



Texas Manufacturing Outlook Survey

May 28, 2019

Texas Manufacturing Expansion Continues but Pace Slows

What's New This Month

For this month's survey, Texas business executives were asked supplemental questions on the labor market, wages and prices. Results for these questions from the Texas Manufacturing Outlook Survey, Texas Service Sector Outlook Survey and Texas Retail Outlook Survey have been released together.

Texas factory activity continued to expand in May, albeit at a slower pace, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, fell six points to 6.3, indicating output growth decelerated from April.

Most other measures of manufacturing activity also suggested slower expansion in May. The survey's demand indicators fell but remained positive: The new orders index slipped seven points to 2.4, and the growth rate of orders index moved down from 5.2 to 1.1. The capacity utilization index fell to 7.7 from a seven-month high of 15.6 in April. Meanwhile, the shipments index edged up to 7.6.

Perceptions of broader business conditions exhibited some weakness in May. The general business activity index turned negative and reached a year-to-date low of -5.3. The company outlook index dipped into negative territory for the first time this year, coming in at -1.7. The index measuring uncertainty regarding companies' outlooks jumped nine points to 16.1, its highest reading since last September. More than a quarter of firms said uncertainty increased this month.

Labor market measures suggested stronger employment growth and longer workweeks in May. The employment index rebounded from its April dip, rising seven points to 11.6. Twenty-one percent of firms noted net hiring, while 9 percent noted net layoffs. The hours worked index remained positive but inched down to 6.4.

Slight upward pressure on input costs continued in May, while pressure on selling prices abated. The raw materials prices index held steady at 7.4, a three-year low. Meanwhile, the finished goods prices index retreated from 6.0 to 0.7, with the near-zero May reading suggesting virtually no growth in selling prices. The wages and benefits index remained elevated and largely unchanged at 27.6.

Expectations regarding future business conditions remained positive in May, although the indexes moved down from April readings. The index of future general business activity fell nine points to 9.1. Similarly, the index of future company outlook fell nine points to 11.5. Most other indexes of future manufacturing activity declined this month but stayed in positive territory.

Next release: Monday, June 24

Data were collected May 14–22, and 114 Texas manufacturers responded to the survey. The Dallas Fed conducts the Texas Manufacturing Outlook Survey monthly to obtain a timely assessment of the state's factory activity. Firms are asked whether output, employment, orders, prices and other indicators increased, decreased or remained unchanged over the previous month.

Survey responses are used to calculate an index for each indicator. Each index is calculated by subtracting the percentage of respondents reporting a decrease from the percentage reporting an increase. When the share of firms reporting an increase exceeds the share reporting a decrease, the index will be greater than zero, suggesting the indicator has increased over the prior month. If the share of firms reporting a decrease exceeds the share reporting an increase, the index will be below zero, suggesting the indicator has decreased over the prior month. An index will be zero when the number of firms reporting an increase is equal to the number of firms reporting a decrease. Data have been seasonally adjusted as necessary.

Results Summary

Business Indicators Relating to Facilities and Products in Texas Current (versus previous month)

Indicator	May Index	Apr Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	6.3	12.4	-6.1	Increasing	35	22.8	60.7	16.5
Capacity Utilization	7.7	15.6	-7.9	Increasing	35	22.0	63.6	14.3
New Orders	2.4	9.8	-7.4	Increasing	31	23.6	55.2	21.2
Growth Rate of Orders	1.1	5.2	-4.1	Increasing	2	19.6	61.9	18.5
Unfilled Orders	-1.6	-0.4	-1.2	Decreasing	6	16.3	65.8	17.9
Shipments	7.6	6.3	+1.3	Increasing	30	25.2	57.2	17.6
Delivery Time	6.5	1.6	+4.9	Increasing	3	14.4	77.7	7.9
Finished Goods Inventories	-6.2	-5.7	-0.5	Decreasing	2	15.9	61.9	22.1
Prices Paid for Raw Materials	7.4	7.9	-0.5	Increasing	38	16.9	73.6	9.5
Prices Received for Finished Goods	0.7	6.0	-5.3	Increasing	34	13.2	74.3	12.5
Wages and Benefits	27.6	28.2	-0.6	Increasing	118	29.3	69.0	1.7
Employment	11.6	4.6	+7.0	Increasing	29	20.9	69.8	9.3
Hours Worked	6.4	8.1	-1.7	Increasing	31	19.9	66.6	13.5
Capital Expenditures	18.3	18.9	-0.6	Increasing	33	24.8	68.7	6.5

General Business Conditions Current (versus previous month)

Indicator	May Index	Apr Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Improved	% Reporting No Change	% Reporting Worsened
Company Outlook	-1.7	6.3	-8.0	Worsening	1	17.1	64.1	18.8
General Business Activity	-5.3	2.0	-7.3	Worsening	1	14.0	66.7	19.3

Indicator	May Index	Apr Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Outlook Uncertainty†	16.1	6.8	+9.3	Increasing	12	27.7	60.7	11.6

Business Indicators Relating to Facilities and Products in Texas
Future (six months ahead)

Indicator	May Index	Apr Index	Change	Indicator Direction	Trend* (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	36.5	41.3	-4.8	Increasing	123	48.4	39.6	11.9
Capacity Utilization	34.8	40.6	-5.8	Increasing	123	44.3	46.2	9.5
New Orders	35.2	35.9	-0.7	Increasing	123	47.0	41.2	11.8
Growth Rate of Orders	25.3	27.5	-2.2	Increasing	123	36.4	52.5	11.1
Unfilled Orders	2.0	10.0	-8.0	Increasing	44	14.1	73.8	12.1
Shipments	32.2	35.5	-3.3	Increasing	123	46.6	38.9	14.4
Delivery Time	1.2	1.8	-0.6	Increasing	30	13.8	73.6	12.6
Finished Goods Inventories	-11.5	-4.1	-7.4	Decreasing	2	11.4	65.7	22.9
Prices Paid for Raw Materials	28.9	14.0	+14.9	Increasing	122	35.6	57.7	6.7
Prices Received for Finished Goods	6.7	8.0	-1.3	Increasing	40	20.0	66.7	13.3
Wages and Benefits	32.8	38.8	-6.0	Increasing	180	38.7	55.4	5.9
Employment	28.9	33.4	-4.5	Increasing	78	37.9	53.1	9.0
Hours Worked	2.8	9.0	-6.2	Increasing	36	12.7	77.4	9.9
Capital Expenditures	22.8	26.2	-3.4	Increasing	114	30.4	62.0	7.6

General Business Conditions
Future (six months ahead)

Indicator	May Index	Apr Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Worsened
Company Outlook	11.5	20.9	-9.4	Improving	40	27.8	55.9	16.3
General Business Activity	9.1	18.4	-9.3	Improving	36	23.6	62.0	14.5

*Indicator direction refers to this month's index. If index is positive (negative), indicator is increasing (decreasing) or improving (worsening). If zero, indicator is unchanged.

**Number of months moving in current direction.

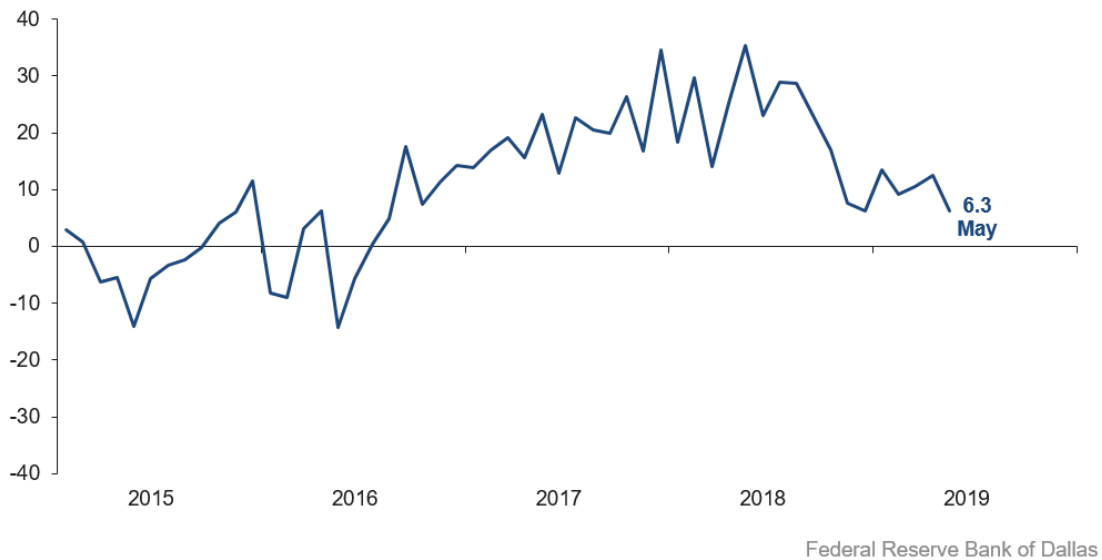
†Added to survey in January 2019.

Data have been seasonally adjusted as necessary, with the exception of the outlook uncertainty index, which does not yet have a sufficiently long time series to test for seasonality.

Production Index

Texas Manufacturing Outlook Survey Production Index

Index, seasonally adjusted



Comments from Survey Respondents

These comments are from respondents' completed surveys and have been edited for publication.

Chemical Manufacturing

- The decline in May figures versus April were a result of a fire at one of our largest customers' facilities, which delayed several of the projects on which we were working with them. Uncertainty has increased due to the tariff war.

Primary Metal Manufacturing

- The possible increases in tariffs related to China will negatively impact our agriculture customers and put further pressure on a segment that is already experiencing cyclical lows.

Fabricated Metal Product Manufacturing

- There is a definite slowing in steel fabrication.
- Competition from Mexico from non-tariffed steel fabricators is very troublesome and we are losing market share.
- We are at maximum capacity and turning away business.

Nonmetallic Mineral Product Manufacturing

- There are many unknowns due to tariffs.
- Extensive rains have delayed shipments over the last three months to customers in the Dallas-Fort Worth area. This is causing a backup of finished goods inventory at our plant.

Machinery Manufacturing

- There has been a sharp decline in orders, and pricing has taken a huge dive as well. Competition has pushed pricing to near-guaranteed losses.
- With all the tariff fees pouring into the U.S. Treasury, when should we expect a tax break?
- We are seeing steady business that should begin to grow again if a China trade deal is reached.

- Our business is improving consistently even though we have increased some prices. Fortune 500 companies are looking for stable small companies to depend on for consistent support and service. And that is what we have focused on over the past two years to fortify our business growth. Now we need to find and develop new middle-tier employees to fill positions to support our customers. This is the toughest problem we have ever faced.
- China tariffs were already causing significant price increases, and the latest escalations will raise our costs even more—probably our prices, too—and make us less competitive on the world stage where we export 70 percent of what we produce.

Computer and Electronic Product Manufacturing

- Trade talks with China could have a longer-term impact but have no impact at this point.
- Growth is robust and would be even stronger without current supply chain and labor constraints, but we aren't complaining.
- With our government's intention to resolve issues with Iran and China and also introducing the "Deal of the Century," it adds warranted risk to our future business that we can't ignore.
- There is significant uncertainty.

Electrical Equipment, Appliance and Component Manufacturing

- We make electric wire for the construction and remodeling industry. We probably lag the economy because big construction projects take time to imagine, design, permit, finance, bid out, etc., before the first shovel breaks ground. Then it can take a year or two more to build it. We see very strong demand in the field right now. Contractors say they are booked a year out. Somebody mistakenly told people to all go to college 40 years ago, and now we are desperately short of tradesmen.

Printing and Related Support Activities

- We continue to be much slower than normal, which is very frustrating. Now we have uncertainties around tariff battles looming, which does not bode well for our business. Capital spending is up only because we found a good deal on a piece of equipment that allows us to add to our capabilities at a cheap price, so we bought it at an auction for pennies of what it sold for new. We are now 30 days in on a price increase—we will see if it can hold. With costs all around us increasing, we have no choice but to raise prices.

Textile Product Mills

- We are finding larger orders, and larger customers require us to outsource to others in the Dallas–Fort Worth area to help us keep up. The outsourcing model is the key to our exponential growth.

Apparel Manufacturing

- Government spending, specifically Department of Defense, continues to be strong in the near term and foreseeable future.

Paper Manufacturing

- Slowness continues.

Transportation Equipment Manufacturing

- We are changing our business model to increase volume, with pricing based on wholesale margins versus retail margins. This change is to be phased in over six months.
- Our primary customer is the U.S. government. We continue to be concerned regarding the volatility of the decision-making processes at the higher levels.

Miscellaneous Manufacturing

- The additional import tariffs really hurt our business, but we fully support getting a fair trade deal with China.

Questions regarding the Texas Manufacturing Outlook Survey can be addressed to Emily Kerr at emily.kerr@dal.frb.org.

Texas **Business** Outlook Surveys

Special Questions

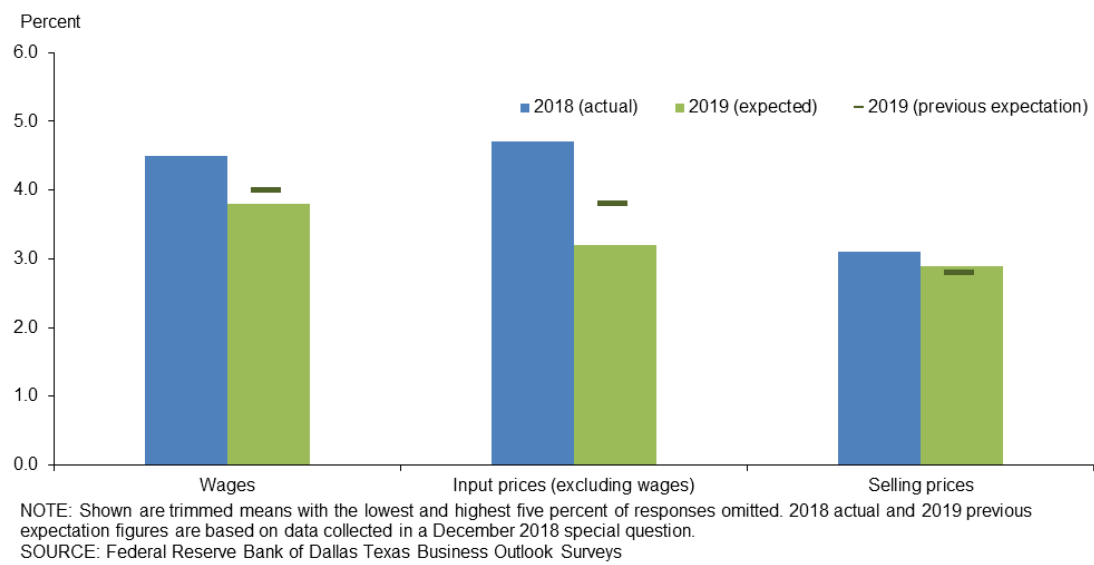
May 28, 2019

Results below include responses from participants of all three surveys: Texas Manufacturing Outlook Survey, Texas Service Sector Outlook Survey and Texas Retail Outlook Survey.

Texas Business Outlook Surveys

Data were collected May 14–22, and 372 Texas business executives responded to the surveys.
See data files with a full history of results.

What annual percent change in wages, input prices and selling prices did your firm experience in 2018 and what do you expect for 2019?



	May '19 (percent)
Wages	3.8
Input prices (excluding wages)	3.2
Selling prices	2.9

NOTES: 296 responses. Shown are trimmed means with the lowest and highest 5 percent of responses omitted.

What, if anything, are you doing to recruit and retain employees? Please check all that apply.

	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Increasing wages and/or benefits	61.6	63.4	66.6	62.7
Increasing wages			61.9	58.3
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	52.6	59.6	60.7	49.5
Offering additional training	27.8	36.6	35.9	32.9
Increasing variable pay, including bonuses	31.5	26.8	29.1	32.3
Improving working conditions	27.2	25.9	27.6	30.1
Increasing benefits			20.1	17.9
Reducing education and other requirements for new hires	8.3	12.9	12.1	8.5

NOTES: 319 responses. Starting in November 2018, "increasing wages" appears as a separate answer choice from 'increasing benefits.' We will continue to include the share of firms reporting increasing wages and/or benefits but as a calculation based on responses to "increasing wages" and 'increasing benefits.'

Are you currently trying to hire?

	May '19 (percent)
Yes	71.4
No	28.6

NOTE: 370 responses.

Are you having problems finding qualified workers when hiring?*

	May '19 (percent)
Yes	83.0
No	17.0

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 259 responses.

If you are you having problems finding qualified workers, what are the main reasons why? Please select all that apply.*

	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Lack of available applicants/no applicants	62.6	72.8	70.6	62.9
Lack of technical competencies (hard skills)	50.2	47.0	43.3	53.1
Looking for more pay than is offered	40.1	41.4	45.0	46.9
Lack of experience	37.0	37.1	40.7	39.4
Lack of workplace competencies (soft skills)	39.6	34.5	39.0	33.8
Inability to pass drug test and/or background check	30.0	31.0	32.5	32.9

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 213 responses.

At your firm, what is the average hourly wage paid for each category?

	May '19 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	\$13.00/hour
Mid-skill positions (typically require some college or technical training)	\$20.00/hour
High-skill positions (typically require college degree or higher)	\$34.25/hour

NOTES: 249 responses. Shown are the median values.

How has your firm's operating margin (defined as earnings before interest and taxes [EBIT] as a share of total revenue) changed over the past six months?

	Dec. '18 (percent)	May '19 (percent)
Increased substantially	7.2	6.2
Increased slightly	23.1	22.9
Remained the same	24.4	29.1
Decreased slightly	34.2	33.6
Decreased substantially	11.1	8.2

NOTE: 354 responses.

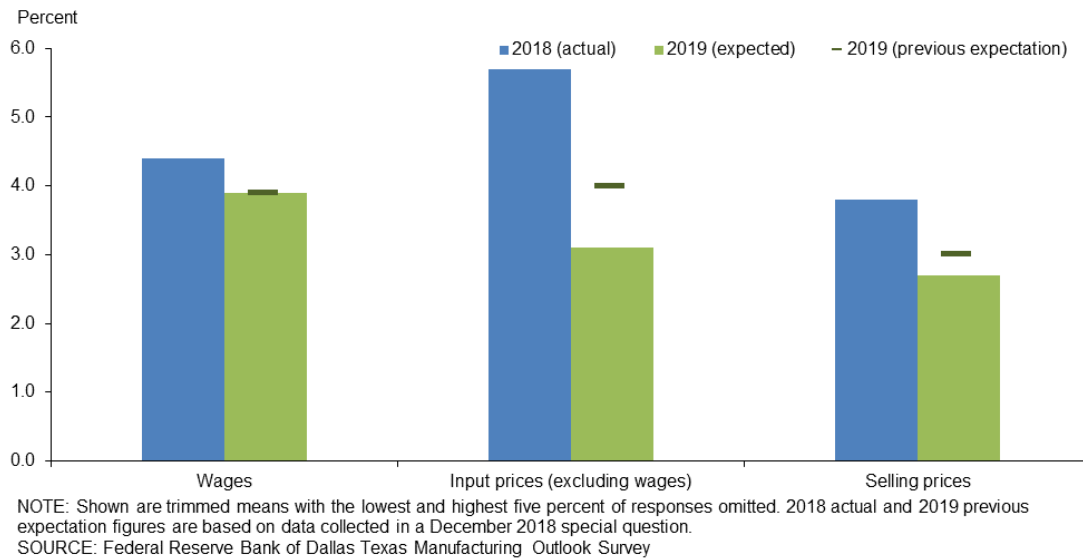
Survey respondents were given the opportunity to provide comments. These comments can be found on the individual survey Special Questions results pages

Texas Manufacturing Outlook Survey

Data were collected May 14–22, and 110 Texas manufacturers responded to the surveys.

See data files with a full history of results.

What annual percent change in wages, input prices and selling prices did your firm experience in 2018 and what do you expect for 2019?



	May '19 (percent)
Wages	3.9
Input prices (excluding wages)	3.1
Selling prices	2.7

NOTES: 97 responses. Shown are trimmed means with the lowest and highest 5 percent of responses omitted.

What, if anything, are you doing to recruit and retain employees? Please check all that apply.

	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Increasing wages and/or benefits	55.8	64.3	68.4	67.0
Increasing wages			63.3	59.6
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	53.5	67.3	61.2	54.3
Increasing variable pay, including bonuses	26.7	21.4	24.5	34.0
Offering additional training	30.2	38.8	32.7	28.7
Improving working conditions	24.4	24.5	30.6	24.5
Increasing benefits			16.3	16.0
Reducing education and other requirements for new hires	14.0	19.4	16.3	11.7

NOTES: 94 responses. Starting in November 2018, "increasing wages" appears as a separate answer choice from 'increasing benefits.' We will continue to include the share of firms reporting increasing wages and/or benefits but as a calculation based on responses to "increasing wages" and 'increasing benefits.'

Are you currently trying to hire?

	May '19 (percent)
Yes	72.7
No	27.3

NOTE: 110 responses.

Are you having problems finding qualified workers when hiring?*

	May '19 (percent)
Yes	79.5
No	20.5

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 78 responses.

If you are you having problems finding qualified workers, what are the main reasons why? Please select all that apply.*

	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Lack of technical competencies (hard skills)	60.3	64.9	57.5	68.9
Lack of available applicants/no applicants	72.1	70.3	69.9	60.7
Looking for more pay than is offered	38.2	47.3	43.8	44.3
Lack of experience	44.1	35.1	38.4	42.6
Lack of workplace competencies (soft skills)	44.1	36.5	45.2	42.6
Inability to pass drug test and/or background check	41.2	35.1	42.5	42.6

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 61 responses.

At your firm, what is the average hourly wage paid for each category?

	May '19 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	\$14.00/hour
Mid-skill positions (typically require some college or technical training)	\$20.00/hour
High-skill positions (typically require college degree or higher)	\$35.00/hour

NOTES: 89 responses. Shown are the median values.

How has your firm's operating margin (defined as earnings before interest and taxes [EBIT] as a share of total revenue) changed over the past six months?

	Dec. '18 (percent)	May '19 (percent)
Increased substantially	11.1	11.4
Increased slightly	24.2	23.8
Remained the same	17.2	22.9
Decreased slightly	35.4	33.3
Decreased substantially	12.1	8.6

NOTE: 105 responses.

Special Questions Comments

These comments have been edited for publication.

Food Manufacturing

- We need a sensible immigration program to support manufacturing growth in the U.S. We are turning down growth opportunities because of lack of labor.

Apparel Manufacturing

- Efficiencies and increased volumes are driving margin increases.

Chemical Manufacturing

- There is a heavy focus on robotics and automation to address efficiencies and employment shortages.

Nonmetallic Mineral Product Manufacturing

- Input pricing changes depend upon tariff amounts.

Primary Metal Manufacturing

- Business is still very good. While we expect a slowdown in the second half of this year, the slowdown should be moderate.

Machinery Manufacturing

- Forecasting is impossible, and skilled labor is nonexistent.
- Tariffs are impacting profit and loss (P&L), and they will be increasing due to the 10 to 25 percent increase in May.

Electrical Equipment, Appliance and Component Manufacturing

- Wages are up, and in the Dallas area if you don't have a job, it's because you don't want one. (Or you can't pass the drug test.)

Transportation Equipment Manufacturing

- The motor home industry has been in a slump for six months.

Texas Service Sector Outlook Survey

Data were collected May 14–22, and 262 Texas business executives responded to the surveys.

See data files with a full history of results.

What annual percent change in wages, input prices and selling prices did your firm experience in 2018 and what do you expect for 2019?



NOTE: Shown are trimmed means with the lowest and highest five percent of responses omitted. 2018 actual and 2019 previous expectation figures are based on data collected in a December 2018 special question.

SOURCE: Federal Reserve Bank of Dallas Texas Service Sector Outlook Survey

	May '19 (percent)
Wages	3.9
Input prices (excluding wages)	3.3
Selling prices	2.9

NOTES: 199 responses. Shown are trimmed means with the lowest and highest 5 percent of responses omitted.

What, if anything, are you doing to recruit and retain employees? Please check all that apply.

	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Increasing wages and/or benefits	63.9	63.0	65.8	60.9
Increasing wages			61.3	57.8
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	52.3	56.2	60.4	47.6
Offering additional training	26.9	35.6	37.3	34.7
Improving working conditions	28.2	26.5	26.2	32.4
Increasing variable pay, including bonuses	33.3	29.2	31.1	31.6
Increasing benefits			21.8	18.7
Reducing education and other requirements for new hires	6.0	10.0	10.2	7.1

NOTES: 225 responses. Starting in November 2018, "increasing wages" appears as a separate answer choice from "increasing benefits." We will continue to include the share of firms reporting increasing wages and/or benefits but as a calculation based on responses to "increasing wages" and "increasing benefits."

Are you currently trying to hire?

	May '19 (percent)
Yes	70.8
No	29.2

NOTE: 260 responses.

Are you having problems finding qualified workers when hiring?*

	May '19 (percent)
Yes	84.5
No	15.5

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 181 responses.

If you are you having problems finding qualified workers, what are the main reasons why? Please select all that apply.*

	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Lack of available applicants/no applicants	58.5	74.1	70.9	63.8
Looking for more pay than is offered	40.9	38.6	45.6	48.0
Lack of technical competencies (hard skills)	45.9	38.6	36.7	46.7
Lack of experience	34.0	38.0	41.8	38.2
Lack of workplace competencies (soft skills)	37.7	33.5	36.1	30.3
Inability to pass drug test and/or background check	25.2	29.1	27.8	28.9

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 152 responses.

At your firm, what is the average hourly wage paid for each category?

	May '19 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	\$12.50/hour
Mid-skill positions (typically require some college or technical training)	\$20.00/hour
High-skill positions (typically require college degree or higher)	\$31.00/hour

NOTES: 161 responses. Shown are the median values.

How has your firm's operating margin (defined as earnings before interest and taxes [EBIT] as a share of total revenue) changed over the past six months?

	Dec. '18 (percent)	May '19 (percent)
Increased substantially	5.3	4.0
Increased slightly	22.6	22.5
Remained the same	27.9	31.7
Decreased slightly	33.7	33.7
Decreased substantially	10.6	8.0

NOTE: 249 responses.

Special Questions Comments

These comments have been edited for publication.

Truck Transportation

- Work has slowed down below what it takes to break even! We can't find anyone who wants to work as a diesel mechanic, even at \$30 to \$40 an hour.

Broadcasting (Except Internet)

- Our anticipated increase in wages is most impacted by our annual pay adjustments we do on July 1 of each year (so we consider that a seasonal adjustment). At this moment, we anticipate increasing all wages by 3 percent on July 1, 2019. On July 1, 2018, we increased wages by 5 percent and moved our "minimum wage" from \$10 an hour to \$11 an hour. We plan on holding our "minimum wage" at \$11 for 2019.

Credit Intermediation and Related Activities

- Wages are increasing without increases in selling prices. We are focused on reductions in marketing and charitable giving budgets to try to maintain profit margins.

Securities, Commodity Contracts, and Other Financial Investments and Related Activities

- Our margin has increased largely due to understaffing. The understaffing is not due to a lack of applicants. To the contrary, we have more applicants than ever before. Finding qualified applicants who can write a coherent sentence and pass evaluations remains very difficult.
- Our operating margin has decreased due to investment in future growth.

Professional, Scientific and Technical Services

- There is a lot of uncertainty on the economic front with USMCA [U.S.–Mexico–Canada trade agreement], Chinese tariffs, labor availability, etc.
- The only reason the operating margin has increased is because my firm has had some work (consulting).

Administrative and Support Services

- We are a staffing company and are finding the availability of skilled personnel to be limited.
- We are government contractors—our contracts are a fixed price and based on government wage determination.

Educational Services

- Labor costs are rising, and it is harder to raise contracted prices when our purchase orders are annual.

Nursing and Residential Care Facilities

- Margins dropped drastically with the increased cost of labor due to overtime. We have remained 6 to 10 percent short of the number of employees required to staff our required positions with an 85 percent turnover rate amongst 67 percent of our entire staff.

Food Services and Drinking Places

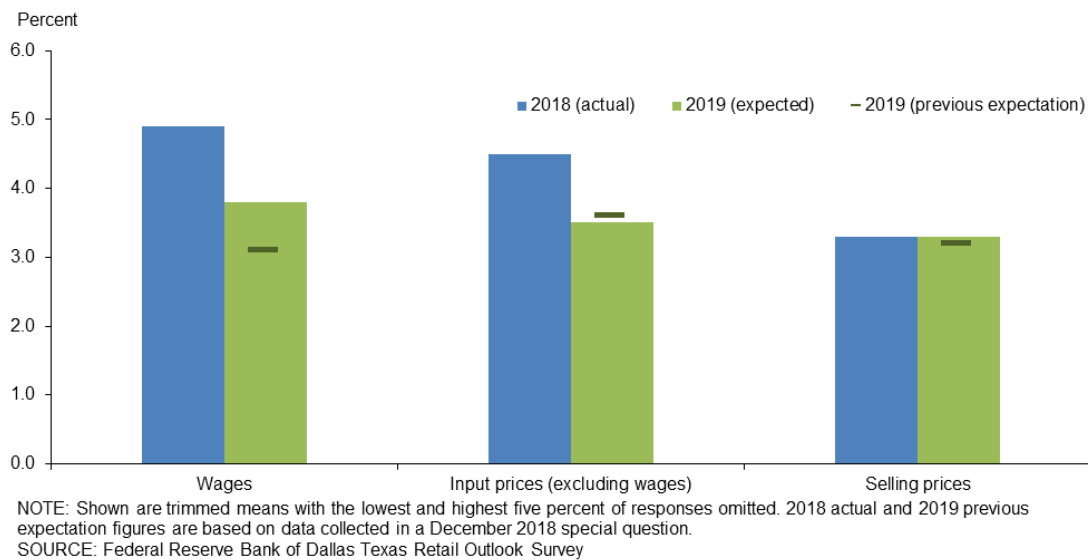
- Small same-store sales gains have cut commission checks to managers.

Texas Retail Outlook Survey

Data were collected May 14–22, and 50 Texas retailers responded to the surveys.

See data files with a full history of results.

What annual percent change in wages, input prices and selling prices did your firm experience in 2018 and what do you expect for 2019?



	May '19 (percent)
Wages	3.8
Input prices (excluding wages)	3.5
Selling prices	3.3

NOTES: 35 responses. Shown are trimmed means with the lowest and highest 5 percent of responses omitted.

What, if anything, are you doing to recruit and retain employees? Please check all that apply.

	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Increasing wages and/or benefits	56.8	63.0	58.7	51.1
Increasing wages			56.5	46.7
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	65.9	54.3	58.7	44.4
Increasing variable pay, including bonuses	36.4	37.0	30.4	35.6
Offering additional training	18.2	30.4	26.1	33.3
Improving working conditions	27.3	32.6	26.1	22.2
Increasing benefits			15.2	20.0
Reducing education and other requirements for new hires	6.8	10.9	10.9	8.9

NOTES: 45 responses. Starting in November 2018, "increasing wages" appears as a separate answer choice from 'increasing benefits.' We will continue to include the share of firms reporting increasing wages and/or benefits but as a calculation based on responses to "increasing wages" and 'increasing benefits.'

Are you currently trying to hire?

	May '19 (percent)
Yes	70.0
No	30.0

NOTE: 50 responses.

Are you having problems finding qualified workers when hiring?*

	May '19 (percent)
Yes	88.6
No	11.4

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 35 responses.

If you are you having problems finding qualified workers, what are the main reasons why? Please select all that apply.*

	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)	May '19 (percent)
Lack of technical competencies (hard skills)	48.6	52.6	45.5	64.5
Lack of available applicants/no applicants	56.8	78.9	66.7	61.3
Inability to pass drug test and/or background check	37.8	42.1	45.5	54.8
Lack of workplace competencies (soft skills)	40.5	36.8	39.4	35.5
Lack of experience	35.1	34.2	33.3	29.0
Looking for more pay than is offered	24.3	23.7	36.4	22.6

*This question posed only to respondents who answered "yes" to the previous question.

NOTE: 31 responses.

At your firm, what is the average hourly wage paid for each category?

	May '19 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	\$12.00/hour
Mid-skill positions (typically require some college or technical training)	\$20.00/hour
High-skill positions (typically require college degree or higher)	\$29.50/hour

NOTES: 35 responses. Shown are the median values.

How has your firm's operating margin (defined as earnings before interest and taxes [EBIT] as a share of total revenue) changed over the past six months?

	Dec. '18 (percent)	May '19 (percent)
Increased substantially	2.6	2.3
Increased slightly	10.3	15.9
Remained the same	23.1	27.3
Decreased slightly	41.0	43.2
Decreased substantially	23.1	11.4

NOTE: 44 responses.

Special Questions Comments

These comments have been edited for publication.

Merchant Wholesalers, Durable Goods

- The big uncertainty is related to the recently implemented tariffs.

Merchant Wholesalers, Nondurable Goods

- Input prices will depend on tariffs.

Motor Vehicle and Parts Dealers

- Prices are entirely dependent on the automobile manufacturers. We have no control over them.
- Our company is focused on offsetting wage and other expense increases by trying to increase margins by small amounts—1 to 2 percent.

Clothing and Clothing Accessories Stores

- Input prices will be determined by the outcome of the tariff issues. Selling prices are very difficult to increase for an apparel retailer.

Questions regarding the Texas Business Outlook Surveys can be addressed to Emily Kerr at emily.kerr@dal.frb.org,