

# TEXAS

# PAPER MANUFACTURING

This subsector includes pulp and paper mills and manufacturers of paper products, including office supplies and products for shipping and packaging.

**47,200**  
DIRECT & INDIRECT EMPLOYMENT

**\$2.1 Billion**  
STATE SUBSECTOR GDP

**\$62,783**  
AVERAGE ANNUAL WAGE

**\$1.9 Billion**  
EXPORTS

Sources: U.S. Bureau of Economic Analysis, Regional Economic Models, Inc., Emsi, U.S. Department of Commerce International Trade Administration

## INDUSTRIES IN PAPER MANUFACTURING SUBSECTOR

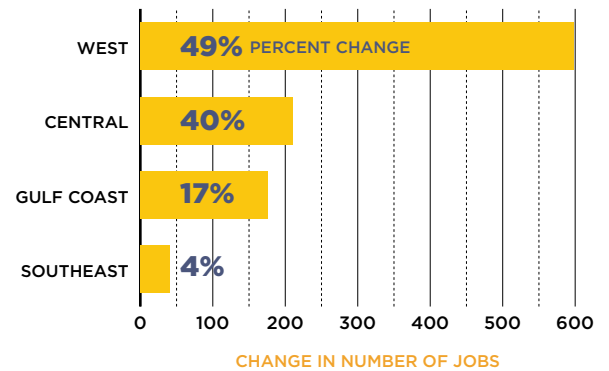
One method to measure a subsector's regional strength is the location quotient (LQ), a ratio of the subsector's share of employment in a region to its share of employment in the U.S. as a whole; the higher the LQ value, the more "concentrated" the industry. LQ values often are used to identify regional strengths and inform economic development and investment decisions. Texas' statewide 0.56 LQ in paper manufacturing indicates that the subsector and its industries are not highly competitive.

	DIRECT JOBS 2016	AVERAGE TEXAS SALARIES 2016	LOCATION QUOTIENT 2016
<b>SUBSECTOR TOTALS</b>	<b>17,207</b>	<b>\$62,783</b>	<b>0.56</b>
PULP, PAPER AND PAPERBOARD MILLS	2,980	\$85,266	0.36
CONVERTED PAPER PRODUCT MANUFACTURING	14,228	\$58,075	0.63

\*Location quotient compares an industry's share of jobs in a specific region with its share of nationwide employment. Source: Emsi

## REGIONAL JOB CHANGES, 2010-2016

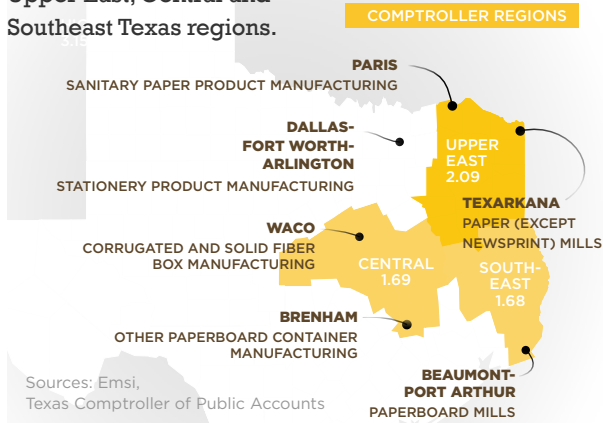
Paper manufacturing jobs declined from 2010-2016 in the U.S. and Texas. Several Texas regions did see job growth, led by the West and Central regions.



Sources: Emsi and Texas Comptroller of Public Accounts

## SUBSECTOR AND INDUSTRY CONCENTRATION IN TEXAS REGIONS

A regional assessment of employment concentration is useful, as the size of Texas' economy and workforce can obscure regional industry strengths. The paper manufacturing subsector is highly concentrated in the Upper East, Central and Southeast Texas regions.



Sources: Emsi, Texas Comptroller of Public Accounts

## CONCLUSION

Manufacturing continues to drive output and productivity in the Texas economy, creating jobs paying well above the statewide average. It also contributes significantly to job creation in other industries, particularly in design operations and services.

The paper manufacturing subsector's employment and economic output levels have declined since the mid-1990s, both in the U.S. and Texas. Demand for paper products has declined as consumers shift to digital media. The subsector is buoyed, however, by demand for packaging from food and beverage industries.

To see more in-depth Texas manufacturing data, visit:

[comptroller.texas.gov/economy/economic-data/manufacturing/](http://comptroller.texas.gov/economy/economic-data/manufacturing/)

Glenn Hegar

Texas Comptroller of Public Accounts

# TEXAS MANUFACTURING

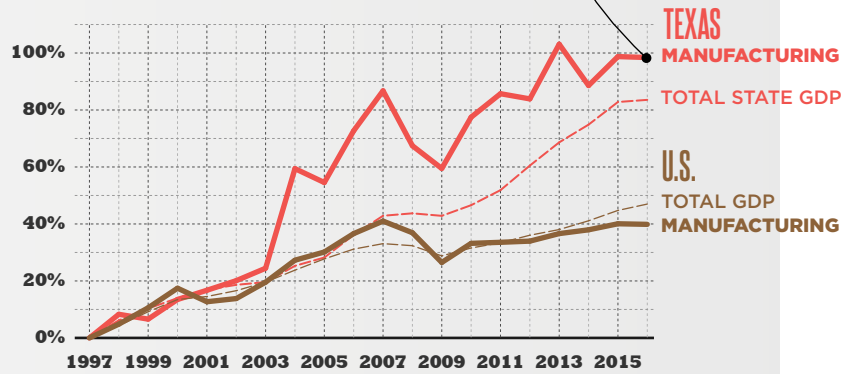
Texas has an extraordinary manufacturing economy. The state's resources make it a natural leader in petroleum and chemical manufacturing; its research institutions have fostered computer-related and other high-tech manufacturing; and a business-friendly environment and skilled labor have helped create a burgeoning automotive manufacturing sector.

**IN ALL, MANUFACTURING CONTRIBUTED \$226 BILLION TO TEXAS' GROSS DOMESTIC PRODUCT (GDP) in 2016, an amount larger than the entire economy of Portugal.**



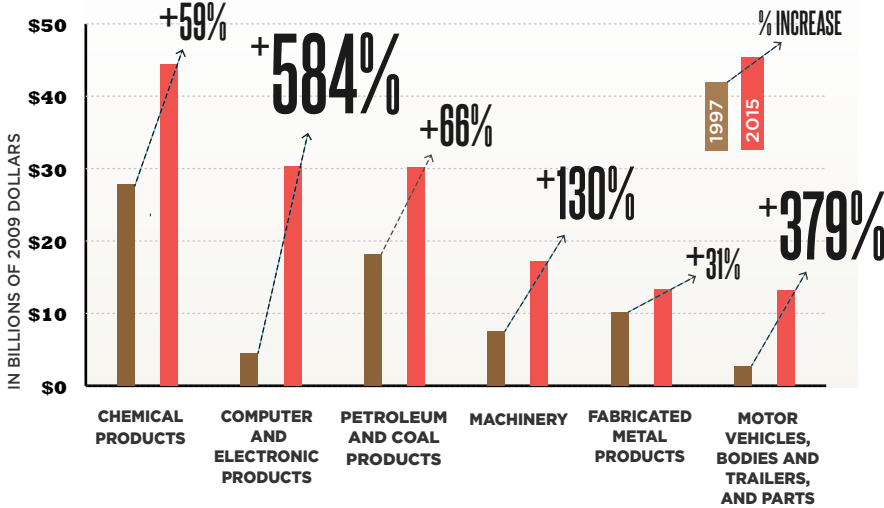
**Glenn Hegar**  
Texas Comptroller of Public Accounts

## PERCENT CHANGE IN REAL GROSS DOMESTIC PRODUCT / 1997-2016



Sources: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics

## LARGEST MANUFACTURING SUBSECTORS IN TEXAS BY GDP: GROWTH FROM 1997 TO 2015



Sources: U.S. Bureau of Economic Analysis, Texas Comptroller of Public Accounts

## TEXAS MANUFACTURING OUTPUT HAS OUTPACED THE TOTAL TEXAS ECONOMY.

TEXAS MANUFACTURING ACCOUNTED FOR 10.4 PERCENT OF U.S. MANUFACTURING GDP IN 2016.

BETWEEN 1997 AND 2016, MANUFACTURING REAL GDP INCREASED 98 PERCENT, COMPARED WITH AN 84 PERCENT GAIN ACROSS ALL TEXAS INDUSTRIES.

From 1997 through 2016, growth in Texas manufacturers' economic output more than doubled U.S. manufacturing gains of 40 percent.

Sources: U.S. Bureau of Economic Analysis, Texas Comptroller of Public Accounts

**3,000,000**  
DIRECT & INDIRECT EMPLOYMENT

**\$225.8 Billion**  
TEXAS MANUFACTURING GDP

**\$73,738**  
AVERAGE ANNUAL WAGE

**\$210.3 Billion**  
EXPORTS

While Texas' manufacturing employment has diminished as a result of automation, technological advances and other factors, its economic output has increased. From 1997 through 2016, Texas' manufacturing job count fell by 19 percent, but its real GDP rose by 98 percent. Texas has **858,000 DIRECT MANUFACTURING JOBS**, as well as another **2.2 MILLION JOBS** indirectly created or supported by manufacturers. In 2016, average annual Texas wages in manufacturing approached **\$74,000**, much higher than the statewide average of \$54,000.

To see more in-depth Texas manufacturing data, visit:

[comptroller.texas.gov/economy/economic-data/manufacturing/](http://comptroller.texas.gov/economy/economic-data/manufacturing/)

Sources: U.S. Bureau of Economic Analysis, Regional Economic Models, Inc., Emsi, U.S. Department of Commerce International Trade Administration

Glenn Hegar

Texas Comptroller of Public Accounts