Texas Manufacturing Outlook Survey

November 26, 2018

Texas Manufacturing Expansion Continues to Moderate

What's New This Month

For this month's survey, Texas business executives were asked supplemental questions on the labor market. 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 November, albeit at a markedly slower pace, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, remained positive but fell nine points to 8.4, indicating output growth continued to abate.

Other indexes of manufacturing activity also suggested notably slower expansion in November. The survey's demand indicators—the new orders and growth rate of new orders indexes—declined to 9.7 and 4.8, respectively, representing their lowest readings in 20 months. The capacity utilization index fell six points to 9.4, and the shipments index fell nine points to 7.7, both at their lowest levels in at least 20 months.

Perceptions of broader business conditions remained positive overall but were less optimistic than in October. The general business activity and company outlook indexes posted double-digit declines, coming in at 17.6 and 13.7, respectively. These readings are lower than what has been seen over the past year but still well above long-term averages. The index measuring uncertainty regarding companies' outlooks rose five points to 12.3, indicating uncertainty was more widespread this month.

Labor market measures suggested continued but slower employment growth and longer workweeks in November. The employment index retreated eight points to 15.9, a level well above average. Twenty-three percent of firms noted net hiring, compared with 7 percent noting net layoffs. The hours worked index edged down to 4.9.

Price and wage increases eased in November. The raw materials prices index posted a 21-point decline to 33.7 after reaching a seven-year high last month. The finished goods prices index also fell, down 10 points to 7.5. However, both indexes remained well above average. Compensation costs also continued to rise at a faster clip than normal, although the pace slowed from October, with the wages and benefits index moving down eight points to 24.9.

Expectations regarding future business conditions remained positive in November, although they were less optimistic than in October. The indexes of future general business activity and future company outlook remained well above average but fell to 25.7 and 31.4, respectively. Other indexes of future manufacturing activity showed mixed movements this month but remained solidly in positive territory.

Next release: Monday, December 31

Data were collected Nov. 12–20, 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	Nov Index	Oct Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	8.4	17.6	–9.2	Increasing	29	24.9	58.6	16.5
Capacity Utilization	9.4	15.4	–6.0	Increasing	29	23.7	62.0	14.3
New Orders	9.7	18.9	–9.2	Increasing	25	29.6	50.5	19.9
Growth Rate of Orders	4.8	11.0	–6.2	Increasing	23	20.7	63.4	15.9
Unfilled Orders	4.5	5.9	–1.4	Increasing	20	16.3	71.9	11.8
Shipments	7.7	16.6	–8.9	Increasing	24	29.4	49.0	21.7
Delivery Time	1.8	7.5	–5.7	Increasing	17	10.0	81.8	8.2
Finished Goods Inventories	2.6	2.6	0.0	Increasing	4	15.9	70.8	13.3
Prices Paid for Raw Materials	33.7	54.4	–20.7	Increasing	33	41.8	50.1	8.1
Prices Received for Finished Goods	7.5	17.5	–10.0	Increasing	28	15.2	77.1	7.7
Wages and Benefits	24.9	32.9	–8.0	Increasing	112	26.1	72.7	1.2
Employment	15.9	23.9	–8.0	Increasing	23	22.7	70.5	6.8
Hours Worked	4.9	6.5	–1.6	Increasing	25	15.1	74.7	10.2
Capital Expenditures	9.2	24.5	–15.3	Increasing	27	17.2	74.8	8.0

General Business Conditions

Current (versus previous month)

Indicator	Nov Index	Oct Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Improved	% Reporting No Change	% Reporting Worsened
Company Outlook	13.7	25.0	–11.3	Improving	27	21.3	71.1	7.6
General Business Activity	17.6	29.4	–11.8	Improving	25	25.2	67.2	7.6

Indicator	Nov Index	Oct Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Outlook Uncertainty†	12.3	6.9	+5.4	Increasing	6	21.9	68.4	9.6

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

Indicator	Nov Index	Oct Index	Change	Indicator Direction	Trend* (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	52.9	47.9	+5.0	Increasing	117	58.2	36.5	5.3
Capacity Utilization	43.4	38.9	+4.5	Increasing	117	49.3	44.7	5.9
New Orders	47.8	46.1	+1.7	Increasing	117	53.3	41.2	5.5
Growth Rate of Orders	32.1	36.5	–4.4	Increasing	117	37.0	58.1	4.9
Unfilled Orders	6.9	11.3	–4.4	Increasing	38	15.2	76.5	8.3
Shipments	46.4	51.7	–5.3	Increasing	117	53.5	39.4	7.1
Delivery Time	1.7	9.8	–8.1	Increasing	24	11.6	78.5	9.9
Finished Goods Inventories	3.8	11.3	–7.5	Increasing	13	14.4	75.0	10.6
Prices Paid for Raw Materials	36.2	42.1	–5.9	Increasing	116	41.9	52.4	5.7
Prices Received for Finished Goods	29.2	27.1	+2.1	Increasing	34	35.0	59.2	5.8
Wages and Benefits	44.8	51.4	–6.6	Increasing	174	45.9	53.0	1.1
Employment	42.0	32.8	+9.2	Increasing	72	46.6	48.7	4.6
Hours Worked	9.3	14.3	–5.0	Increasing	30	14.7	79.9	5.4
Capital Expenditures	34.1	28.0	+6.1	Increasing	108	40.9	52.3	6.8

General Business Conditions
Future (six months ahead)

Indicator	Nov Index	Oct Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Worsened
Company Outlook	31.4	37.3	–5.9	Improving	34	37.9	55.6	6.5
General Business Activity	25.7	35.6	–9.9	Improving	30	34.9	55.9	9.2

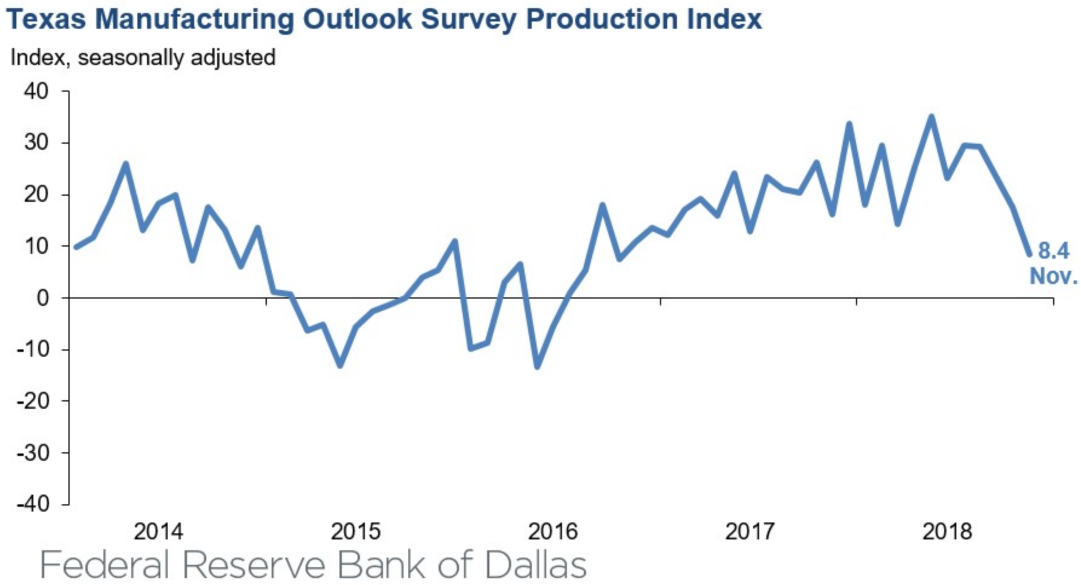
*Indicator direction refers to this month's index. If index is positive (negative), indicator is increasing (decreasing) or improving (worsening). If zero, indicator is unchanged.

**Number of months moving in current direction.

†Added to survey in January 2018.

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



Comments from Survey Respondents

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

Nonmetallic Mineral Product Manufacturing

- After a better-than-expected October, November is showing surprising weakness.

Primary Metal Manufacturing

- The steel and aluminum tariffs are a drag!

Fabricated Metal Product Manufacturing

- Permanent modular construction is growing with architects, contractors and developers. Long term, this will be a huge growth area for our company and the commercial modular industry.
- Foreign competition for steel structures continues to be a challenge. With domestic steel prices increasing, foreign markets continue to have an advantage, especially when supplemented by foreign governments. U.S. federal-government-owned utilities continue to buy steel structures from foreign countries.
- As a manufacturer, we are finally getting some pricing power. Large corporate customers are used to price reductions, so they are having difficulty accepting the new environment.
- Customers' orders are declining as they reduce inventory levels into year-end. Customers providing forecasts for the first quarter of 2019 indicate slightly lower order levels.

Machinery Manufacturing

- We are starting to experience a slowdown in the tech sector, which accounts for a large percentage of our business. We are not yet sure if this slowdown is being caused by the China tariffs or the cyclical nature of the tech sector.
- Tariffs are bad. Tariff waivers for preferred companies, a.k.a. picking winners, is also bad.
- I feel good about the overall business outlook.

Computer and Electronic Product Manufacturing

- We believe harsh politics will spill over into the current economy, causing uncertainty and investment pullback.

- Most markets slowed as the third quarter developed, and we expect the fourth quarter to be well below normal seasonal levels. Uncertainty around trade/tariffs is likely part of the recent change, but our industry has been running above long-term trends for almost two years.

Electrical Equipment, Appliance and Component Manufacturing

- Things have been rolling along quite well in the overall construction industry and our building wire market for the last few years. It has been really good the last two years, and we think that should continue through next year. Our conversations with our distributor customers and their electrical contractor customers indicate a backlog of big construction projects for at least 15 months out. Our biggest issue is finding enough electricians to do the work. Some "genius" told everyone to go to college 40 years ago and now the average electrician is 56 years old. Same with other trades. This is a huge problem. Also, these workers make more money than many people with college degrees.
- The current U.S. trade policies are causing customers to rethink longer-term purchases due to trade war concerns and the impact of tariffs on virtually all imported raw materials. Tariffs on imported raw materials are making U.S. exports less competitive.

Transportation Equipment Manufacturing

- Competition for and turnover of qualified aviation and engine mechanics adds to costs—it takes three to six months for a new hire to reach full efficiency—in addition to the wage increases and retention bonuses we put in place to reduce turnover.
- The seemingly weekly vendor price increases make it very hard to forecast future orders. Hopefully, we found the ceiling and can calm our dealers against any further increases.
- We have plans to increase line products and change our sales network. We have to improve efficiency and offset material increases as we can't realistically raise wholesale/retail prices.
- Trade issues create a level of uncertainty for us as we face potential pricing and supply issues on aluminum and any items we buy that use source components from China. Changes at the congressional level may end up creating excessive friction for companies as well as fostering an anti-business bias among House Democrats looking to promote a progressive agenda. A potential drop in oil prices due to oversupply is troubling given what happened to the Texas economy the last time prices pulled back.
- Constant conflicting information from D.C. regarding tariffs, etc., has confused our planning process dramatically.

Textile Product Mills

- Thanks to some great marketing opportunities, we have a very optimistic outlook for the future.

Wood Product Manufacturing

- We sell to homebuilders in Dallas–Fort Worth. Rising costs, rising mortgage rates, labor shortages, etc., will not dampen activity over the next six months. Activity will continue at the current pace, but houses will shrink in size and the price per square foot will fall.

Miscellaneous Manufacturing

- We would like to see improvements in economic relations with China and Russia. We should be doing more business with each other, not less. Better economic ties would improve the political situation in the long run. However, we support President Trump's efforts to balance the trade policies but wish for success quickly.

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

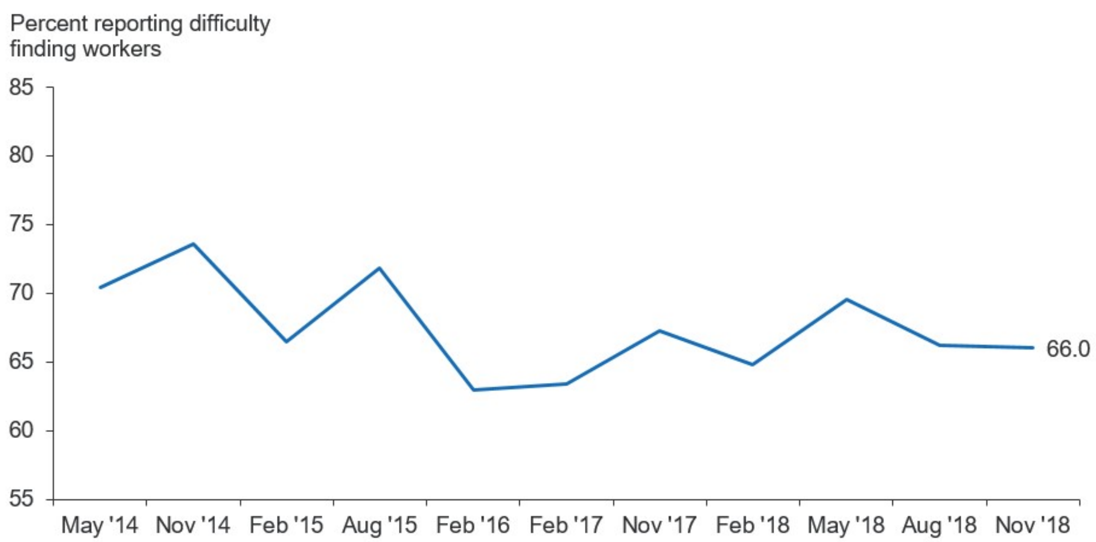
November 26, 2018

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 Nov. 12–20, and 359 Texas business executives responded to the surveys.

Are you having problems finding qualified workers when hiring?



NOTE: Data shown are for months when special questions were asked.
SOURCE: Federal Reserve Bank of Dallas Texas Business Outlook Surveys.

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Yes	67.3	64.8	69.5	66.2	66.0
No	32.7	35.2	30.5	33.8	34.0

If you are having problems finding qualified workers, in which categories are you experiencing difficulty? Please check all that apply.*

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	47.2	51.1	53.4	56.5	54.1
Mid-skill positions (typically require some college or technical schooling)	60.4	61.2	66.7	68.1	71.4
High-skill positions (typically require college degree or higher)	37.6	39.6	37.4	37.1	36.4

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

	Feb. '17 (percent)	Nov. '17 (percent)	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Lack of available applicants/no applicants	43.2	58.6	62.6	72.8	70.6
Looking for more pay than is offered	34.4	39.0	40.1	41.4	45.0
Lack of technical competencies (hard skills)	59.8	49.8	50.2	47.0	43.3
Lack of experience	40.5	32.5	37.0	37.1	40.7
Lack of workplace competencies (soft skills)	43.2	37.3	39.6	34.5	39.0
Inability to pass drug test and/or background check	29.3	32.1	30.0	31.0	32.5

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

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Increasing wages and/or benefits	49.4	53.3	61.6	63.4	66.6
Increasing wages					61.9
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	63.5	62.1	52.6	59.6	60.7
Offering additional training	35.7	38.2	27.8	36.6	35.9
Increasing variable pay, including bonuses	29.2	33.3	31.5	26.8	29.1
Improving working conditions	23.4	22.2	27.2	25.9	27.6
Increasing benefits					20.1
Reducing education and other requirements for new hires	8.8	6.5	8.3	12.9	12.1
Other	6.7	7.8	7.3	6.3	9.3

For each category below, please select the extent to which your firm raised wages (excluding benefits) over the past 12 months:

	Nov. '18 (percent)		
	None	< 4%	≥ 4%
Low-skill positions (typically require high school diploma or less and minimal work experience)	23.5	43.7	32.8
Mid-skill positions (typically require some college or technical schooling)	19.3	44.9	35.8
High-skill positions (typically require college degree or higher)	27.4	36.5	36.2

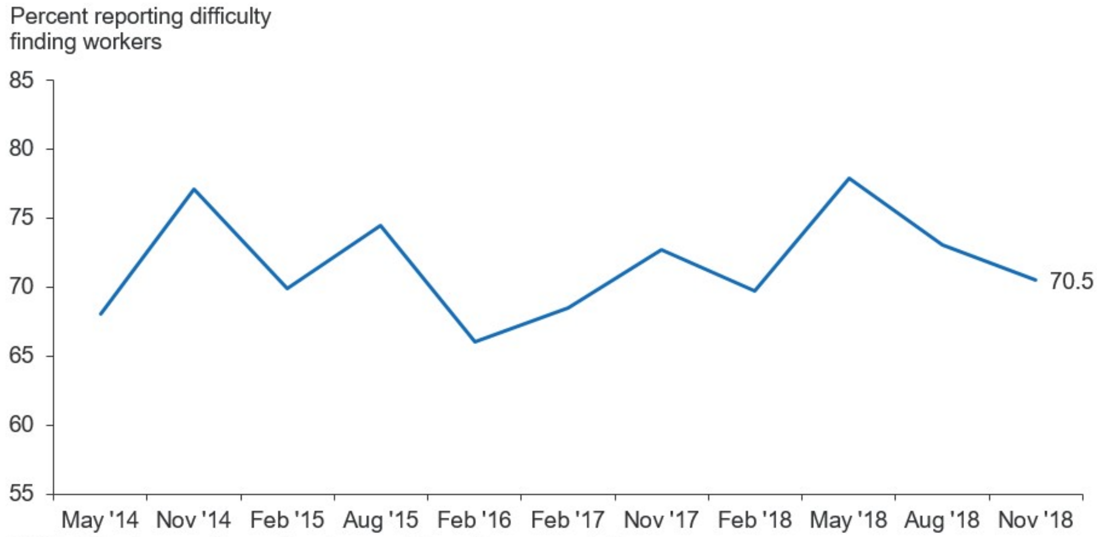
*This question only posed to firms that noted they are having problems finding qualified workers when hiring.
**Starting in November 2018, "increasing wages" appears as a separate answer choice from "increasing benefits." We will continue to include the share of firms reporting increasing wages and/or benefits but as a calculation based on responses to “increasing wages” and “increasing benefits.”
NOTES: 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 Nov. 12–20, and 105 Texas manufacturers responded to the survey.

See data files with a full history of results.

Are you having problems finding qualified workers when hiring?



NOTE: Data shown are for months when special questions were asked.
SOURCE: Federal Reserve Bank of Dallas Texas Manufacturing Outlook Survey.

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Yes	72.7	69.7	77.9	73.1	70.5
No	27.3	30.3	22.1	26.9	29.5

If you are having problems finding qualified workers, in which categories are you experiencing difficulty? Please check all that apply.*

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	61.1	64.7	62.9	68.9	66.2
Mid-skill positions (typically require some college or technical schooling)	66.7	70.6	70.0	71.6	77.5
High-skill positions (typically require college degree or higher)	30.6	32.4	28.6	27.0	26.8

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

	Feb. '17 (percent)	Nov. '17 (percent)	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Lack of available applicants/no applicants	44.3	51.4	72.1	70.3	69.9
Lack of technical competencies (hard skills)	72.2	61.1	60.3	64.9	57.5
Lack of workplace competencies (soft skills)	45.6	37.5	44.1	36.5	45.2
Looking for more pay than is offered	36.7	36.1	38.2	47.3	43.8
Inability to pass drug test and/or background check	29.1	45.8	41.2	35.1	42.5
Lack of experience	44.3	31.9	44.1	35.1	38.4

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

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Increasing wages and/or benefits	51.7	53.5	55.8	64.3	68.4
Increasing wages					63.3
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	67.4	65.1	53.5	67.3	61.2
Offering additional training	40.4	43.0	30.2	38.8	32.7
Improving working conditions	24.7	18.6	24.4	24.5	30.6
Increasing variable pay, including bonuses	28.1	31.4	26.7	21.4	24.5
Reducing education and other requirements for new hires	11.2	4.7	14.0	19.4	16.3
Increasing benefits					16.3
Other	5.6	7.0	7.0	0.0	7.1

For each category below, please select the extent to which your firm raised wages (excluding benefits) over the past 12 months:

		Nov. '18 (percent)	
	None	< 4%	≥ 4%
Low-skill positions (typically require high school diploma or less and minimal work experience)	10.8	53.9	35.3
Mid-skill positions (typically require some college or technical schooling)	11.7	49.5	38.8
High-skill positions (typically require college degree or higher)	20.4	39.8	39.8

*This question only posed to firms that noted they are having problems finding qualified workers when hiring.
**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.”

Special Questions Comments

These comments have been edited for publication.

Food Manufacturing

- We have had some success advertising on radio during "drive time" which enables us to "steal" workers from other businesses in our area. With unemployment at 3.7 percent, it appears almost everyone who wants a job, has a job. We have raised our hourly compensation for blue-collar jobs as well. It is a tough labor market. On another subject, there is a significant shortage of truck drivers right now. One national vendor of ours tells us the U.S. is short 60,000 truck drivers. They are currently 32 truckloads behind in picking up merchandise we have manufactured, per their orders, which creates a bottleneck for us from a warehousing point of view.
- We plan on a significant (more than 4 percent) raise for all positions effective January 2019.

Textile Product Mills

- We have a higher level of orders, so we are increasing wages to keep workers happy and here!

Nonmetallic Mineral Product Manufacturing

- In the Austin area, unemployment is very low, which affects the pool of available candidates. Those individuals left in the market are typically ones that don't want to work or can't find jobs; therefore, we have to be able to pull potential employees away from established positions.

Fabricated Metal Product Manufacturing

- In the steel fabrication industry, skilled welders and fitters (with the ability to read fabrication drawings) are going to the oil and gas industry, which pays almost double what the fabrication industry pays. Because of this and other issues, other steel lattice fabricators have moved offshore.

Machinery Manufacturing

- We have increased wages for entry-level positions to improve the applicant pool.

Computer and Electronic Product Manufacturing

- We always have trouble finding enough technical talent in the U.S. but can hire in other regions of the world to meet demand.

Electrical Equipment, Appliance and Component Manufacturing

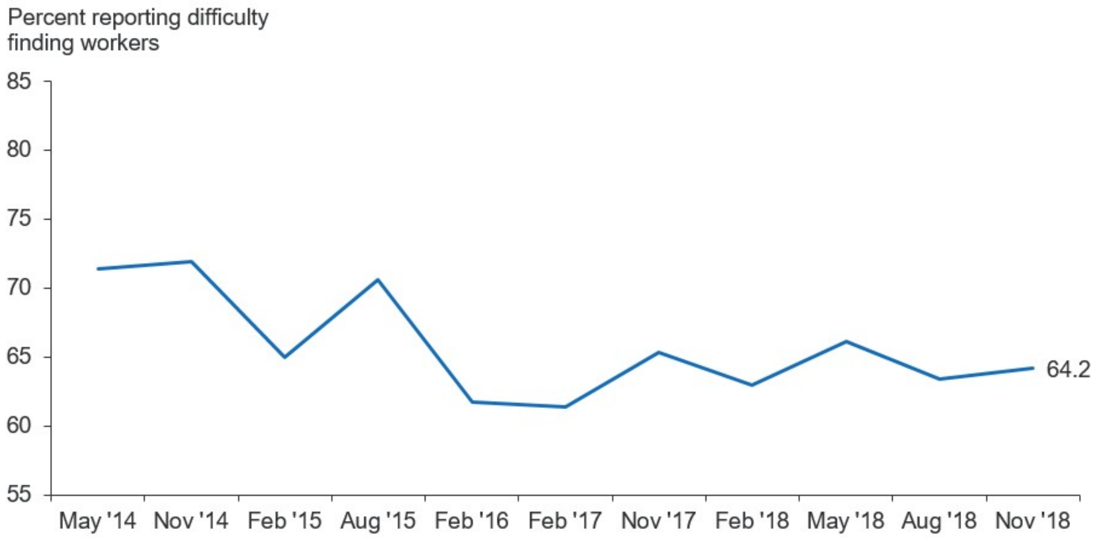
- In our plants (which is where 85 percent of our employees work), drug testing washes out more people than you would think. Random testing in our office has also nailed a couple. We are not in favor of pot laws. Also, we need a better pot test that tells if people are high or not.

Texas Service Sector Outlook Survey

Data were collected Nov. 12–20, and 254 Texas business executives responded to the survey.

See data files with a full history of results.

Are you having problems finding qualified workers when hiring?



NOTE: Data shown are for months when special questions were asked.
SOURCE: Federal Reserve Bank of Dallas Texas Service Sector Outlook Survey.

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Yes	65.3	62.9	66.1	63.4	64.2
No	34.7	37.1	33.9	36.6	35.8

If you are having problems finding qualified workers, in which categories are you experiencing difficulty? Please check all that apply.*

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	41.6	45.3	49.0	50.6	48.8
Mid-skill positions (typically require some college or technical schooling)	57.9	57.2	65.1	66.5	68.8
High-skill positions (typically require college degree or higher)	40.4	42.8	41.6	41.8	40.6

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

	Feb. '17 (percent)	Nov. '17 (percent)	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Lack of available applicants/no applicants	42.8	61.6	58.5	74.1	70.9
Looking for more pay than is offered	33.3	40.1	40.9	38.6	45.6
Lack of experience	38.9	32.8	34.0	38.0	41.8
Lack of technical competencies (hard skills)	54.4	45.2	45.9	38.6	36.7
Lack of workplace competencies (soft skills)	42.2	37.3	37.7	33.5	36.1
Inability to pass drug test and/or background check	29.4	26.6	25.2	29.1	27.8

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

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Increasing wages and/or benefits	48.6	53.2	63.9	63.0	65.8
Increasing wages					61.3
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	62.1	60.9	52.3	56.2	60.4
Offering additional training	34.0	36.4	26.9	35.6	37.3
Increasing variable pay, including bonuses	29.6	34.1	33.3	29.2	31.1
Improving working conditions	22.9	23.6	28.2	26.5	26.2
Increasing benefits					21.8
Reducing education and other requirements for new hires	7.9	7.3	6.0	10.0	10.2
Other	7.1	8.2	7.4	9.1	10.2

For each category below, please select the extent to which your firm raised wages (excluding benefits) over the past 12 months:

		Nov. '18 (percent)	
	None	< 4%	≥ 4%
Low-skill positions (typically require high school diploma or less and minimal work experience)	29.4	38.9	31.7
Mid-skill positions (typically require some college or technical schooling)	22.7	42.8	34.5
High-skill positions (typically require college degree or higher)	30.4	35.0	34.6

*This question only posed to firms that noted they are having problems finding qualified workers when hiring.
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Special Questions Comments

These comments have been edited for publication.

Truck Transportation

- It is difficult to find qualified truck drivers for over-the-road positions. It's a $70,000 per year job but drivers are gone from home 90 percent of the time.

Support Activities for Transportation

- People literally just do not understand or want to put in a good day's work.

Data Processing, Hosting and Related Services

- Lack of qualified applicants in Dallas–Fort Worth has prompted us to expand searches. We've used recruiters for approximately 85 percent of hires this year. We've increased wages and benefits to attract and retain talent. The younger the talent, the more time they want to "work from home," but that hasn't proven to enable the company to serve its customers as well.

Credit Intermediation and Related Activities

- We do not gauge skill in terms of college degrees or training but rather in terms of knowledge and ability.
- In our rural markets, we must recruit available students out of high school to try and establish a trainable employment base that will stay on the job for years to come.

Insurance Carriers and Related Activities

- We hire based on sales and relationship talent, not vocational-technical type training.

Professional, Scientific and Technical Services

- I don't use anyone but "high-skill" workers. The type I would need would be relatively available, as high-skill workers for energy business projects are not in particularly high demand.

Administrative and Support Services

- I am a recruiter, so I'm speaking not from my firm's experience, but from our clients' perspectives. Some positions are extremely difficult to fill, like civil engineering, audit/tax, clinical/pharmaceutical/therapeutic, etc. The less socially active you are and the more conservative in nature, the harder it is to hire. The lead times are significant, but many of these firms don't start their hiring process until there is a need, which is a fatal flaw in their process.
- Finding employees is a very big challenge. Just finding an individual with a good driver's license is like winning the lottery.
- Increasing pay to retain qualified existing employees is essential.

Educational Services

- We continue to struggle with hiring transportation drivers and teachers. We continue to reinforce our efforts by increasing wages and through more robust recruiting. It's not only our problem but the problem in our industry.

Nursing and Residential Care Facilities

- We are making wage adjustments in targeted markets to try to attract and retain employees.

Food Services and Drinking Places

- There are more jobs than people.

Texas Retail Outlook Survey

Data were collected Nov. 12–20, and 50 Texas retailers responded to the survey.

See data files with a full history of results.

Are you having problems finding qualified workers when hiring?

NOTE: Data shown are for months when special questions were asked.
SOURCE: Federal Reserve Bank of Dallas Texas Retail Outlook Survey.

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Yes	76.4	75.5	82.2	76.5	70.0
No	23.6	24.5	17.8	23.5	30.0

If you are having problems finding qualified workers, in which categories are you experiencing difficulty? Please check all that apply.*

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Low-skill positions (typically require high school diploma or less and minimal work experience)	54.8	55.6	69.4	56.8	61.8
Mid-skill positions (typically require some college or technical schooling)	66.7	69.4	75.0	86.5	76.5
High-skill positions (typically require college degree or higher)	21.4	13.9	30.6	24.3	29.4

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

	Feb. '17 (percent)	Nov. '17 (percent)	Feb. '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Lack of available applicants/no applicants	46.7	59.5	56.8	78.9	66.7
Lack of technical competencies (hard skills)	55.6	54.8	48.6	52.6	45.5
Inability to pass drug test and/or background check	48.9	47.6	37.8	42.1	45.5
Lack of workplace competencies (soft skills)	46.7	33.3	40.5	36.8	39.4
Looking for more pay than is offered	28.9	38.1	24.3	23.7	36.4
Lack of experience	37.8	35.7	35.1	34.2	33.3

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

	Nov. '17 (percent)	Feb. '18 (percent)	May '18 (percent)	Aug. '18 (percent)	Nov. '18 (percent)
Increasing wages and/or benefits	56.6	41.3	56.8	63.0	58.7
Intensifying recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	66.0	60.9	65.9	54.3	58.7
Increasing wages					56.5
Increasing variable pay, including bonuses	39.6	43.5	36.4	37.0	30.4
Offering additional training	34.0	32.6	18.2	30.4	26.1
Improving working conditions	24.5	26.1	27.3	32.6	26.1
Increasing benefits					15.2
Reducing education and other requirements for new hires	13.2	10.9	6.8	10.9	10.9
Other	5.7	4.3	4.5	8.7	10.9

For each category below, please select the extent to which your firm raised wages (excluding benefits) over the past 12 months:

		Nov. '18 (percent)	
	None	< 4%	≥ 4%
Low-skill positions (typically require high school diploma or less and minimal work experience)	16.3	46.5	37.2
Mid-skill positions (typically require some college or technical schooling)	18.6	44.2	37.2
High-skill positions (typically require college degree or higher)	38.5	41.0	20.5

*This question only posed to firms that noted they are having problems finding qualified workers when hiring.
**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."

Special Questions Comments

These comments have been edited for publication.

Merchant Wholesalers, Nondurable Goods

- Drivers are in high demand and hard to find and keep.

Motor Vehicle and Parts Dealers

- Younger college-educated candidates are wanting fewer work hours and noncommissioned pay plans, making it difficult to recruit for sales positions.

Building Material and Garden Equipment and Supplies Dealers

- There has always been an issue with schools not training workers properly.

Health and Personal Care Stores

- I now have one more employee on company health insurance than I did last quarter.

Clothing and Clothing Accessories Stores

- There is significantly more difficulty in hiring in major metropolitan areas like Houston. Smaller cities are generally not experiencing any issues.

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