

TEXAS

MEDICAL EQUIPMENT AND SUPPLIES AND MISCELLANEOUS MANUFACTURING

This subsector includes industries that manufacture surgical, dental and optical instruments and supplies; recreational goods such as sporting equipment, toys, office supplies and musical instruments; and other items intended for daily use. Many of its industries rely heavily on export activity and research and development investments to develop innovative products.



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

INDUSTRIES WITHIN THE MISCELLANEOUS MANUFACTURING SUBSECTOR

The Medical Equipment and Supplies industry is considered an “advanced industry,” as defined by the Brookings Institution. Such industries are distinguished by R&D spending per worker ranking in the top 20 percent of industries, and a share of workers with levels of scientific and technical knowledge exceeding the national average. Their emphasis on innovation and highly skilled workers makes advanced industries essential to growing prosperity and rising standards of living.

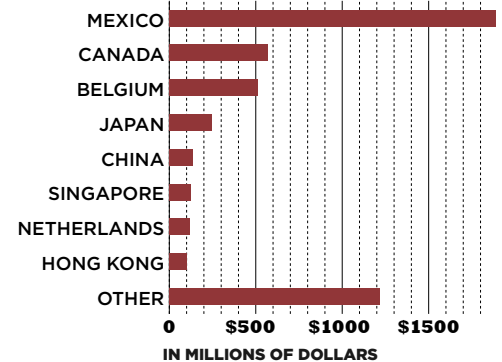
	DIRECT JOBS 2016	JOB CHANGE 2010-2016	AVERAGE TEXAS SALARIES 2016	LOCATION QUOTIENT* 2016
SUBSECTOR TOTALS	30,493	12%	\$52,953	0.62
MEDICAL EQUIPMENT AND SUPPLIES	11,929	2%	\$56,821	0.47
JEWELRY AND SILVERWARE	2,435	6%	\$53,971	1.10
SPORTING AND ATHLETIC GOODS	2,235	23%	\$53,170	0.62
DOLL, TOY, AND GAME MANUFACTURING	304	41%	\$46,913	0.33
OFFICE SUPPLIES (EXCEPT PAPER)	931	-5%	\$34,514	0.97
SIGN MANUFACTURING	6,098	39%	\$44,948	0.97
ALL OTHER MISCELLANEOUS MANUFACTURING	6,560	12%	\$55,805	0.69

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

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

TEXAS' ECONOMIC OUTPUT PER WORKER IN THE SUBSECTOR ROSE FROM ABOUT \$70,900 IN 1997 TO \$91,900 IN 2015.

SUBSECTOR EXPORTS FROM TEXAS

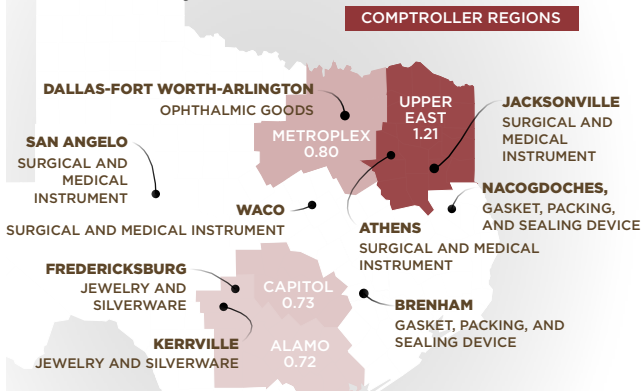


Source: U.S. Department of Commerce International Trade Administration

This subsector's exports from Texas rose from \$2.27 billion in 2006 to \$4.9 billion in 2016, a 116 percent increase. Half of these exports ended up in Mexico or Canada.

REGIONAL SUBSECTOR LQs* AND AREAS OF INDUSTRY SPECIALIZATION BY METRO AREA

This subsector's share of employment in the Upper East region is 21 percent higher than in the U.S., led by medical equipment manufacturing in areas such as Athens and Jacksonville.



*Location quotient compares an industry's share of jobs in a specific region with its share of nationwide employment. 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 miscellaneous manufacturing subsector, including medical equipment and supplies and a variety of recreational goods, consists of innovative, advanced industries and is export-intensive. The subsector is not highly concentrated in Texas as a whole. There is a high regional employment concentration, however, in the state's Upper East region.

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

comptroller.texas.gov/economy/economic-data/manufacturing/

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TEXAS MANUFACTURING

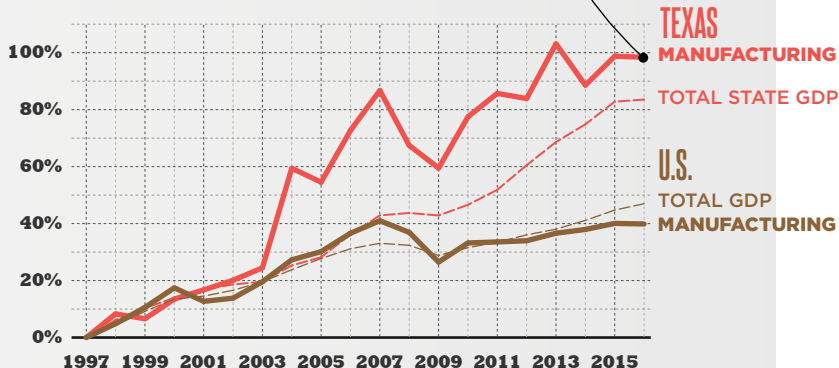
Texas has an extraordinary manufacturing economy. The state's resources make it a natural leader in petroleum and chemical manufacturing; its research institutions have fostered computer-related and other high-tech manufacturing; and a business-friendly environment and skilled labor have helped create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



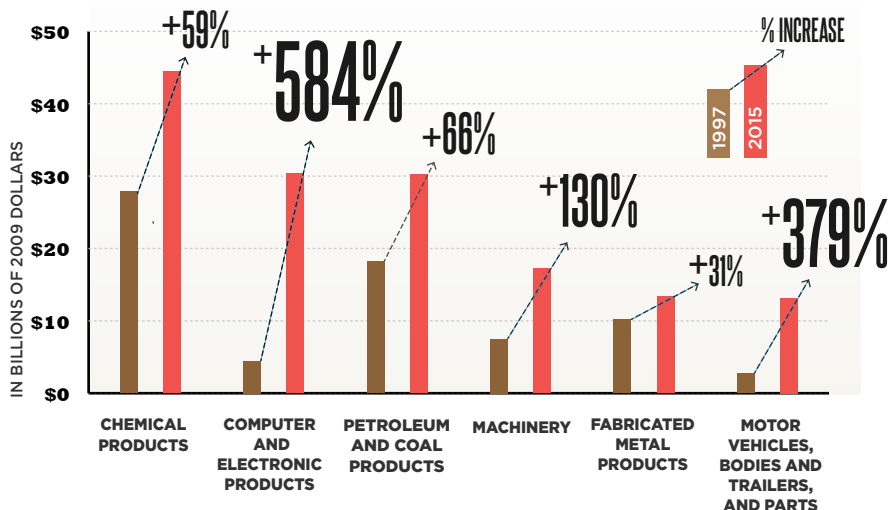
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PERCENT CHANGE IN REAL GROSS DOMESTIC PRODUCT / 1997-2016



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.

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

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

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.

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