (ACS 2017)

| RANK | AREA | MIN. |
|---|---|---|
| 1. | San Diego | 26.3 |
| 2. | San Antonio | 26.5 |
| 3. | Phoenix | 26.8 |
| 4. | Denver | 28.1 |
| 5. | Dallas | 28.6 |
| **6.** | **Gulf Coast** | **29.9** |
| 7. | Miami | 29.9 |
| 8. | Seattle | 31.0 |
| 9. | Atlanta | 32.3 |
| | U.S. | 26.9 |

**Percent Using Public Transportation** (ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Seattle | 10.1 |
| 2. | Denver | 4.4 |
| 3. | Atlanta | 3.1 |
| 4. | Miami | 3.1 |
| 5. | San Diego | 3.1 |
| **6.** | **Gulf Coast** | **2.1** |
| 7. | Phoenix | 1.8 |
| 8. | San Antonio | 1.8 |
| 9. | Dallas | 1.3 |
| | U.S. | 5.0 |

**Violent Crime per 100,000 Inhabitants** (FBI 2017)

| RANK | AREA | |
|---|---|---|
| 1. | San Diego | 337.1 |
| 2. | Seattle | 353.7 |
| 3. | Atlanta | 367.6 |
| 4. | Dallas | 369.3 |
| 5. | Denver | 413.9 |
| 6. | Miami | 458.2 |
| 7. | Phoenix | 470.6 |
| 8. | San Antonio | 523.9 |
| **9.** | **Gulf Coast** | **593.1** |
| | U.S. | 382.9 |

* Included for informational purposes only. Not used in scoring.

# Education Achievement and Investment

For the demand side of a regional economy (i.e. employers), the most critical aspect is the skill level of the workforce. Skill level is influenced by educational outcomes, which are frequently used as proxies for work-force readiness.

**The Adjusted Cohort Graduation Rate (ACGR)** is an estimate of "the number of students who graduate in four years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class. From the beginning of 9th grade (or the earliest high school grade), students who are entering that grade for the first time form a cohort that is 'adjusted' by adding any students who subsequently transfer into the cohort and subtracting any students who subsequently transfer out, emigrate

**Adjusted Cohort Graduation Rate**
(NCES Entered fall 2011 Exited SY 2015–16)[5]

| RANK | AREA | % |
|---|---|---|
| 1. | San Antonio | 95 |
| 2. | San Diego | 91 |
| 3. | Atlanta | 87 |
| 4. | Dallas | 87 |
| 5. | Phoenix | 84 |
| 6. | Denver | 83 |
| 7. | Miami | 80 |
| **8.** | **Gulf Coast** | **78** |
| 9. | Seattle | 77 |
| | U.S. | – |

to another country, etc." The following graduation rates refer to the single-largest urban school district in each comparison metro as this was an equitable method of comparing distinct areas with varying workforce development areas and political boundaries.[5] (See page 26 for a special look at graduation rates across the entire Gulf Coast Region over time.)

For the school year 2015–2016, the most recent year for which cohort data were available for all comparison areas, the lowest adjusted graduation rate was recorded in Seattle, which also had the highest **percentage of individuals 25 and over with a high school diploma** and the second-highest **percentage of residents over 25 with a bachelor's degree**.

The Gulf Coast posted the second-lowest graduation rate of the comparison areas, but differed from Seattle in that it possessed the lowest percentage of residents with a high school diploma. The Gulf Coast also saw an increase in the percentage of residents with a bachelor's degree. The **share of residents with associate degrees** rose from 37 percent to 39.6 percent.

**Percent High School Diploma or Equivalent**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Seattle | 92.6 |
| 2. | Denver | 91.2 |
| 3. | Atlanta | 89.6 |
| 4. | San Diego | 87.6 |
| 5. | Phoenix | 87.3 |
| 6. | Miami | 85.9 |
| 7. | San Antonio | 85.6 |
| 8. | Dallas | 85.4 |
| **9.** | **Gulf Coast** | **83.5** |
| | U.S. | 88.0 |

**Percent Bachelor's or Higher – age 25 and older**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 43.9 |
| 2. | Seattle | 41.9 |
| 3. | San Diego | 38.8 |
| 4. | Atlanta | 37.9 |
| 5. | Dallas | 34.6 |
| **6.** | **Gulf Coast** | **32.4** |
| 7. | Miami | 32.1 |
| 8. | Phoenix | 31.1 |
| 9. | San Antonio | 28.1 |
| | U.S. | 32.0 |

**Percent Associate or Higher – age 25 and older**
(ACS 2017)

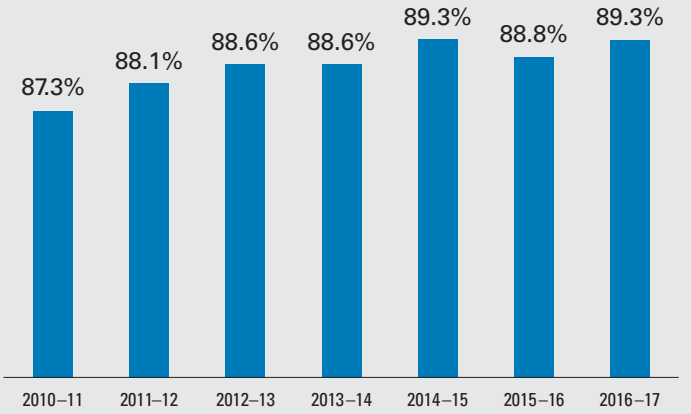
| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 51.4 |
| 2. | Seattle | 51.4 |
| 3. | San Diego | 47.0 |
| 4. | Atlanta | 45.5 |
| 5. | Dallas | 41.7 |
| 6. | Miami | 41.5 |
| 7. | Phoenix | 39.6 |
| **8.** | **Gulf Coast** | **39.6** |
| 9. | San Antonio | 36.2 |
| | U.S. | 40.5 |

[5] Refers to the following large urban school districts associated with each metropolitan area: Houston ISD, Fulton County Public Schools (Atlanta), Dallas ISD, Jefferson County School District No. R-1 (Denver), Dade Public Schools (Miami), Phoenix Union High School District, Northside ISD (San Antonio), San Diego Unified School District and Seattle Public Schools.

## Gulf Coast Region High School Graduation Rates

The 2015 Workforce Report Card saw the introduction of a more accurate measure of high school completion known as the Adjusted Cohort Graduation Rate (ACGR). As noted, the version of the ACGR found in the previous section and the data table at the end of this section considers only academic year 2015–2016 graduation rates pertaining to the single-largest urban school district in each comparison metro. Houston Independent School District (HISD) is the Gulf Coast's largest urban district and was therefore selected as the proxy for the region. Unfortunately, it posted the second-lowest graduation rate of the nine areas. Furthermore, a look at this measure over time revealed that HISD's graduation rate remained virtually constant at 79 percent each school year between 2010–2011 and 2016–2017. (Note: data for this final year were not available for use in regional comparisons at the time of writing.) While stable, this lack of improvement did not accurately reflect trends across the Gulf Coast Region as a whole. For this reason, an Adjusted Cohort Graduation Rate weighted by high school enrollment was calculated for the 40 out of 76 districts in the region for which data were available. While this only represents a little more than half of all districts, it captures 95 percent of high school enrollment and therefore serves as a better gauge of regional performance than HISD alone at only 15 percent of the total. This approach revealed that Gulf Coast graduation rates collectively have experienced an increase of two percentage points over the past seven school years and now exceed 89 percent, a rate nearly 10 percentage points higher than the region's largest district.

**Adjusted Cohort Graduation Rate – Gulf Coast Region**




**89%**

Gulf Coast graduation rates collectively. A rate nearly 10 percentage points higher than the region's largest district.

Source: NCES – Cohort entered fall four years prior to referenced school year.

Includes 40 of 76 Gulf Coast Region school districts for which data were available representing 95% of regional high school enrollment.

**Percent Limited English Proficiency**
(ACS 2017)

| RANK | AREA | % |
|---|---|---|
| 1. | Denver | 6.9 |
| 2. | Atlanta | 7.1 |
| 3. | Phoenix | 8.8 |
| 4. | Seattle | 9.2 |
| 5. | San Antonio | 10.1 |
| 6. | San Diego | 13.3 |
| 7. | Dallas | 13.7 |
| **8.** | **Gulf Coast** | **16.9** |
| 9. | Miami | 24.4 |
| | U.S. | 8.5 |

**Expenditure by Student**
(NCES SY 2014–2015)[6,7]

| RANK | AREA | $ |
|---|---|---|
| 1. | Seattle | $ 14,678 |
| 2. | San Diego | $ 13,540 |
| 3. | Atlanta | $ 12,846 |
| 4. | Phoenix | $ 11,541 |
| 5. | Dallas | $ 11,142 |
| 6. | San Antonio | $ 10,676 |
| **7.** | **Gulf Coast** | **$ 10,544** |
| 8. | Denver | $ 10,165 |
| 9. | Miami | $ 10,153 |
| | U.S. | – |

The percentage of people age five and over with **limited English proficiency** can impact overall education attainment and employment. Miami had the largest share of residents with limited English proficiency, followed by the Gulf Coast region. This reflects the above average percentage of foreign-born residents in each area.

As a measure of public investment in education, **expenditure per student** saw increases for areas since the last report where comparable data were available. For the 2014–2015 school year, the most recent year of data, the largest urban school districts representing the three Texas metropolitan areas – Houston ISD, Dallas ISD and Northside ISD saw increases in spending. In terms of absolute spending among comparison cities major districts, Seattle had the highest outlays followed by San Diego and Atlanta. A brief look at expenditures relative to graduation rates revealed no strong correlations.

[6] Refers to the following large urban school districts associated with each metropolitan area: Houston ISD, Fulton County Public Schools (Atlanta), Dallas ISD, Jefferson County School District No. R-1 (Denver), Dade Public Schools (Miami), Phoenix Union High School District, Northside ISD (San Antonio), San Diego Unified School District and Seattle Public Schools

[7] National level data either not published or not calculable due to suppression of multiple local geographies.

# Report Card Data

| | Gulf Coast | Atlanta | Dallas |
|---|---|---|---|
| Total Population 2017 | **6,892,427** | 5,884,736 | 7,399,662 |
| **Macro Economy & Industry Dynamics** | | | |
| Five-year Percent Growth in Population (Census 2012–2017) | **11.5%** | 7.9% | 10.3% |
| One-year Percent Change Metropolitan GDP (BEA 2016–2017)* | **3.8%** | 4.3% | 6.3% |
| Five-year Percent Change Metropolitan GDP (BEA 2012–2017) | **6.0%** | 32.3% | 28.4% |
| Five-year Percent Growth in Business Establishments (CBP 2011–2016) | **12.30%** | 9.3% | 13.6% |
| Entropy Index of Industrial Diversity (BLS 2017) | **2.183** | 2.129 | 2.145 |
| Hachman Index of Industrial Diversity (BLS 2017) | **0.888** | 0.944 | 0.965 |
| **Employment & Unemployment** | | | |
| Unemployment Rate (BLS 2017) | **5.0%** | 4.5% | 3.6% |
| One-year Net Change in Unemployment Rate (BLS 2016–2017) | **-0.3%** | -0.6% | -0.3% |
| Five-year Rate of Job Growth (BLS 2012–2017) | **10.4%** | 15.7% | 16.7% |
| Five-year Net Job Growth (BLS 2012–2017)* | **283,600** | 369,400 | 514,400 |
| Percent Not in the Labor Force (ACS 2017) | **34.0%** | 32.6% | 31.6% |
| **Labor Force Composition** | | | |
| Percent Managerial, Professional & Related Jobs (ACS 2017) | **38.0%** | 41.2% | 39.3% |
| Simpson Index of Racial & Ethnic Diversity (ACS 2017)* | **0.70** | 0.65 | 0.67 |
| Percent Foreign Born (ACS 2017)* | **23.6%** | 14.1% | 18.7% |
| Median Age (ACS 2017)* | **34.4** | 36.4 | 34.9 |
| Five-year Change in Median Age by Years (ACS 2012-2017) | **0.9** | 1.0 | 0.9 |
| Balance Between Entering & Exiting Workforce (ACS 2017) | **2.1%** | 1.6% | 2.3% |
| Ten-year Job Growth-labor Force Growth Alignment (BLS 2007–2017) | **-1.0%** | -0.1% | 0.8% |
| **Income, Wealth & Poverty** | | | |
| Nominal Median Household Income in 2017 dollars (ACS 2017)* | **$ 63,802** | $ 65,381 | $ 67,382 |
| Five-year Percent Change in Real Median Household Income (ACS & BLS CPI-U 2012–2017) | **5.6%** | 9.4% | 11.0% |
| Living Wage for a Family of Four (EPI 2017)* | **$ 74,736** | $ 78,720 | $ 75,480 |
| Regional Purchasing Parity (BEA 2016) | **101.6** | 96.3 | 100.2 |
| Percent of Family Households with Single Female Parent (ACS 2017) | **11.1%** | 11.9% | 10.6% |
| Percent of Families in Poverty (ACS 2017) | **7.9%** | 6.0% | 5.8% |
| Percent in Poverty and Working – 16 Years and Over (ACS 2017) | **35.6%** | 35.0% | 35.3% |
| Percent No Health Insurance (ACS 2017) | **18.2%** | 13.0% | 16.5% |
| Percent with Employer-provided Health Insurance (ACS 2017) | **52.3%** | 57.3% | 56.1% |
| Percent of Households Receiving Public Assistance (ACS 2017) | **13.8%** | 11.9% | 10.3% |

* Included for informational purposes only. Not used in scoring.

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| Denver | Miami | Phoenix | San Antonio | San Diego | Seattle | U.S. | Interpretation |
|---|---|---|---|---|---|---|---|
| 2,888,227 | 6,158,824 | 4,737,270 | 2,473,974 | 3,337,685 | 3,867,046 | 325,719,178 | |
| 9.1% | 6.5% | 9.6% | 10.6% | 5.0% | 8.9% | 3.7% | + |
| 6.0% | 4.3% | 5.2% | 8.2% | 4.0% | 6.6% | 4.1% | + |
| 24.7% | 29.4% | 24.2% | 38.5% | 22.6% | 33.3% | 21.1% | + |
| 12.32% | 11.3% | 9.3% | 11.0% | 9.6% | 8.5% | 5.5% | + |
| 2.158 | 2.095 | 2.139 | 2.158 | 2.132 | 2.188 | 2.155 | + |
| 0.946 | 0.942 | 0.955 | 0.962 | 0.975 | 0.922 | 1.000 | + |
| 2.7% | 4.3% | 4.2% | 3.5% | 4.0% | 4.1% | 4.4% | – |
| -0.4% | -0.6% | -0.4% | -0.3% | -0.7% | -0.3% | -0.5% | – |
| 17.0% | 15.0% | 15.6% | 16.3% | 13.1% | 15.4% | 9.3% | + |
| 212,200 | 342,500 | 273,800 | 145,700 | 168,600 | 266,300 | 12,449,000 | + |
| 28.8% | 37.6% | 37.2% | 36.5% | 33.7% | 31.6% | 36.8% | – |
| 43.8% | 34.8% | 37.4% | 35.7% | 41.9% | 46.0% | 38.2% | + |
| 0.53 | 0.66 | 0.59 | 0.58 | 0.66 | 0.56 | 0.58 | =/+ |
| 12.3% | 41.0% | 14.2% | 11.6% | 23.3% | 18.8% | 13.7% | =/+ |
| 36.6 | 41.0 | 36.7 | 34.7 | 35.8 | 37.1 | 38.1 | = |
| 0.6 | 0.8 | 1.3 | 0.3 | 0.9 | 0.1 | 0.7 | 0 |
| -0.2% | -1.2% | 1.7% | 3.1% | 2.1% | -0.7% | 0.4% | 0 |
| 1.3% | -0.9% | -1.1% | 0.7% | 0.6% | -0.5% | 0.3% | 0 |
| $ 76,643 | $ 54,284 | $ 61,506 | $ 56,774 | $ 76,207 | $ 82,133 | $ 60,336 | = |
| 9.8% | 6.6% | 11.6% | 4.2% | 14.7% | 13.6% | 10.0% | + |
| $ 98,208 | $ 84,972 | $ 91,020 | $ 72,288 | $ 97,548 | $ 97,152 | 0.0% | |
| 106.0 | 107.6 | 97.1 | 94.4 | 116.3 | 110.5 | 100.0 | – |
| 8.3% | 10.4% | 9.8% | 11.5% | 8.5% | 7.3% | 9.9% | – |
| 3.6% | 7.1% | 6.2% | 7.8% | 5.4% | 3.6% | 6.2% | – |
| 38.5% | 27.8% | 31.6% | 30.6% | 33.5% | 31.0% | 31.1% | =/– |
| 7.2% | 15.5% | 10.2% | 14.5% | 7.7% | 5.6% | 8.7% | – |
| 60.0% | 41.5% | 53.1% | 50.9% | 52.7% | 62.0% | 55.0% | + |
| 8.3% | 19.8% | 11.1% | 13.2% | 10.3% | 13.3% | 14.7% | – |

# Report Card Data (continued)

| | Gulf Coast | Atlanta | Dallas |
|---|---|---|---|
| **Quality of Life** | | | |
| Housing Trends | | | |
| Median Home Value (ACS 2017)* | **$ 192,900** | $ 215,100 | $ 214,900 |
| Percent Monthly Home Ownership Cost Greater than 30% (ACS 2017) | **20.7%** | 20.6% | 20.5% |
| Percent Monthly Rental Cost Greater than 30% (ACS 2017) | **45.4%** | 46.5% | 43.8% |
| Percent Housing Units Owned versus Rented (ACS 2017)* | **60.7%** | 63.0% | 59.7% |
| Average Home Appreciation, 5 years through Q4 (2012–2017) | **40.8%** | 48.1% | 56.8% |
| Ratio of Home Value to Annual Income (ACS 2017) | **3.0** | 3.3 | 3.2 |
| Travel to Work | | | |
| Mean Travel Time to Work in Minutes (ACS 2017) | **29.9** | 32.3 | 28.6 |
| Percent Using Public Transportation (ACS 2017) | **2.1%** | 3.1% | 1.3% |
| Percent Carpooling (ACS 2017) | **10.0%** | 9.7% | 9.6% |
| Environment | | | |
| Number of Days Air Rated "Unhealthy" or "Unhealthy for Sensitive Groups" (EPA 2017) | **25** | 11 | 24 |
| Crime Prevalence | | | |
| Violent Crime per 100,000 Inhabitants (FBI 2017) | **593.1** | 367.6 | 369.3 |
| **Educational Achievement and Investment** | | | |
| Percent Bachelor's or Higher – age 25 and older (ACS 2017) | **32.4%** | 37.9% | 34.6% |
| Percent Associate or Higher – age 25 and older (ACS 2017) | **39.6%** | 45.5% | 41.7% |
| Percent High School Diploma or Equivalent – age 25 and older (ACS 2017) | **83.5%** | 89.6% | 85.4% |
| Percent Limited English Proficiency (ACS 2017) | **16.9%** | 7.1% | 13.7% |
| Adjusted Cohort Graduation Rate (NCES Entered fall 2011 Exited SY 2015–16)[1] | **78%** | 87% | 87% |
| Expenditure by Student (NCES SY 2014–2015)[1,2] | **$ 10,544** | $ 12,846 | $ 11,142 |

* Included for informational purposes only. Not used in scoring.

[1] Refers to the following large urban school districts associated with each metropolitan area: Houston ISD, Fulton County Public Schools (Atlanta), Dallas ISD, Jefferson County School District No. R-1 (Denver), Dade Public Schools (Miami), Phoenix Union High School District, Northside ISD (San Antonio), San Diego Unified School District and Seattle Public Schools.

[2] National level data either not published or not calculable due to suppression of multiple local geographies.

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| Denver | Miami | Phoenix | San Antonio | San Diego | Seattle | U.S. | Interpretation |
|---|---|---|---|---|---|---|---|
| $ 386,800 | $ 278,700 | $ 246,900 | $ 170,100 | $ 563,800 | $ 439,800 | $ 217,600 | = |
| 22.8% | 32.3% | 21.9% | 20.4% | 31.4% | 24.8% | 22.1% | – |
| 48.7% | 59.1% | 44.4% | 47.1% | 55.0% | 45.6% | 46.0% | – |
| 64.1% | 59.5% | 63.7% | 63.3% | 53.5% | 60.0% | 63.9% | + |
| 67.9% | 62.0% | 59.4% | 34.3% | 51.7% | 68.9% | 30.4% | + |
| 5.0 | 5.1 | 4.0 | 3.0 | 7.4 | 5.4 | 3.6 | – |
| 28.1 | 29.9 | 26.8 | 26.5 | 26.3 | 31.0 | 26.9 | – |
| 4.4% | 3.1% | 1.8% | 1.8% | 3.1% | 10.1% | 5.0% | + |
| 7.9% | 9.0% | 11.3% | 10.4% | 8.4% | 10.5% | 8.9% | + |
| | | | | | | | |
| 40 | 8 | 93 | 6 | 62 | 23 | N/A | – |
| 413.9 | 458.2 | 470.6 | 523.9 | 337.1 | 353.7 | 382.9 | – |
| 43.9% | 32.1% | 31.1% | 28.1% | 38.8% | 41.9% | 32.0% | + |
| 51.43% | 41.5% | 39.6% | 36.2% | 47.0% | 51.4% | 40.5% | + |
| 91.23% | 85.9% | 87.3% | 85.6% | 87.6% | 92.6% | 88.0% | + |
| 6.9% | 24.4% | 8.8% | 10.1% | 13.3% | 9.2% | 8.5% | – |
| 83% | 80% | 84% | 95% | 91% | 77% | – | + |
| $ 10,165 | $ 10,153 | $ 11,541 | $ 10,676 | $ 13,540 | $ 14,678 | – | =/+ |

## 2019 Workforce Report Card Scores

| | GULF COAST | ATLANTA | DALLAS | DENVER | MIAMI | PHOENIX | SAN ANTONIO | SAN DIEGO | SEATTLE |
|---|---|---|---|---|---|---|---|---|---|
| Macro Economy & Industry Dynamics | B | C | A | B | C | B | A | B | B |
| Employment & Unemployment | C | B | A | A | B | B | B | B | B |
| Labor Force Composition | B | B | B | B | B | C | B | B | A |
| Income, Wealth & Poverty | C | B | B | A | C | B | B | B | A |
| Quality of Life | B | B | B | B | B | B | B | B | B |
| Educational Achievement and Investment | C | A | B | A | C | B | B | A | A |

# Elevating the economic and human potential of the Gulf Coast region.

# Improving the Grade

The indicator data provide a thorough picture of the trends and trajectories of our regional economy. Despite the oil downturn in 2014, our region remained reasonably competitive. The data also provide insight into potential opportunities to ensure our economic competitiveness.

As we consider efforts to enhance our competitive standing, we also draw attention to the fundamental shift in work itself, as automation and artificial intelligence play an ever-greater role in determining the contours of day-to-day activity.

As we continue driving our region forward, we must now also consider:

- How work will fundamentally change in the future; and,
- How our region can best leverage the opportunities this future holds

As the Gulf Coast Workforce Board, we propose three overarching themes for further consideration:

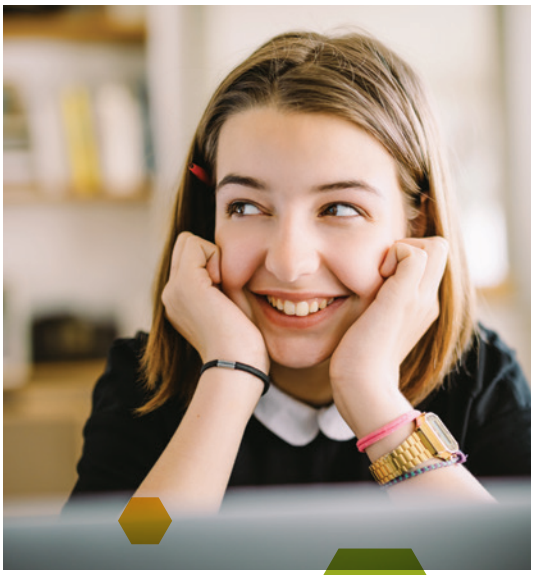
1. Robust changes to public education that support a future-ready workforce
2. Continued industrial diversification that builds on the region's existing business strengths
3. Employer-driven talent development as a strategy to equip both businesses and workers to adapt to a rapidly changing workplace.

# Building a Future-ready Workforce

The future workers of the Gulf Coast region are our best asset for attracting industries in emerging technologies and for ensuring that the region remains one of the strongest in the global economy. We must begin building a workforce that is educated and nimble enough to address the rapid changes expected in the coming decades. This begins in our preK–12 systems, continues into post-secondary education, and remains relevant throughout a person's working life.

As we prepare students for careers of the future, we need to understand the very different needs that education will have to fulfill. Our current understanding of education relies on an industrial-era mode of thinking that emphasizes memory and the ability to recall data. Our education policy and systems were developed in the days of the steam engine, while we now live in the age of the smart phone. In a future where intellectual wherewithal is measured not by how well a person can recall facts or complete mechanical tasks, but rather by how well they can leverage increasingly advanced technology to enhance problem-solving ability, education must evolve to make these skills as essential as reading, writing and arithmetic.

The rise of automation means that the aspects of the human worker that are the least replicable by machines, like creative intelligence, social intelligence and proficiency in high dexterity non-routine tasks will become prized commodities in human resource and capital planning. In other words, it will be a combination of digital and social literacies that make an employee a truly effective one.



It is for this reason that we encourage a renewed emphasis on not only STEM education, but also on social skills learning and interpersonal dynamics – those things that a society needs in order to harness the tremendous power of machines in a knowledge-based economy.

Educational programming that teaches students skills like judgment, imagination, creativity, decision-making, problem solving using data and people, clarity of expression and the panoply of other human attributes like empathy and socialization, will pay off in dividends for both the future worker and future employer. While learning that imparts human-centric skills will be important, they must be married to the hard, technical skills that help navigate a future where information is ubiquitous and knowing how to work with it will be critically important.

Thousands of years ago the development of a written language was one of the keys to success for ancient civilizations. Today, humanity is poised to elevate mathematical and computational coding to the same level. Successfully educating the workforce will require a new definition of what it means to be literate. If that idea seems too far-fetched to be practically meaningful, it's worth pointing out that in some countries children are taught coding beginning in preschool. They are learning how to read and write in a human tongue at the same time they are learning how to read and write in a computational one as well.

If coding is the new literacy, then artificial intelligence is the new electricity. It will power everything. Its presence will be as commonplace as artificial light. Just as electricity and artificial light invoked fear and uncertainty at the time of their invention, they became ubiquitous as more and more people gained exposure to their benefits. They also created whole new disciplines, trades and industries. This is precisely the reason why the Gulf Coast region should be leading the way in embracing and popularizing new technologies.

The result of education and workforce policy should be to focus on developing human capital comfortable and nimble enough with change that navigating the negative aspects of rapid technological and social development – creative destruction – will be as painless as possible.

Policies that support greater emphasis on digital skills and technical education are essential for future workforce development. Nothing will have as great an impact on the future prosperity of our region as a well-educated workforce with sharpened technical and digital skills.

The Texas Higher Education Coordinating Board's 60x30TX encompasses this stronger alignment between education priorities and the future needs of employers. Together with the Texas Education Agency and the Texas Workforce Commission, their Tri-Agency Report supports integrated pathways that provide students from junior high, through high school with a clear understanding of which post-secondary courses lead to the credential necessary for workplace advancement.

**What the Workforce Board Can Do:**

- Promote and incentivize our early education network providers to seek out and maintain the highest early education quality ratings to help our children begin their learning in the best possible environments.
- Encourage and support digital literacy and the attainment of digital learning skills in elementary and secondary schools.
- Develop and integrate digital skills learning in our adult education programs.

# Preparing for the Future by Learning from Our Past

The oil bust of the 1980s was among the darkest chapters in our region's economic history. A national recession along with collapses in real estate and banking, meant that the area losses were particularly keen. It would be decades before the local economy and workforce could recover from the downturn that began in 1982 and ended in 1989. The shock of that downturn left its mark on the Gulf Coast region, but also created an impetus to diversify our local economy as a hedge against future downturns.[8]

While the region has made tremendous strides toward weaning itself off its dependence on petrochemicals, the oil price disruptions of 2014 brought a new awareness to our continued vulnerabilities. Nearly 74,000 oil related jobs were lost as a result of the recent downturn, sending tremors across other economic sectors. However, this time our region was cushioned by a strong national economy and the increase in natural gas production.

This economic disruption suggests that the Gulf Coast region must continue to diversify its economic and job creating systems to an even greater extent. We can do this by capitalizing on existing regional strength in areas such as engineering, healthcare, chemical manufacturing and by better leveraging policy and resources to attract and grow industry sectors employing emerging technologies. The technological advancements sweeping across industrial America have one clear thing in common: the use of data to increase efficiencies. This will be especially true for our region's commodities firms, trading houses, manufacturers and medical communities.

For example, the average oil well produces 1–2 terabytes of data per day. The digital equivalent of 3,334,000 copies of Webster's Collegiate Dictionary. Today, most oil and gas companies are only utilizing between 1–3% of their available data.[9] As energy producers begin to incorporate this wealth of knowledge into their processes, the expectation is that human scientists, technologists and even front-line workers, will be able to focus on higher-order operations and decision making rather than routine tasks. Aspects of oil and gas operations that once required highly trained geoscientists months of analysis and calculation and cost tens of thousands of dollars, will be done infinitely faster and infinitely cheaper. At the same time, robotics and artificial intelligence will make more dangerous tasks safer by transferring this work to machines. As the capacity and sophistication of our data applications increases, these same efficiencies will apply across other economic sectors.

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[8] Eaton, Collin (August 31, 2016) 1980s oil bust left a lasting mark. Houston Chronicle. Retrieved from www.chron.com. – https://www.chron.com/local/history/economy-business/article/The-1980s-oil-bust-left-lasting-mark-on-Houston-9195222.php

[9] Luck, Marissa (March 18, 2019) Big Tech aims for a piece of Big Oil. Houston Chronicle. Retrieved from www.houstonchronicle.com. – https://www.houstonchronicle.com/business/energy/article/Big-Tech-aims-for-a-piece-of-Big-Oil-13692195.php

The Ion

Photo credit: © 2019 Shop Architects PC

James Carpenter Design Associates Inc

As we elevate the expansion of our existing businesses, new ventures also need to be nurtured very carefully and with great support in order to thrive. We can simultaneously work to attract new employers while cultivating native assets. A superb example of this is the new Ion innovation corridor anchored by the redevelopment of the former midtown Sears location into a life-sciences and research center in partnership with Rice University. This collaboration illustrates two key elements in the quest for growing and attracting new and yet-to-be invented industries: access to the necessary education that creates them and access to venture capital that can incubate their growth.

But again, government policies alone will not be enough to fundamentally shift regional thinking. Private sector businesses are necessary partners in growing the next generation of industries. The region must actively seek out and court leaders in those industries that we wish to attract and orient them to the local opportunities already present. A prime example is the Texas Medical Center. The TMCx accelerator advances the development of health and medical technology companies by connecting visionary entrepreneurs to the abundant resources of the Texas Medical Center.

Future economic development will also mean making our region the most welcoming home it could possibly be for the people and resources that we wish to attract. The old saying, "Capital goes where it's well treated," has traditionally been applied to money. But in the future, it must necessarily apply to intellectual and social capital as well. We must find ways to better partner in attracting the human capital that we need most – responsible entrepreneurs.

**What the Workforce Board Can Do:**

- With our economic development partners, support and invest in projects that diversify the local economy and develop new businesses.
- Invest in the workforce for key local industry employers developing new technologies, products, or services.

# Investing Today to Remain Relevant Tomorrow

One aspect of our current anxiety about the future is that our technological capacity is outstripping our imaginative capacity. What we are left with as our imaginations catchup is an opportunity to shift our thinking and mindset about how we can prepare our workforce to seize the opportunities surrounding them.

Over the coming decades, the nature of work is likely to change to a degree not seen in generations. Artificial intelligence, robotics, synthetic biology, genomics, computational science, data analytics, augmented reality, nanotechnology, 3D/4D printing and a host of other advancements are poised to alter our understanding of work in ways not seen since the invention of the printing press. As technology continues its expansion, jobs that do not exist today will be created and jobs that exist today will look radically different. Reliable jobs that have been around for years will be automated out of existence.

Despite the uncertainty, these changes present opportunities to employers and workers alike.

The future workforce across all industries will require additional training to keep pace with technological progress. Rapid cycles of creative disruption will become the norm. To truly position the Gulf Coast as an indispensable region in the global economy, we will need to increase the technological sophistication of our workforce and our regional workforce must be prepared to retrain and reeducate itself on a constant basis.

In the future, most people will not simply complete school then go to work and never return to the classroom. Workers of all types will have to commit to the idea of life-long learning and new skill acquisition. Once workers realize the potential in the new skill being learned, they take to it relatively quickly and painlessly. Look no further than the fastest-growing segment of social media users: senior citizens. Individuals who never thought they would have an interest in social media have realized the benefits of embracing and learning a new technology.

Creating this mindset and shift in work culture will be critically important to our regional economic stability. Cultivating a mindset among learners, both adults and children, that values self-direction, critical thinking and risk-taking as opportunity is an essential foundation. These habits of the mind cascade into transferable skills that make learning second nature. The speed and ease with which a person learns and relearns will have a profound effect on individual career options and yield a more diverse and nimble pool of optimized human resources. Our region should pay close attention to programming and curricula that support the development of these traits.

Employers will also need to understand the practical administrative and human resource solutions needed to accommodate these disruptions and turn them into genuine business accelerants. Smart human resource policy should focus on how to make learning an integral part of the workplace. Workplace culture is not created in a vacuum, but is the end result of conscious business decisions that affect day-to-day operations. It will be increasingly important that businesses identify and implement strategies for embracing learning as part of that culture-building process.

One way to successfully navigate this change is by leveraging work-based learning. Workers must be willing to consistently retrain and employers must be willing to share with workers and education entities exactly what skills they are looking for presently, but more importantly in the near and far future. Additionally, much of the work-based learning must be employer- and industry-led to help support business growth and expansion. This will mean increasing investments in the retraining of incumbent workers. Collaboration between employees, state agencies, educational entities and of course, employers.

Work-based learning takes many different forms depending on the circumstances of the work, the business and the worker. Work-based learning combines elements of traditional classroom learning and hands-on skills training. The classic examples of work-based learning include apprenticeships in the skilled trades and college internships. Today, work-based learning expands these models to address both new and current workers at all career stages in a variety of skill-based and knowledge-based occupations. The key features of work-based learning are three-fold -- identifying the skills necessary to perform a job, an assessment of the current or prospective worker's skills and a customized curriculum to fill any gap.

A by-product of increased work-based learning is the naturally resulting career pathways that will allow students to navigate education through the lens of career progression. The structured step-by-step processes that allow students to progressively pursue better paying work related to their career will also lessen student debt burdens and ease the transition into a full-time profession.

**What the Workforce Board Can Do:**

- Increase its investments in work-based learning, particularly for young people.
- Promote and invest in pre-apprenticeship and apprenticeship programs with local employers to increase the number of people earning-while-learning in critically labor short occupations.
- Find ways to link scholarships for education or training in high-skill, high-growth jobs with direct work-based experiences and increase the numbers of graduates ready to work in training-related jobs.
- Increase its investments in helping employers upskill their existing workforces.

# In Summary

Despite the setbacks of the recent oil price drops, the effects of a category five hurricane and the current geopolitical uncertainties, the Gulf Coast region has significant advantages working in its favor.

In this report, we examined 45 indicators to gauge our regional workforce conditions. We also considered the potential implications of technology on the future of work. When we overlay these views, one thing is clear – our region has the capacity to harness technological disruption that will ensure continued prosperity.

The Gulf Coast Workforce Board stands ready to serve the region and set the standard for future-forward thinking.

The region is home to a younger workforce still developing its habits and attitudes – the better to help them understand the importance of continued education and skills training. The population is continuing to grow – with that growth being led by immigration that supplies a constant stream of people, skills, knowledge and potential. There is a greater awareness and push for better vocational and skill-based education among regional leadership, which has the potential to be parlayed into substantive policy discussions. Of course, there are clear challenges for our area's emerging workforce as well.

Far too many Gulf Coast residents lack access to healthcare, child care and transportation, which all too often are impediments to worker success and have expensive economic and social costs. The more effectively our institutions and policies can assist learners in reaching their vocational and academic goals by supporting worker access to these necessities, the greater the benefits that accrue to our region as a whole.

But government and wise policy cannot make this critical transition toward a more robust high-tech workforce alone. Employers must recognize the need to promote training and continuing education on a macro-level and more aggressively pursue partnerships to effectuate them. More than focus and good intention, it is action that will count in the final competition for the workforce of the future. Creative and novel approaches to each of these future developments will be the best way to manage their effects.

The region's collective strengths combined with investments in our future and current workers will provide a nimble and adaptable workforce that allows our region to attract and retain the best employers, afford everyone the dignity of a job, remain indispensable to the global economy and ensure that all within it are thriving.

Workforce Solutions

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