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Texas Housing Prices on the Rise By Courtney King

MAJOR METROS SEE MUCH HIGHER COSTS



For years, Texas has built a reputation as a place where families can live well for less, with several of its metropolitan areas consistently ranked among the nation's most affordable. The economic success of our cities is changing that picture, however, and according to the Federal Reserve Bank of Dallas, the rise in Texas home prices has outpaced that of the nation as a whole since 2011.

Similarly, a recent Texas A&M Real Estate Center study indicates that Texas housing prices have been rising faster than the state's personal income. These rapid price increases aren't occurring uniformly throughout the state, of course, but in all they may reduce Texas' traditional cost of living advantage.

"On the demand side, Texas home prices are currently driven by the state's growing economy," says Dr. Ali Anari, research economist at the Texas A&M Real Estate Center. "Texas created jobs at an annual rate of 2.5 percent from December 2016 to December 2017 — higher than the nation's employment growth rate of 1.4 percent."

Texas also continues to experience explosive population growth, gaining nearly 1,100 people per day. According to recent Census estimates, four of the nation's five fastest-growing large cities (those with 50,000 or more residents) are in Texas — Conroe, Frisco, McKinney and Georgetown, all of them located within the state's largest metropolitan areas.

RISING BUILDING COSTS

Texas homebuilders are struggling to meet the strong demand for affordable single-family homes. One problem they face has been a lack of skilled construction workers following the housing bust of the Great Recession. Between 2007 and 2013, the nation's builders lost more than 2 million workers, and only 40 percent of them ultimately returned to the industry. The Federal Reserve Bank of Dallas reports that Texas' residential construction job count fell more than total employment during the recession, and took more time to rebound.

CONTINUED ON PAGE 3

A Message from the Comptroller

Sometimes, success brings its own problems, and the rapid growth of Texas' most economically dynamic cities provides a case in point: in a state that has long touted its low cost of living, affordable housing is getting hard to find in some areas. In this issue, we take a look at increasing home prices in Texas.



Texas weathered the housing crisis that sparked the Great Recession relatively well. The market for Texas homes largely held steady, avoiding both the boom and the bust. In more recent years, however, average Texas home prices have begun climbing faster than the nation's — and faster than our personal income. The rise in prices isn't uniform, and many areas of the state remain a bargain by national standards. But when coupled with high property tax rates, the soaring cost of homes in some of our largest cities is a cause for concern.

In this issue, we also highlight Texas manufacturing. I recently completed one of our "Good for Texas" tours, meeting with manufacturers around the state to announce the results of a study my office recently completed. We estimate manufacturing contributes \$218 billion annually to Texas' gross state product and employed about 845,000 Texans in 2016. But manufacturing also stimulates and supports a wide variety of other businesses; more than a quarter of all Texas jobs depend on it, directly or indirectly.

As always, I hope you enjoy this issue!

GLENN HEGAR

Texas Comptroller of Public Accounts

CHEMICAL PRODUCT MANUFACTURING

321,100
DIRECT & INDIRECT EMPLOYMENT

\$55.5 Billion
STATE SUBSECTOR GSP

\$108,000
AVERAGE ANNUAL WAGE

\$36.6 Billion
EXPORTS

The Comptroller's office has identified 18 manufacturing subsectors within the Texas economy. This manufacturing subsector creates products essential to our daily needs, such as cleaning and beauty products, pharmaceuticals, agricultural fertilizers, dyes and paints, adhesives, plastics and much more.

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

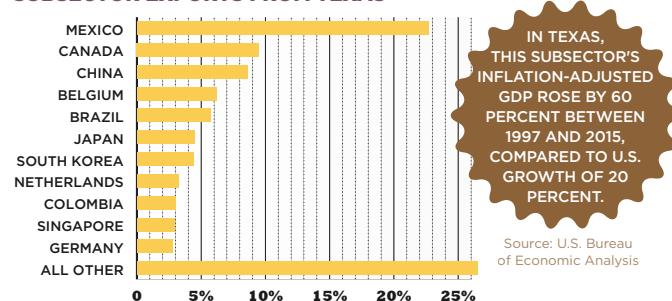
CHEMICAL PRODUCT MANUFACTURING: BIG IN TEXAS

	DIRECT JOBS 2016	JOB CHANGE 2010-2016	AVERAGE TEXAS SALARIES 2016
SUBSECTOR TOTALS / 2016	78,845	12%	\$108,397
BASIC CHEMICALS	35,376	14%	\$123,588
RESIN, SYNTHETIC RUBBER AND ARTIFICIAL SYNTHETIC FIBERS AND FILAMENTS	10,242	22%	\$119,391
PESTICIDE, FERTILIZER AND OTHER AGRICULTURAL CHEMICALS	2,872	-4%	\$85,120
PHARMACEUTICALS AND MEDICINE	11,502	20%	\$103,186
PAINT, COATING AND ADHESIVES	5,765	8%	\$77,775
SOAP, CLEANING COMPOUNDS AND TOILET PREPARATION	4,272	-15%	\$67,282
OTHER CHEMICAL PRODUCTS AND PREPARATION	8,817	11%	\$89,002

Source: Emsi

The basic chemical manufacturing industry is highly concentrated in Texas. Its share of total employment is 2.87 times greater in Texas than in the U.S. In 2016, 67 percent of all U.S. petrochemical production jobs were in Texas.

SUBSECTOR EXPORTS FROM TEXAS



IN TEXAS, THIS SUBSECTOR'S INFLATION-ADJUSTED GDP ROSE BY 60 PERCENT BETWEEN 1997 AND 2015, COMPARED TO U.S. GROWTH OF 20 PERCENT.

Source: U.S. Bureau of Economic Analysis

Texas exported \$36.6 billion in chemical products in 2016, making this subsector the state's second-largest export market.

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

CONCLUSION

Chemical manufacturing contributes \$55.5 billion to Texas' gross state product (GSP), the most of any manufacturing subsector. Industries in chemical manufacturing have seen increased production and employment in recent years, fueled by lower costs for natural gas, their main feedstock. Employment has remained stable since early 2015.

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

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The shortage of carpenters, masons and other skilled workers led to higher wages, which increase the bottom-line price of homes. And construction worker pay is rising *much* faster in Texas than in the nation as a whole. Inflation-adjusted average hourly earnings in Texas' construction sector rose by more than 20 percent between 2011 and 2016, versus just 4.7 percent for the U.S. construction sector — and nearly four times the 5.9 percent growth in Texas' total average private-sector earnings.

The cost of land itself is another factor.

"Land costs account for 20.4 percent of Texas home prices, historically the highest percentage [we've seen] and up from 14.1 percent in 2000," Anari says. And Texas' land price index, a measure of the extent to which land prices change over time, indicates prices are increasing quickly. "Since 2000, the Texas land price index for single-family homes has increased by 122 percent, compared with 95 percent nationally," he says.

Government regulation plays a role as well. According to the Texas Public Policy Foundation, many Texas cities have reacted to rapid growth by enacting strict zoning codes — ordinances controlling land use and construction — that remove tracts of land from development, driving up demand and prices.

Where building *can* take place, the cost of regulatory compliance contributes to higher prices. Such costs can include permit, hookup and "impact" fees, environmental surveys, requirements for specific building materials and much more — all well-intentioned, but all adding to the bottom line.

A 2016 study by the National Association of Home Builders estimated government regulations account for nearly a quarter (24.3 percent) of the final price of an average new single-family home. And between 2011 and 2016, these regulatory costs rose by nearly 30 percent, while the nation's per capita disposable income increased by just 14.4 percent. In other words, regulatory

costs are rising more than *twice* as fast as the average American's ability to pay for a home.

Rising costs associated with building have made the development of moderately priced housing difficult and less profitable for homebuilders. As a result, single-family home construction is skewing away from "entry-level" housing and toward larger, more expensive — and more profitable — homes.

The stock of entry-level homes is most limited in the state's major metropolitan areas, although an abundance of homes is available at higher price points. According to the Real Estate Center, sales of homes priced from \$300,000 to \$399,000 have been rising since 2012, while sales of homes priced below \$200,000 have been either flat or declining.

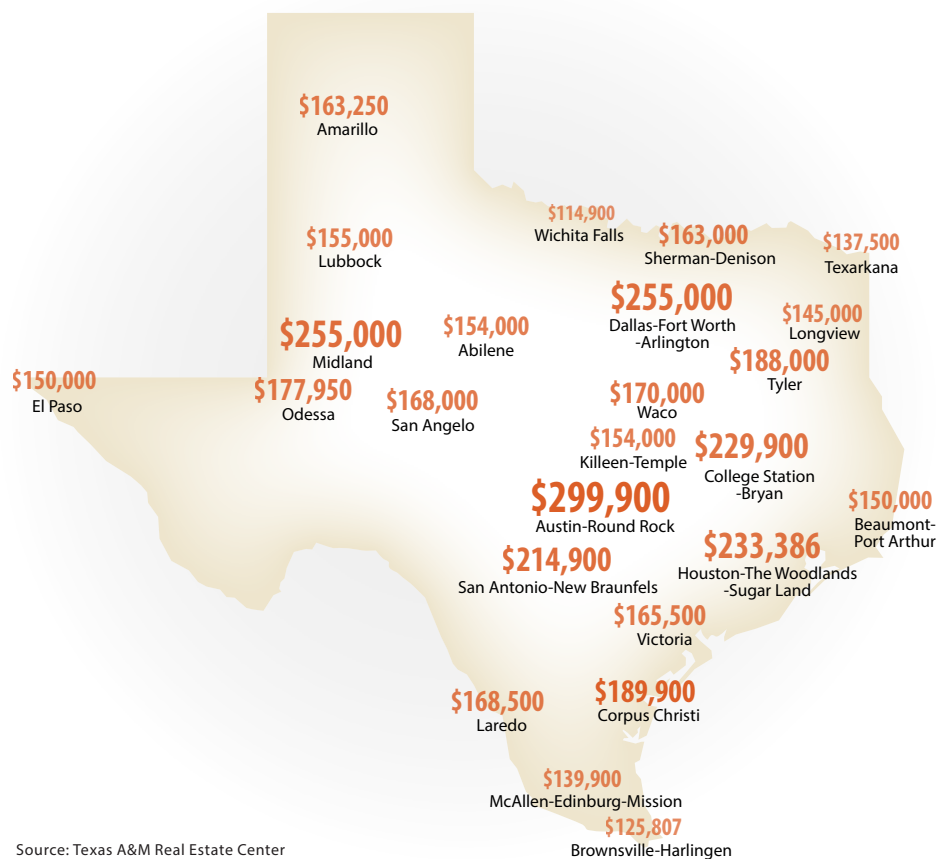
Again, however, this is primarily a phenomenon of the state's largest metropolitan areas, as recent price data indicate (**Exhibit 1**).



DR. ALI ANARI
Research Economist,
Texas A&M Real Estate Center

EXHIBIT 1

MEDIAN PRICES, NEW AND EXISTING SINGLE-FAMILY HOMES, 2017



Source: Texas A&M Real Estate Center

Texas Housing Prices on the Rise

Perhaps unsurprisingly, the booming Austin-Round Rock area had the highest median home price in 2017, at \$299,900.

But while Austin has the highest median price, it hasn't seen the fastest price increase. That distinction falls to Grayson County's fast-growing Sherman-Denison metro area, which saw an 83 percent increase in its median price between 2011 and 2017 (**Exhibit 2**), although that price remains well below the state median.

Exhibit 2 excludes only one of the state's five largest metro areas, McAllen-Edinburg-Mission. This border-area community offers some of the state's most affordable single-family homes, with a median price of \$139,900 in 2017. But even its median price has risen fairly briskly, at 30.6 percent between 2011 and 2017.

It's worth noting, however, that Texas housing still remains a bargain compared to many other areas of the nation. According to the Real Estate Center, for instance, in November 2017 the median sale price for existing Texas homes was about \$218,000, while the median price realized for new homes was nearly \$286,000. The National Association of Realtors, by contrast, reports the nationwide median price for existing homes was \$248,200 in November 2017. In the same month, according to the Census Bureau, the median U.S. price for new homes was \$334,900.

RISING RENTAL MARKETS

Texas has a large rental housing market. The Texas State Affordable Housing Corporation reports about 38 percent of Texans are renters; these include the



majority of the state's newcomers. Inevitably, the same factors affecting demand and sales prices have boosted rents in some regions.

Market conditions contributing to high rents include a limited supply of land zoned for multifamily use and high development costs. As with single-family housing, high costs incentivize developers to build properties designed to yield higher returns. According to a recent study by Harvard University's Joint Center for Housing Studies, most of the new multifamily construction under way across the U.S. is at the higher end of the market, with low-rent units growing increasingly scarce in major cities.

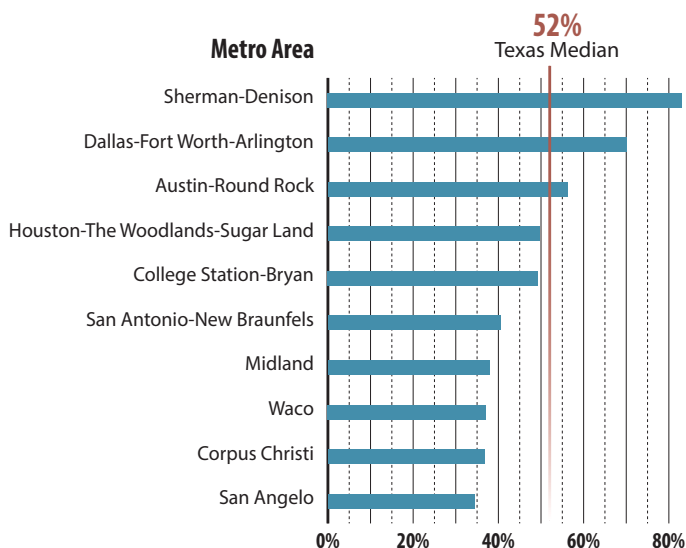
Growing demand from higher-income households, such as relocating professionals, also can push rent higher.

The Austin, DFW and Houston metro areas currently have the highest median monthly rents in Texas (**Exhibit 3**), as does Midland whose energy-related industry is surging back after the oil price slump. Together, these areas have helped push the median Texas rent to \$956, even though rents trend lower in most other Texas metro areas. The U.S. median rent was similar, at \$981 in 2016.

Austin-Round Rock also leads the state in its rate of rent increase, followed by smaller metro areas including Abilene, Lubbock, Odessa, Midland and San Angelo (**Exhibit 4**). With the exception of Midland, however, each of these smaller cities had median gross rents below the state median, as seen in Exhibit 3. The state's median rent rose by 17.6 percent between 2011 and 2016, easily outpacing the national rate of 12.6 percent.

EXHIBIT 2

FASTEST GROWTH IN MEDIAN PRICE OF SINGLE-FAMILY HOUSING, TEXAS METRO AREAS, 2011-2017



Note: Texas A&M Real Estate Center began tracking single-family data separately in 2011.
Source: Texas A&M Real Estate Center

HOUSING COSTS VERSUS INCOME

High housing costs pose challenges for households and for the state's economy. The cost and availability of affordable housing can determine a family's access to work, education, shopping and more. It also affects

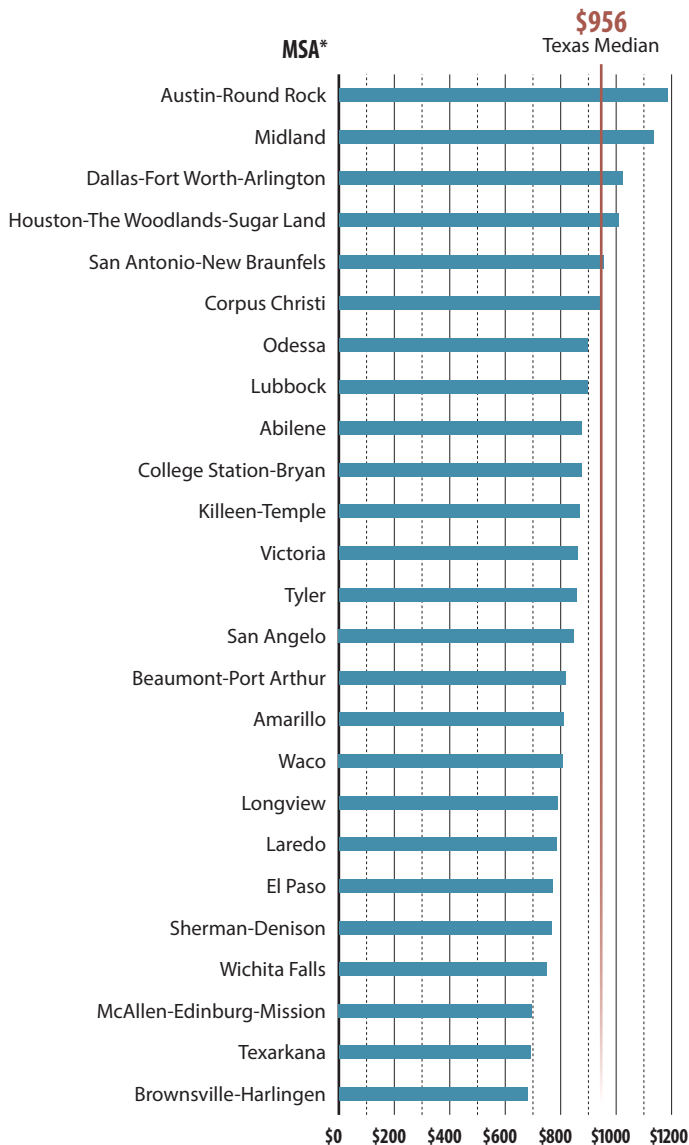
employers' ability to hire and retain qualified workers, which in turn can influence where companies choose to locate and expand.

Although Texas' housing affordability remains favorable compared to other states, high housing costs in some regions force many households to make serious tradeoffs. These often include commuting farther to work each day, postponing or forgoing homeownership, living in more crowded housing and spending a greater share of income on housing.

And these trade-offs are particularly challenging for households with low incomes.

EXHIBIT 3

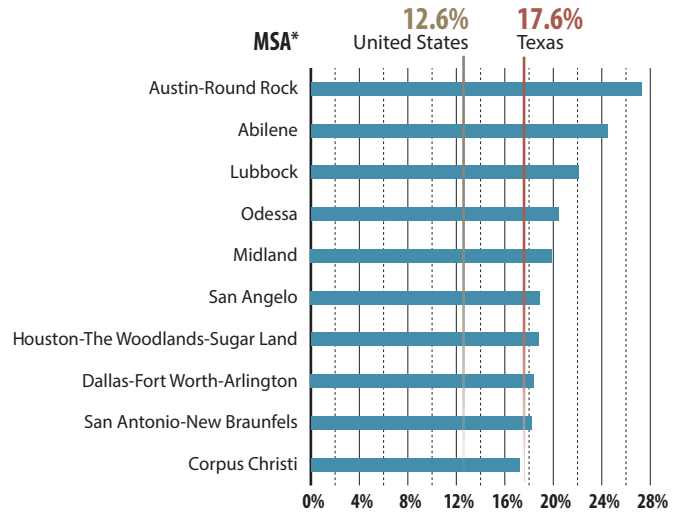
ESTIMATED MEDIAN MONTHLY GROSS RENTS IN TEXAS METRO AREAS, 2016



*Metropolitan Statistical Area as defined by the federal government. Source: U.S. Census Bureau

EXHIBIT 4

TEN FASTEST-GROWING MEDIAN MONTHLY GROSS RENTS, 2011-2016



*Metropolitan Statistical Area as defined by the federal government. Source: U.S. Census Bureau

The latest Census estimates indicate 26.4 percent of Texas homeowners with mortgages are “cost burdened,” spending 30 percent or more of their household incomes on house payments, still slightly below the comparable U.S. figure of 28.1 percent.

In addition to mortgage payments, property taxes also make it more difficult to afford homes. In a Tax Foundation analysis based on 2014 tax information, Texas had the nation’s sixth-highest “effective” property tax rate (the average amount of residential property taxes paid expressed as a percentage of home value — in Texas’ case, 1.67 percent).

In general, renters are even more likely to be cost burdened — 43.9 percent of Texas renters and 46.1 percent of renters in the U.S. spend 30 percent or more of household income on rent and utilities.

According to the Texas State Affordable Housing Corporation, a Texas household must earn \$18.38 per hour or \$38,234 annually to afford the state’s average fair-market rent of \$956 for a two-bedroom apartment without being cost burdened. Unfortunately, the average renter in Texas earns only \$17.89 per hour.

Housing experts’ opinions vary on the extent of Texas’ future housing challenges, but economic growth and population increases will put continuing upward pressure on the state’s home prices and rents. If Texas wants to maintain its overall reputation for a low cost of living, state and local policymakers must consider the factors driving price increases — and act on those they can influence. **FN**

Texas Manufacturing

By Bruce Wright



THE CHANGING WORLD OF “MADE IN TEXAS”

Any modern economy consists of a huge variety of activities, from banking to lawn care to cloud computing services. But to most of us, somewhere in the back of our minds, an “economy” still means people in a big building somewhere, making physical products.

Now factory smokestacks are giving way to computer-assisted design and clean rooms, and the most important raw materials often are human intelligence and insight. But a big part of the Texas economy still depends on manufacturing, which drives both innovation and employment in a host of related industries.

Texas Comptroller Glenn Hegar recently wrapped up a Good for Texas tour of six manufacturing facilities around the state, sharing the results of a new Comptroller study of this economic sector, which contributes more than \$218 billion annually to the Texas gross state product (GSP).

“Texas has a thriving manufacturing economy,” Hegar says. “Our state’s resources have made it a natural leader in petrochemicals, but there’s a lot more going on. Our research institutions are fostering high-tech manufacturing, and our business-friendly environment and skilled labor force have helped create new jobs in automotive manufacturing and other cutting-edge industries.”

THE EVOLUTION OF MANUFACTURING

In the last half-century, technical advances have revolutionized the nature of manufacturing. Advanced technologies and automation have boosted productivity while eliminating much of the need for the dirty, dangerous work once performed by unskilled labor. Today’s shop floors and refineries require increasingly sophisticated technical knowledge and skills.

This evolution inevitably reduced manufacturing employment. From 1997 through 2016, the U.S. manufacturing job count fell by 29 percent, and by 19 percent in Texas. In 2016, about 845,000 Texans were directly employed in manufacturing (**Exhibit 1**).

TEXAS MANUFACTURING ACCOUNTED FOR 10 PERCENT OF U.S. MANUFACTURING GDP IN 2016.

BETWEEN 1997 AND 2016, MANUFACTURING REAL GSP INCREASED BY 94 PERCENT, COMPARED WITH AN 81 PERCENT GAIN ACROSS ALL TEXAS INDUSTRIES.

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

EXHIBIT 1

ESTIMATED MANUFACTURING EMPLOYMENT IN TEXAS, 2016

	TEXAS JOBS
FABRICATED METAL PRODUCTS	118,060
FOOD, BEVERAGE AND TOBACCO PRODUCTS	105,439
COMPUTERS AND ELECTRONIC PRODUCTS	90,450
MACHINERY	88,044
CHEMICAL PRODUCTS	78,910
AEROSPACE AND OTHER TRANSPORTATION EQUIPMENT	51,825
MOTOR VEHICLES, BODIES, TRAILERS AND PARTS	38,836
NONMETALLIC MINERAL PRODUCTS	37,820
PLASTICS AND RUBBER PRODUCTS	37,764
MISCELLANEOUS MANUFACTURING	30,490
PRINTING AND RELATED SUPPORT ACTIVITIES	25,239
FURNITURE AND RELATED PRODUCTS	23,142
WOOD PRODUCTS	23,038
PETROLEUM AND COAL PRODUCTS	22,967
PRIMARY METALS	20,065
ELECTRICAL EQUIPMENT, APPLIANCES AND COMPONENTS	18,749
PAPER PRODUCTS	17,207
TEXTILE PRODUCTS, APPAREL, LEATHER AND ALLIED PRODUCTS	17,119
MANUFACTURING TOTAL	845,164

Source: Emsi



But in Texas, the sector's economic contributions have soared, despite a slump induced by the Great Recession. From 1997 through 2016, the real gross state product (GSP) for Texas manufacturing rose by nearly 94 percent, exceeding the growth of the overall state economy and more than doubling the growth of U.S. manufacturing as a whole (**Exhibit 2**).

The Comptroller study examined 18 distinct manufacturing subsectors, all of them represented in Texas. In all, Texas contributes 10 percent of U.S. manufacturing's gross domestic product.

While total manufacturing employment has declined, the *quality* of the jobs it produces has improved dramatically. Technically skilled workers are always in demand, and their salaries reflect it. In 2016, Texas' manufacturing jobs paid an average of more than \$73,000, about 37 percent more than the statewide

average wage of about \$53,500 (**Exhibit 3**). Recent Texas Workforce Commission (TWC) estimates indicate Texas gained more than 36,000 additional manufacturing jobs in 2017.

And manufacturing spurs employment in a host of related fields, including various service providers, part suppliers, distributors, transportation companies and more.

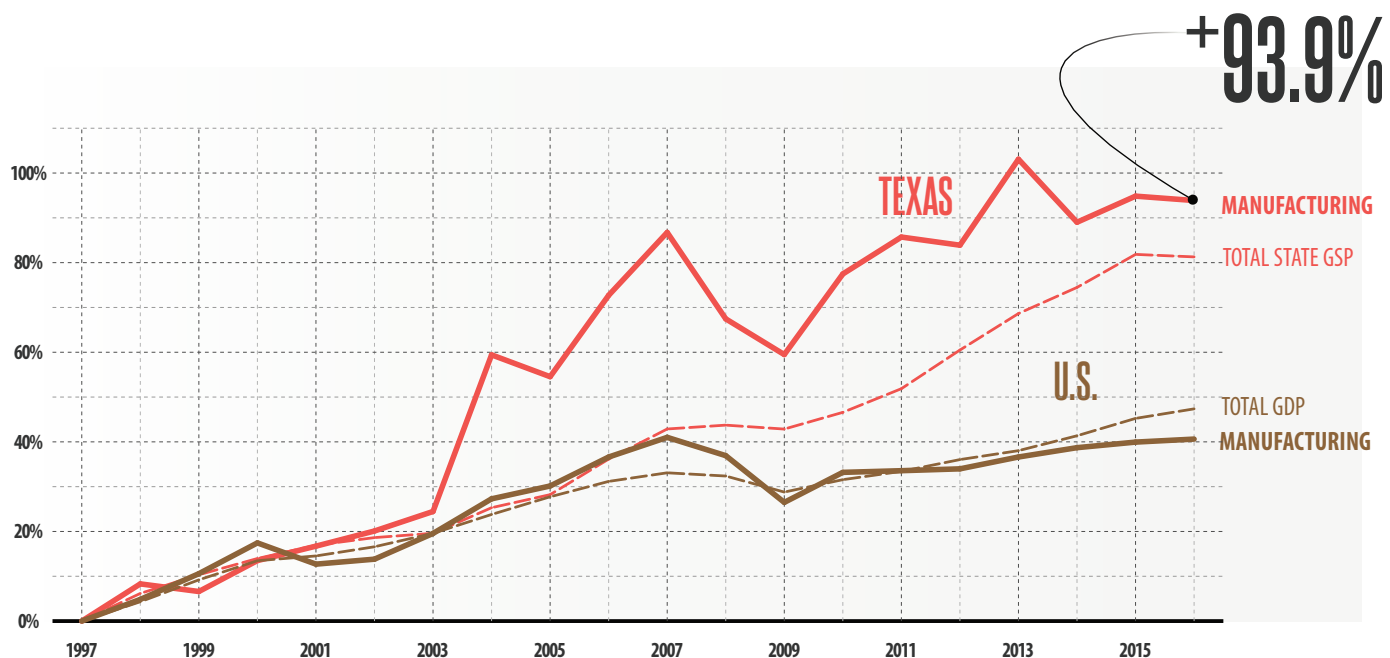
The Comptroller's office estimates that manufacturing supports about 2.2 million other Texas jobs. In all, then, more than a quarter of *all working Texans* depend directly or indirectly on the state's manufacturers for their paychecks.

MANUFACTURING CONTRIBUTED \$218 BILLION TO TEXAS' GSP IN 2016, AN AMOUNT LARGER THAN THE ENTIRE ECONOMY OF PORTUGAL.

Source: Texas Comptroller of Public Accounts

EXHIBIT 2

CUMULATIVE PERCENT CHANGE IN REAL ECONOMIC OUTPUT,* 1997 TO 2016, TEXAS VS. U.S.



Note: GDP = gross domestic product; GSP = gross state product. *GSP and GDP values inflation-adjusted to 2009 dollars. Sources: U.S. Bureau of Economic Analysis and Texas Comptroller of Public Accounts



EXHIBIT 3

ESTIMATED AVERAGE MANUFACTURING WAGES BY SUBSECTOR, 2016

	2016 AVERAGE WAGES
MANUFACTURING TOTAL AVERAGE	\$73,124
PETROLEUM AND COAL PRODUCTS	\$131,454
COMPUTERS AND ELECTRONIC PRODUCTS	\$121,210
CHEMICAL PRODUCTS	\$106,865
AEROSPACE AND OTHER TRANSPORTATION EQUIPMENT	\$97,832
MACHINERY	\$83,275
ELECTRICAL EQUIPMENT, APPLIANCES AND COMPONENTS	\$69,453
PAPER PRODUCTS	\$62,783
MOTOR VEHICLES, BODIES, TRAILERS AND PARTS	\$60,669
FABRICATED METAL PRODUCTS	\$58,662
PRIMARY METALS	\$57,800
NONMETALLIC MINERAL PRODUCTS	\$57,710
MISCELLANEOUS MANUFACTURING	\$52,953
PLASTICS AND RUBBER PRODUCTS	\$51,731
PRINTING AND RELATED SUPPORT ACTIVITIES	\$47,474
FOOD, BEVERAGE AND TOBACCO PRODUCTS	\$44,430
FURNITURE AND RELATED PRODUCTS	\$41,559
WOOD PRODUCTS	\$41,025
TEXTILE PRODUCTS, APPAREL, LEATHER AND ALLIED PRODUCTS	\$36,228

Source: Emsi

A HIGHLY DIVERSE SECTOR

Texas is, of course, the national leader in **petroleum and coal products manufacturing**, with about 30 percent of the nation's petrochemical refining capacity, and the largest manufacturer of **chemical products** as well. Together, these two subsectors employ more than 100,000 Texans and contribute nearly \$99.5 billion to Texas' GSP. They produce high-paying jobs, too; in 2016, petroleum manufacturing paid the highest average wages of any manufacturing subsector, at \$131,454, while the chemical products field paid an average of \$106,865.

But there's far more to manufacturing in Texas. The growth of the state's manufacturing economy is led largely by three subsectors — computer and electronic products, motor vehicles and parts and machinery manufacturing (**Exhibit 4**).

The latest Good for Texas tour reflected the extraordinary diversity of Texas' manufacturing scene. Some highlights:

Computer and electronic products manufacturing is the second-largest manufacturing subsector in Texas in terms of GSP, contributing about \$28.7 billion in 2015 (most recent available data). Its economic importance has grown explosively in recent years, with a real GSP increase of 585 percent since 1997.

This cornerstone of the Austin-Round Rock and Metroplex economies directly employed more than 90,000 Texans in 2016, while supporting another 218,000 Texas jobs. Those Texans earned average wages of \$121,210 in 2016, more than double the statewide average of \$53,500.

IN 2016, THE ELECTRICAL SUBSECTOR ACCOUNTED FOR JUST 2.2 PERCENT OF ALL TEXAS MANUFACTURING JOBS BUT CONTRIBUTED 5.6 PERCENT OF THE STATE'S MANUFACTURING EXPORTS.

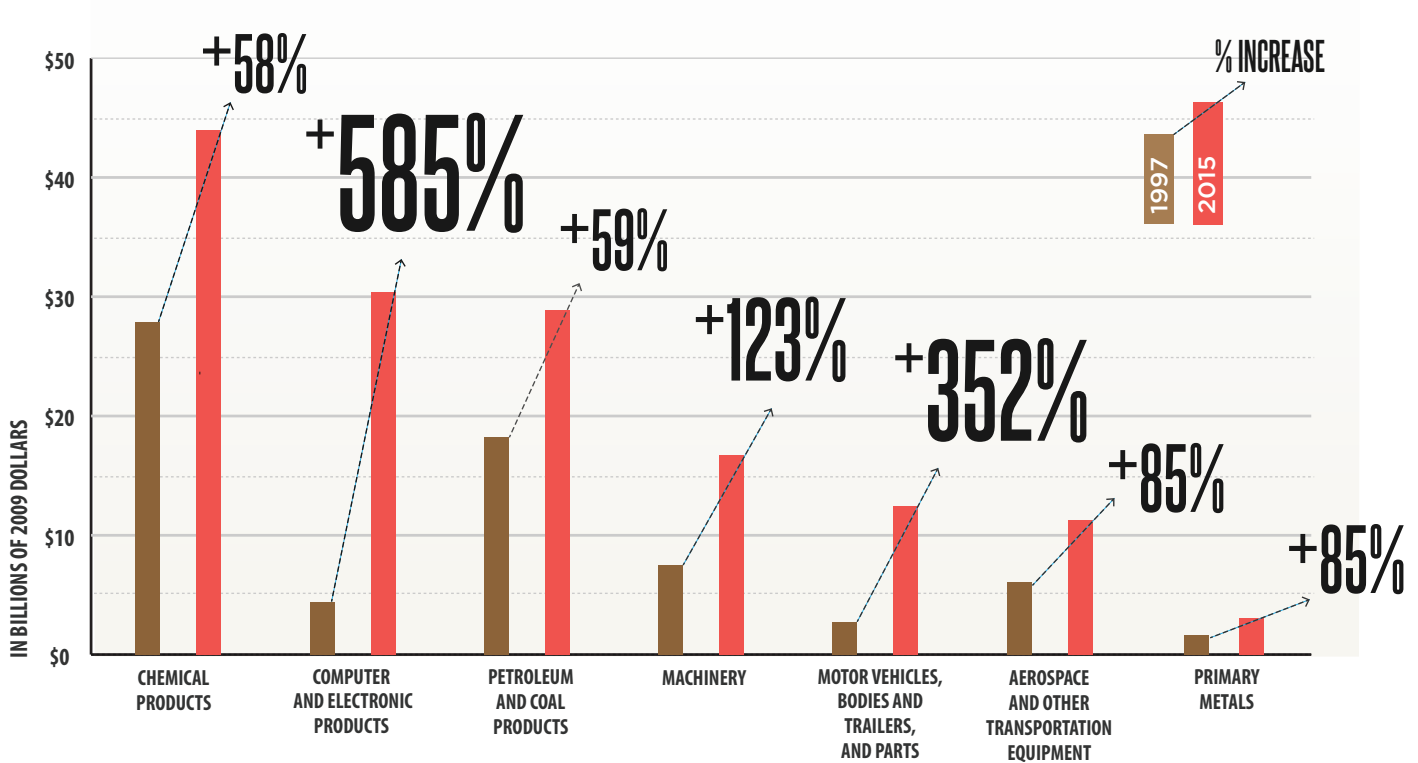
Sources: Emsi and U.S. Department of Commerce International Trade Administration

ADVANCED INDUSTRIES

The Brookings Institution defines "advanced" manufacturing industries as those with research and development spending per worker ranking in the top 20 percent of all industries and a share of workers with high levels of scientific and technical knowledge exceeding the national average.

EXHIBIT 4

TEXAS MANUFACTURING SUBSECTORS,
LARGEST PERCENT CHANGES IN REAL GDP,* 1997 TO 2015



*GSP values in this exhibit are inflation-adjusted to 2009 dollars and thus differ slightly from 2015 GSP figures cited in the text. Note: GSP data for subsectors available only through 2015. Sources: U.S. Bureau of Economic Analysis and Texas Comptroller of Public Accounts

And Texas electronics are used throughout the world. According to the International Trade Administration, computer and electronic products are Texas' most important exports, accounting for more than \$47 billion or more than 20 percent of all Texas exports in 2016. Mexico, our most important trading partner, received more than half of those, with a value of nearly \$26 billion.

Motor vehicle-related manufacturers include makers of cars, trucks, trailers and automotive parts.

These industries have expanded rapidly in Texas in recent years, boosting their contributions to real state GDP by 352 percent since 1997. They employed nearly 39,000 Texans in 2016, and supported about 67,000 other jobs in the state. In 2016, Texas exported \$13.7 billion in auto-related products.

Texas' auto-related manufacturers are high-tech and relatively high-paying; all are considered "advanced" industries under the Brookings Institution's definition. Texas wages for

positions in these industries averaged about \$60,700 in 2016. Both the Metroplex and the San Antonio area have significant motor vehicle operations, and Upper East Texas has particularly high concentrations of jobs in the manufacture of truck trailers, travel trailers and campers.

Machinery manufacturing includes makers of equipment used in agricultural, construction and mining activities, heating and cooling units, engines, turbines, transmissions and a variety of industrial machinery. It's one of the largest employers of manufacturing workers, providing about 88,000 Texas jobs in 2016 and supporting another 117,000 jobs indirectly. According to TWC, the subsector added another 8,800 net jobs last year.

Nearly half of Texas jobs in machinery manufacturing are in the Houston area, with significant activity in oil and gas field machinery, air and gas compressors and air conditioning and heating equipment.

THE TEXAS SHARE OF NATIONAL GDP IN AUTO-RELATED INDUSTRIES ROSE FROM 3.1 PERCENT IN 1997 TO 8.5 PERCENT IN 2015.

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

IN 2016, THE MACHINERY SUBSECTOR PROVIDED 42,500 DIRECT JOBS IN THE HOUSTON METROPOLITAN AREA, ALMOST HALF THE STATE TOTAL.

Sources: Emsi, Texas Comptroller of Public Accounts

Texas Manufacturing



Its real economic impact in Texas rose by 123 percent from 1997 to 2015, to \$19 billion. In the U.S. as a whole, by contrast, this subsector's real gross product rose by just 4 percent in the same period.

Primary metals manufacturing includes makers of basic metal products used extensively by the automotive, energy, machinery and transportation industries, such as castings, pipe, tubes, wires and springs. These businesses primarily serve local demand, and generally locate near their customers; typically, they also choose locations near sources for their raw materials to reduce the cost of transporting them. Raw materials represent the largest cost by far for these manufacturers. The cost of ores represents 70 to 80 percent of the final cost of steel, for instance.

Primary metals manufacturing employed more than 20,000 Texans in 2016, paying average wages of nearly \$58,000. It supports nearly 50,000 Texas jobs in other industries. Its inflation-adjusted contributions to the Texas economy have risen by 85 percent since 1997 and exceeded \$3.1 billion in 2015.

Several areas of the state have significant concentrations of primary metal employment. El Paso, for instance, produces copper products, while Brownwood is a center for iron and steel pipe manufacturing, and both Longview and the Killeen-Temple area are home to steel foundries.

Makers of **fabricated metal products** produce a huge variety of products ranging from cutlery to shipping containers. This relatively labor-intensive subsector employs more Texans than any other manufacturing category, with more than 118,000 jobs in 2016. Wages and salaries account for nearly two-thirds of the value added in this subsector, compared to 46 percent for all manufacturing activity.

Fabricated metal manufacturers are strongly concentrated in various areas of the state with specific industrial needs, such as makers of valves, boilers and heat exchangers that serve the petrochemical refining and chemical industries along the upper Gulf Coast. This subsector saw job losses during the oil price slump of 2015 but has recovered strongly; current TWC estimates show it adding another 14,000 jobs in 2017.

Aerospace and other transportation equipment manufacturing essentially includes all vehicles and transportation equipment other than cars, trucks and trailers — airplanes, spacecraft, boats and ships, railroad engines and cars and their component parts. Both aerospace and railroad rolling stock makers are considered to be advanced industries as defined by Brookings.

In Texas, the most important portion of this subsector, in terms of employment and economic impact, is aerospace manufacturing, a highly innovative industry that spends heavily on research and development investment and drives export activity. The state also has substantial concentrations of railroad-related manufacturing in East Texas and boat building and repair along the upper coast.

In 2015, this subsector contributed \$11.3 billion to Texas' economy, paid nearly 52,000 Texans average salaries of about \$98,000 and supported 125,000 jobs in other industries. Its exports rose by 94 percent between 2010 and 2016, reaching \$9.8 billion. **FN**

For more information about Texas manufacturing, visit comptroller.texas.gov/economy/economic-data/manufacturing.

MORE THAN 60 MILLION TONS OF STEEL ARE RECYCLED OR EXPORTED FOR RECYCLING EACH YEAR IN NORTH AMERICA ALONE.

Sources: American Iron and Steel Institute

THE U.S. AEROSPACE INDUSTRY CARRIED AN \$86.8 BILLION TRADE SURPLUS IN 2016.

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

FABRICATED METAL PRODUCTS MANUFACTURING IS THE LARGEST MANUFACTURING SUBSECTOR IN TEXAS, ACCOUNTING FOR 14 PERCENT OF TEXAS MANUFACTURING JOBS IN 2016.

Source: Texas Comptroller of Public Accounts

State Revenue Watch

This table presents data on net state revenue collections by source. It includes the most recent monthly collections, year-to-date (YTD) totals for the current fiscal year and a comparison of current YTD totals with those in the equivalent period of the previous fiscal year.

These numbers were current at press time. For the most current data as well as downloadable files, visit comptroller.texas.gov/transparency.

Note: Texas' fiscal year begins on Sept. 1 and ends on Aug. 31.

NET STATE REVENUE — All Funds Excluding Trust

(AMOUNTS IN THOUSANDS)

Monthly and Year-to-Date Collections: Percent Change From Previous Year

Tax Collections by Major Tax	FEBRUARY 2018	YEAR TO DATE: TOTAL	YEAR TO DATE: CHANGE FROM PREVIOUS YEAR
SALES TAX	2,612,239	15,629,638	9.75%
PERCENT CHANGE FROM FEBRUARY 2017	8.56%		
MOTOR VEHICLE SALES AND RENTAL TAXES	421,779	2,514,807	8.91%
PERCENT CHANGE FROM FEBRUARY 2017	13.01%		
MOTOR FUEL TAXES	296,769	1,818,080	2.68%
PERCENT CHANGE FROM FEBRUARY 2017	2.45%		
FRANCHISE TAX	5,857	-308,980	-27.97%
PERCENT CHANGE FROM FEBRUARY 2017	-111.74%		
OIL PRODUCTION TAX	307,123	1,474,338	47.96%
PERCENT CHANGE FROM FEBRUARY 2017	58.21%		
INSURANCE TAXES TAX	809,555	929,069	-0.07%
PERCENT CHANGE FROM FEBRUARY 2017	-1.84%		
CIGARETTE AND TOBACCO TAXES	100,988	599,980	-12.88%
PERCENT CHANGE FROM FEBRUARY 2017	0.72%		
NATURAL GAS PRODUCTION TAX	133,989	706,485	56.45%
PERCENT CHANGE FROM FEBRUARY 2017	60.27%		
ALCOHOLIC BEVERAGES TAXES	95,964	618,323	5.11%
PERCENT CHANGE FROM FEBRUARY 2017	4.85%		
HOTEL OCCUPANCY TAX	44,661	272,733	13.97%
PERCENT CHANGE FROM FEBRUARY 2017	15.47%		
UTILITY TAXES¹	8,719	200,594	-2.45%
PERCENT CHANGE FROM FEBRUARY 2017	24.92%		
OTHER TAXES²	17,266	118,374	80.73%
PERCENT CHANGE FROM FEBRUARY 2017	78.47%		
TOTAL TAX COLLECTIONS	\$4,854,910	\$24,573,443	11.41%
PERCENT CHANGE FROM FEBRUARY 2017	11.12%		
Revenue By Source	FEBRUARY 2018	YEAR TO DATE: TOTAL	YEAR TO DATE: CHANGE FROM PREVIOUS YEAR
TOTAL TAX COLLECTIONS	4,854,910	24,573,443	11.41%
PERCENT CHANGE FROM FEBRUARY 2017	11.12%		
FEDERAL INCOME	3,644,813	21,044,308	4.97%
PERCENT CHANGE FROM FEBRUARY 2017	0.58%		
LICENSES, FEES, FINES, AND PENALTIES	521,620	3,356,120	2.20%
PERCENT CHANGE FROM FEBRUARY 2017	0.35%		
STATE HEALTH SERVICE FEES AND REBATES³	759,723	4,510,372	11.84%
PERCENT CHANGE FROM FEBRUARY 2017	1.65%		
NET LOTTERY PROCEEDS⁴	176,119	1,081,856	17.63%
PERCENT CHANGE FROM FEBRUARY 2017	6.72%		
LAND INCOME	148,471	937,897	12.91%
PERCENT CHANGE FROM FEBRUARY 2017	-10.81%		
INTEREST AND INVESTMENT INCOME	104,350	702,227	84.10%
PERCENT CHANGE FROM FEBRUARY 2017	9.00%		
SETTLEMENTS OF CLAIMS	4,586	483,248	0.64%
PERCENT CHANGE FROM FEBRUARY 2017	-61.62%		
ESCHEATED ESTATES	3,107	79,833	-30.06%
PERCENT CHANGE FROM FEBRUARY 2017	-70.53%		
SALES OF GOODS AND SERVICES	20,822	138,944	-4.91%
PERCENT CHANGE FROM FEBRUARY 2017	-15.73%		
OTHER REVENUE	380,059	919,886	3.10%
PERCENT CHANGE FROM FEBRUARY 2017	18.26%		
TOTAL NET REVENUE	\$10,618,580	\$57,828,134	8.73%
PERCENT CHANGE FROM FEBRUARY 2017	5.60%		

¹ Includes public utility gross receipts assessment, gas, electric and water utility tax and gas utility pipeline tax.

² Includes taxes not separately listed, such as taxes on oil well services, coin-operated amusement machines, cement and combative sports admissions as well as refunds to employers of certain welfare recipients.

³ Includes various health-related service fees and rebates that were previously in "license, fees, fines and penalties" or in other non-tax revenue categories.

⁴ Gross sales less retailer commission and the smaller prizes paid by retailers.

Notes: Totals may not add due to rounding. Excludes local funds and deposits by certain semi-independent agencies.

Includes certain state revenues that are deposited in the State Treasury but not appropriated.



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