### TEXAS

## WOOD PRODUCTS Manufacturing

This subsector includes sawmills and wood preservation services; plywood, hardwood and truss manufacturers; and manufacturers of windows, doors, flooring, wood containers and mobile homes.



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

#### INDUSTRIES IN WOOD 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

DSECTOR	DIRECT JOBS 2016	AVERAGE TEXAS SALARIES 2016	LOCATION QUOTIENT 2016
SUBSECTOR TOTALS	23,038	\$41,025	0.71
SAWMILLS AND WOOD PRESERVATION	3,527	\$44,021	0.47
VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING	4,815	\$49,106	0.76
OTHER WOOD PRODUCT MANUFACTURING	14,696	\$37,658	0.79

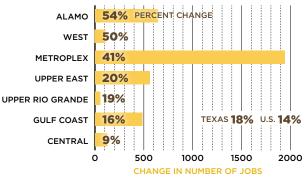
\*Location quotient compares an industry's share of jobs in a specific region with its share of nationwide employment. Source: Emsi

"concentrated" the industry. LQ values often are used to identify regional strengths and inform economic development and investment decisions.

Texas' statewide 0.71 LQ in wood product manufacturing indicates that the subsector and its industries are not highly competitive.

### **REGIONAL JOB CHANGES, 2010-2016**

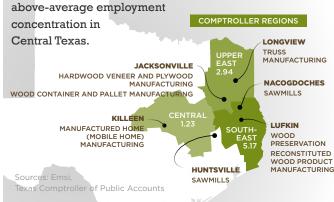
Texas subsector jobs rose 18 percent from 2010-2016, compared to 14 percent in the U.S. Texas' Alamo region experienced the largest percent growth of 54 percent; the Metroplex region added the most total jobs.



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 wood product manufacturing subsector is highly concentrated in the Southeast and Upper East Texas regions and has an



### 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.

Wood product subsector employment rose by 18 percent in Texas from 2010 through 2016, buoyed by demand from residential construction and housing starts. The subsector will continue to face competition from imports and from material substitutes such as rubber, plastics and steel.

To see more in-depth Texas manufacturing data, visit: comptroller.texas.gov/economy/economic-data/manufacturing/

**Glenn Hegar** 

# 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** 

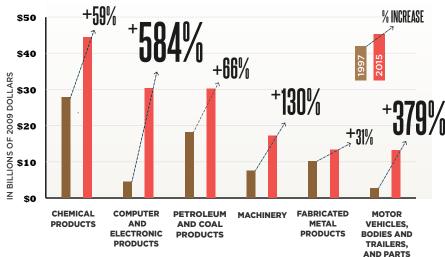
### **+ 4X 4**% PERCENT CHANGE IN REAL GROSS DOMESTIC PRODUCT / 1997-2016 TEXAS 100% MANUFACTURING TOTAL STATE GDP 80% U.S. 60% TOTAL GDP 40% MANUFACTURING 20% **n%** 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

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

MANUFACTURING GDP IN 2016.

U.S. Bureau of

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



**TEXAS MANUFACTURING OUTPUT HAS OUTPACED** THE TOTAL TEXAS ECONOMY. MANUFACTURING ACCOUNTED FOR 10.4 PERCENT From 1997 through OF U.S.

BETWEEN 1997 AND 2016. MANUFACTURING REAL GDP INCREASED 98 PERCENT, COMPARED WITH AN **84 PERCENT GAIN** Economic Analysis, ACROSS ALL TEXAS INDUSTRIES. of Public Accounts

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

DIRECT & INDIRECT EMPLOYMENT TEXAS MANUFACTURING GDP AVERAGE ANNUAL WAGE 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/

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