The Coastal Bend economy has become more diversified. During the past two decades, the military sector has reduced in size, while the construction sector has expanded considerably. Along with growth in management businesses, major shifts in the regional economic landscape are unique to the region, and they have affected the mix of occupations and increasingly more jobs require post-secondary education. Women and Hispanic employees are concentrated in a few industries.

It has been a decade since the United States began to recover the most severe economic downturn after World War II. The Great Recession officially ended in June 2009, although it took another year or two for the Coastal Bend economy to show signs of recovery. Since then the nation has stayed on a steady but slow path of job and economic growth, while a large part of Texas has ridden a full oil boom and bust cycle.

In South Texas, various communities battled the 2005 round of Base Realignment and Closure (BRAC) process that concluded in late 2011, followed by developments in the shale oil industry that promised to be a “game changer” for the regional economy.

How has the regional economic landscape changed? The answer is particularly important for policymakers and workforce development officials alike to evaluate the region’s competitiveness and to plan for economic development programs.

Shifting Economic Landscape

Today the top economic drivers of the Coastal Bend are the government and healthcare sectors, followed by accommodation and food services, retail trade, and construction.

Most jobs are in services, and only 4% are manufacturing jobs. Government agencies at various levels collectively hire slightly more than one in five employees (21%) in the region. The health care and social assistance sector, including hospitals, clinics and nursing homes, hires another one in six employees (15%). The accommodation and food services, retail trade and construction sectors each accounts for about one in ten jobs (11%) in the Coastal Bend.

Judging by employment patterns, the overall economic landscape of the region today is not much different from that two decades ago. Between 2001 and 2018, the share of regional employment differed by less than two percentage points for most economic sectors, except government and construction.

Government employment has reduced from 24% in 2001 to 21% today, while construction employment has expanded from 7% to 10%. The employment share of healthcare and social assistance sector has increased from 13% to 15%, while the share of manufacturing employment has reduced from 6% to 4%.

Despite the fact that oil and gas production in the Eagle Ford...
shale region still plays a vital role in recent economic growth of South Texas, employment directly related to oil and gas extraction has returned to the 2009 level at about 8,000 after falling by more than half from the peak of 17,000 jobs in 2014.

Given the diminishing mining and military sectors, the Coastal Bend economy has become more diversified.

**Coastal Bend Effects**

Between 2001 and 2018, seven economic sectors lost jobs while the other sectors gained jobs. The Coastal Bend region added more than 30,000 jobs during that period, the manufacturing sector lost about 4,000 jobs.

Employment changes in various sectors are affected by different factors, including the relative performance of industries, developments specific to the Coastal Bend region, and overall economic growth outside this region.

The following bar chart breaks down for each sector the change in regional employment between 2001 and 2018 into three individual types of factors. The first broad type of economic effect is called the industrial mix effect, which represents the share of regional industry growth explained by the growth of the specific industry at the national level. This number equals the employment growth rate of the specific industry at the national level less than the national-level overall employment growth. Much of the employment loss in the region’s manufacturing and information sectors mirrored the declining trends of these two sectors nationwide.

The second type of economic effect refers to the national effect, which is the regional employment change that corresponds to the overall employment growth of the nation. Between 2001 and 2018, employment across the nation grew by 13%. Economic growth elsewhere in the nation affected the performance of regional businesses, especially such export-based businesses as hotels/motels and industrial manufacturing plants.

The third broad type of economic effect captures all factors that are not related to the performance of specific industries or the nation as a whole. This is the regional-specific effect, which is measured by subtracting employment changes associated with the industrial mix and national effects from the actual employment change. The sector experiencing the most regional effect is management of companies, whose employment more than doubled from 421 in 2001 to 1,128 in 2018.

Regional employment in the construction and utilities sectors also gained 53% and 20%, respectively, during the same period. Remarkable growth in these industries has been driven by a surge in industrial projects and development of wind farms near the Port of Corpus Christi. Port officials reported a total of over $50 billion of capital expenditures in industrial manufacturing facilities, in addition to the replacement of the Harbor Bridge at slightly less than $1 billion.
Persistent Growth

Overall, major economic sectors in the Coastal Bend have continued to outperform other sectors. This can be realized from the following scatter plot, which shows a positive relationship between the relative sizes of different sectors in the region and their growth rates during the 2001-2018 period. Location quotient measures the size of an industry in the Coastal Bend relative to the size of that same industry in the nation as a whole. This measure depicts a region’s competitiveness.

A sector with a higher location quotient (larger relative size) also tended to have experienced stronger recent growth. This overall pattern suggests only minor shifts in the regional economic landscape. In particular, the construction sector is twice as large in the region as in the nation. With close to 60% employment gain since 2001 compared to the overall regional employment growth of 14%, this sector has continued to be a key regional economy driver.

The location quotient for employment in the mining sector is 7.9, meaning that mining employment is nearly 8 times as high in the Coastal Bend as elsewhere in the nation. But reflecting developments in the oil and gas industry, the mining sector has gained relatively fewer jobs, especially in comparison with other sectors with relatively high location quotients.

On the contrary, the business management sector is extremely small (location quotient of 0.29) in the region relative to elsewhere but its employment has more than doubled from 421 in 2001 to 1,128 jobs today. Most businesses in this sector are offices of bank holding companies.

Like mining, the government is another sector that is relatively large but its economic role has diminished in the past two decades. The region’s military bases were responsible for much of the loss in government employment. Along with the closure of Naval Station Ingleside in 2011, the numbers of military personnel in the remaining military installations, namely Corpus Christi Army Depot and Naval Air Station Kingsville, have declined gradually since 2001.

Occupations

To understand how well this region meets its workforce demand, we look at employment data by occupation instead of industry. A particular occupation, say chief executives, can be found in different industries. The most popular jobs are in food preparation and serving (14%), and office and administration support (13%). Each of these two broad occupations types accounts for more than one in 10 jobs in the Coastal Bend. Occupations related to construction and extraction account another 9% of regional employment. Other types of occupations are rather diverse in the region.

As for industries, employment has grown faster for some occupations than others. Different patterns reflect in part the growth patterns of different industries. In particular, exceptional growth in the construction industry was the key driver for the 50% growth rate of architecture and engineering occupations. Between 2001 and 2018, there were 167 job openings per year on average for civil engineers.

The location quotient for civil engineers in the Coastal Bend is nearly 6, meaning a regional demand 6 times as high as the demand nationwide. This measure of relative workforce demand is only shy of the location quotients for oil and gas extraction occupations, such as roustabouts, rotary drill operators.

But civil engineering is also an example of the region’s limited capacity in meeting its changing workforce demand. In the past year, the region graduated no more than 60 students with a bachelor’s degree in civil engineering, mostly from Texas A&M University-Kingsville. This means that each year more than 100 civil engineering job openings must be filled by residents outside the Coastal Bend.

To better understand how workforce needs have changed over time, we compare the historical changes of one occupation relative to another. The following bar chart shows a measure of the occupational mix effect analogous to the industrial mix effect discussed above, so this effect represents the share of regional job growth explained by the growth of the specific occupation at the national level.

It is obvious that some shifts in occupations are related to changes in different industries. The high growth rates of healthcare and personal care related occupations were related to the relative growth of the healthcare sector. The decline in production related occupations was related to the shrinking manufacturing sector.

Several measures of the occupational mix effect run opposite to the relative performance of regional industries. In particular, the construction sector has been growing remarkably in the region, but the nationwide demand for construction related occupations, including architecture and engineering jobs, has decreased. This
means that the growth of these occupations in the Coastal Bend reflects mostly growth in this region instead of elsewhere in the nation.

**Skilled Labor Mobility**

Other than growth of different industries, historical changes in different occupations reveal one general pattern: Growth has been tilted toward jobs that require post-secondary education or training. The majority of jobs related to production and construction do not require formal educational credential, but the majority of jobs that have been growing nationally do require a post-secondary degree or formal training. Today about 65 percent of job openings across the United States require education beyond high school, and 35% of jobs require at least a bachelor’s degree.

But more educated or skilled workers tend to be more mobile. According to a database compiled by the Wall Street Journal, the majority of graduates from Texas A&M University-Corpus Christi do not continue to stay within the region. More than one in 10 university graduates have moved to Houston or San Antonio. For the total of 2,386 university graduates in the 2016-2017 academic year, this means that nearly 1,000 of them would have move out of the Coastal Bend for other metro areas in Texas.

**Workforce Demographics**

In addition to education attainment, performance of different industries and the region’s overall economic conditions, the job prospect appears to differ across demographic groups. More than three-quarters (76%) of hiring in the Coastal Bend region is to replace vacant job positions due to retirement or resignation.

As for the nation as a whole, the region is facing an aging workforce. The share of workforce with employees aged 55 or older is over 25% in the agriculture, utilities, and manufacturing sectors. In the next decade, hiring to replace retiring employees would likely be higher in these three particular sectors than in other sectors.

Other than the workforce’s overall age, different industries display different demographic patterns. This might also affect the job prospect of different individuals. In particular, females are more concentrated in services sectors, especially the healthcare (81%), financial (74%), and educational (69%) sectors.

Hispanics make up about 60% of the Coastal Bend population, but they account for less than 30% of employment in the government sector. Rather this demographic group is concentrated (67%) mostly in the construction and healthcare sectors.

So despite a diversified economy with a diverse workforce in the Coastal Bend, not all residents face the same employment outlook.