Texas **Manufacturing** Outlook Survey

May 29, 2018

Texas Manufacturing Expansion Accelerates Notably

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 (TMOS), Texas Service Sector Outlook Survey (TSSOS) and Texas Retail Outlook Survey (TROS) have been released together.

Texas factory activity rose markedly in May, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, increased 10 points to a 12-year high of 35.2, signaling further acceleration in output growth.

Most other indexes of manufacturing activity also indicated a sharp acceleration in May. The capacity utilization index rose notably from 18.7 to 32.2, and the shipments index jumped 20 points to 39.5. Demand growth picked up as the growth rate of orders index increased eight points to 26.5. All three measures reached their highest readings since 2006. Meanwhile, the new orders index held steady at 27.7.

Perceptions of broader business conditions were even more positive in May than in April. The general business activity index rose five points to 26.8, and the company outlook index rose four points to 28.0. These readings are far above their respective averages.

Labor market measures suggested stronger growth in employment and notably longer work hours in May. The employment index pushed up six points to 23.4, its highest reading in six years. Twenty-nine percent of firms noted net hiring, compared with 5 percent that noted net layoffs. The hours worked index shot up nine points to 23.2.

Price and wage pressures remained highly elevated in May. The raw materials prices index and wages and benefits index edged down to 44.0 and 24.3, respectively—still well above their average readings. The finished goods prices index moved up to 20.5, with a quarter of firms noting that prices rose this month.

Expectations regarding future business conditions remained largely optimistic in May. The indexes of future general business activity and future company outlook were largely unchanged at 30.0 and 35.2, respectively, with both readings significantly above average. Most other indexes for future manufacturing activity pushed further into positive territory.

Next release: Monday, June 25

Data were collected May 15–23, and 107 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	35.2	25.3	+9.9	Increasing	23	45.0	45.2	9.8
Capacity Utilization	32.2	18.7	+13.5	Increasing	23	42.5	47.2	10.3
New Orders	27.7	27.9	–0.2	Increasing	19	40.1	47.5	12.4
Growth Rate of Orders	26.5	18.9	+7.6	Increasing	17	36.0	54.5	9.5
Unfilled Orders	4.1	7.2	–3.1	Increasing	14	15.6	72.9	11.5
Shipments	39.5	19.3	+20.2	Increasing	18	50.4	38.7	10.9
Delivery Time	10.2	14.5	–4.3	Increasing	11	16.6	77.0	6.4
Finished Goods Inventories	–6.6	1.7	–8.3	Decreasing	1	14.2	65.1	20.8
Prices Paid for Raw Materials	44.0	46.3	–2.3	Increasing	27	49.5	45.0	5.5
Prices Received for Finished Goods	20.5	17.0	+3.5	Increasing	22	25.5	69.5	5.0
Wages and Benefits	24.3	29.3	–5.0	Increasing	106	25.3	73.7	1.0
Employment	23.4	17.8	+5.6	Increasing	17	28.5	66.4	5.1
Hours Worked	23.2	14.3	+8.9	Increasing	19	28.4	66.4	5.2
Capital Expenditures	21.7	23.9	–2.2	Increasing	21	26.6	68.5	4.9

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	28.0	23.6	+4.4	Improving	21	35.1	57.8	7.1
General Business Activity	26.8	21.8	+5.0	Improving	19	32.5	61.8	5.7

Indicator	May Index	Apr Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Outlook Uncertainty†	–2.9	12.4	–15.3	Decreasing	1	15.4	66.3	18.3

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	58.0	52.3	+5.7	Increasing	111	63.2	31.6	5.2
Capacity Utilization	51.0	49.0	+2.0	Increasing	111	56.7	37.6	5.7
New Orders	48.5	47.6	+0.9	Increasing	111	53.1	42.3	4.6
Growth Rate of Orders	37.7	37.8	–0.1	Increasing	111	41.6	54.5	3.9
Unfilled Orders	13.8	15.5	–1.7	Increasing	32	19.4	75.0	5.6
Shipments	49.2	49.2	0.0	Increasing	111	56.5	36.2	7.3
Delivery Time	13.4	11.4	+2.0	Increasing	18	18.5	76.4	5.1
Finished Goods Inventories	11.9	11.1	+0.8	Increasing	7	20.8	70.3	8.9
Prices Paid for Raw Materials	51.9	49.1	+2.8	Increasing	110	53.9	44.1	2.0
Prices Received for Finished Goods	27.0	33.3	–6.3	Increasing	28	30.0	67.0	3.0
Wages and Benefits	50.6	50.1	+0.5	Increasing	168	51.0	48.6	0.4
Employment	37.6	35.4	+2.2	Increasing	66	44.4	48.8	6.8
Hours Worked	13.9	14.4	–0.5	Increasing	24	18.4	77.1	4.5
Capital Expenditures	32.2	31.0	+1.2	Increasing	102	36.2	59.8	4.0

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	35.2	37.1	–1.9	Improving	28	41.7	51.8	6.5
General Business Activity	30.0	31.9	–1.9	Improving	24	36.4	57.2	6.4

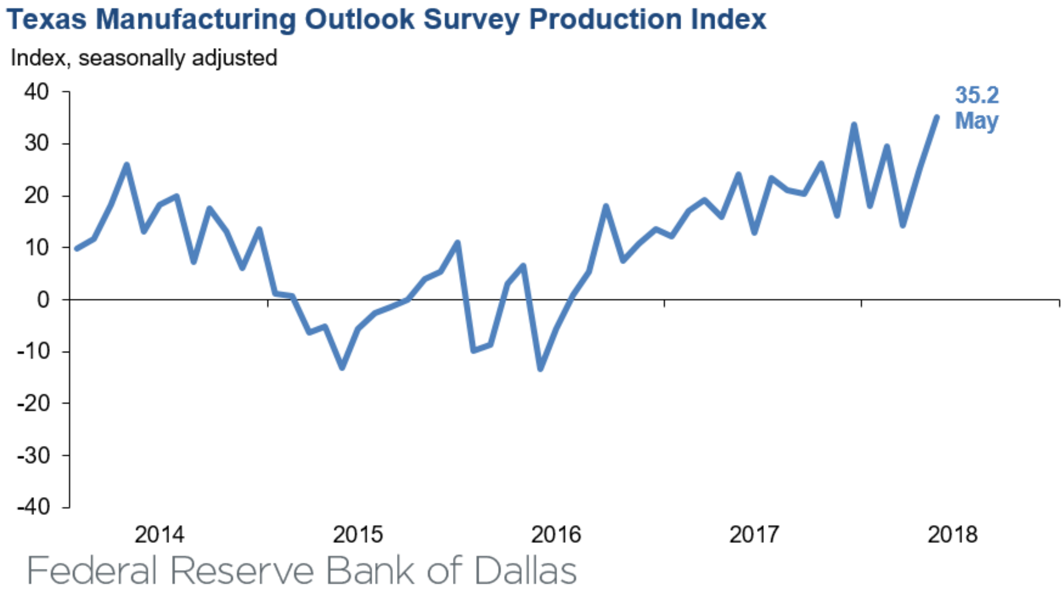
*Indicator direction refers to this month's index. If index is positive (negative), indicator is increasing (decreasing) or improving (worsening). If zero, indicator is unchanged.

**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.

Chemical Manufacturing

- Wages and competition for skilled workers are getting to be major concerns.

Primary Metal Manufacturing

- A supplier plant shutdown has lowered the feedstock into the plant in May.
- We are being impacted by major raw material increases as a result of the Commerce Department's sanctions and tariffs on aluminum. There is not enough domestic production of primary aluminum or extrusion billet to satisfy current demand in the United States. It will take months—possibly up to two years—before domestic production can be increased, and due to political uncertainties, it is uncertain whether companies will increase or turn on idled production. The current administration is considering quotas on imported raw aluminum, which would cause even more shortages. Bottom line—manufacturing jobs will be lost and production curtailed if the current situation continues. Our uptick in business is artificially driven, with customers concerned about future supply curtailments.
- The volume of business is more than we can do within normal lead times, so our lead times are extending and almost double what they were three months ago.

Fabricated Metal Product Manufacturing

- Our company is beginning to see oil and gas customers coming back strong and strengthening our backlogs. General business activity is good. Aluminum and steel price increases are driving us to raise prices to customers, who are not happy about those increases. Therefore, customers begin shopping our new prices, which creates a period of uncertainty with the customer relationships. Conversely, we are seeing increases in our requests to quote new opportunities because other suppliers/competitors are raising their prices, too.

- Tariffs on steel, aluminum and soft woods have increased prices, regardless of whether the tariff actually exists. Businesses will use any excuse to raise prices if they can. Fuel has been increasing steadily, primarily gasoline, followed by diesel. Fortunately for our business, natural gas—which is used in the production of glass and aluminum—has remained steady, thus keeping surcharges stable. Wages continue to rise as the pool of potential employees has all but evaporated. With the growth in Texas, along with the changes in immigration, hiring has become a full-time endeavor here. Interest rates increasing are probably the largest threat on the horizon. Since we are tied to the housing and remodeling industries, our market is interest rate sensitive. Even though rates are still near historic lows, I see current rates as the new standard. When I was young, the standard was 12 percent roughly, so a 1–2 percent increase raised concerns. Well, with a new standard of 3–4 percent, a 1–2 percent increase in the next 18 months is going to be severe, in my opinion. Interest rates have been so low for so long, most people do not understand how higher rates can change their lives. To summarize, business is stable, but there are problems everywhere.
- We are being covered up with quotes but are not seeing project starts and backlog increases.

Machinery Manufacturing

- Business remains strong and continues to grow. It is a great business environment.
- We are hopeful the rise in oil prices will bring us some much-needed work. We are cautiously optimistic.
- Rising metals costs and rising freight costs are concerns going forward.

Computer and Electronic Product Manufacturing

- Electronic component lead times and allocations are affecting the ability to deliver.

Printing and Related Support Activities

- We have gotten lucky and landed a couple of nice, big orders that are keeping us busy. We are worried about pressure to raise wages, combined with having to pay more for raw materials, yet not seeming to be able to pass along price increases easily.
- The impacts of Hurricane Harvey are still a drag on the retail economy.

Food Manufacturing

- Stainless steel prices have increased due to tariff restrictions, and the possible purchase price per unit has decreased.

Miscellaneous Manufacturing

- We are having one of the best years in company history. Now, if we can hire our open positions and produce all the products we could sell, it would be even more amazing. We want to keep America open for global trade. It does worry us about the potential of losing access to, or supply from, certain overseas markets, but the risk is worth it if we are going to negotiate more fair terms. We are supportive of short-term pain and volatility for a better long-term competitive position and a stronger America.

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

Texas **Manufacturing** Outlook Survey

Special Questions

May 29, 2018

Texas Business Outlook Surveys

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

Data were collected May 15–23, and 328 Texas business executives responded to the surveys.

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

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Increase wages and/or benefits	61.6	53.3	49.4
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	52.6	62.1	63.5
Increase variable pay, including bonuses	31.5	33.3	29.2
Offer additional training	27.8	38.2	35.7
Improve working conditions	27.2	22.2	23.4
Reduce education and other requirements for new hires	8.3	6.5	8.8
Other	7.3	7.8	6.7

2. **Are you having problems finding qualified workers when hiring?**

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Yes	69.5	64.8	67.3
No	30.5	35.2	32.7

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

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

4. **If your firm has experienced upward wage pressure over the past 12 months, for each category below please select the extent to which your firm raised wages (excluding benefits) in response:**

	None	Less than 4 percent	4 percent or more
Low-skill positions	23.5	42.5	33.9
Mid-skill positions	18.1	43.2	38.8
High-skill positions	26.0	32.2	41.8

5. **What annual percent change in wages and input prices did your firm experience in 2017 and what do you expect for 2018? Also, by how much did your firm change selling prices in 2017, and by how much do you expect to change selling prices in 2018?**

	2017 actual (percent)**	2018 expected (percent)**
Wages	3.8	4.4
Input prices (excluding wages)	3.1	4.8
Selling prices	2.3	3.5

6. **If your firm has experienced an increase in costs (including wages, benefits, other inputs, etc.), how has your firm's ability to pass those increases on to customers changed over the past year?**

	May '18 (percent)
Much easier now	2.5
Somewhat easier now	23.8
Similar to a year ago	38.8
Somewhat harder now	21.0
Significantly harder now	13.9

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

**Shown are trimmed means with the lowest and highest five percent of responses omitted.

Texas Manufacturing Outlook Survey

Data were collected May 15–23, and 95 Texas manufacturers responded to the survey.

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

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Increase wages and/or benefits	55.8	53.5	51.7
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	53.5	65.1	67.4
Offer additional training	30.2	43.0	40.4
Increase variable pay, including bonuses	26.7	31.4	28.1
Improve working conditions	24.4	18.6	24.7
Reduce education and other requirements for new hires	14.0	4.7	11.2
Other	7.0	7.0	5.6

2. **Are you having problems finding qualified workers when hiring?**

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Yes	77.9	69.7	72.7
No	22.1	30.3	27.3

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

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

4. **If your firm has experienced upward wage pressure over the past 12 months, for each category below please select the extent to which your firm raised wages (excluding benefits) in response:**

	None	Less than 4 percent	4 percent or more
Low-skill positions	13.8	47.7	38.5
Mid-skill positions	9.1	45.5	45.5
High-skill positions	15.8	38.6	45.6

5. **What annual percent change in wages and input prices did your firm experience in 2017 and what do you expect for 2018? Also, by how much did your firm change selling prices in 2017, and by how much do you expect to change selling prices in 2018?**

	2017 actual (percent)**	2018 expected (percent)**
Wages	3.4	4.2
Input prices (excluding wages)	3.1	6.2
Selling prices	2.3	4.0

6. **If your firm has experienced an increase in costs (including wages, benefits, other inputs, etc.), how has your firm's ability to pass those increases on to customers changed over the past year?**

	May '18 (percent)
Much easier now	1.2
Somewhat easier now	30.2
Similar to a year ago	31.4
Somewhat harder now	24.4
Significantly harder now	12.8

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

**Shown are trimmed means with the lowest and highest five percent of responses omitted.

Special Questions Comments

These comments have been edited for publication.

Chemical Manufacturing

- Sign-on bonuses are sometimes necessary for some highly skilled or postgraduate positions.

Primary Metal Manufacturing

- Our selling price is up, but we have no idea what we will be paying in the coming months. This new selling price is to protect us, we hope.

Machinery Manufacturing

- As a domestic manufacturer, it is virtually impossible for us to raise pricing when the customer can buy the finished product directly from China for less than the cost of American raw material.
- Everyone is experiencing the same increases in steel prices.
- We are investing in capital equipment to help lower our reliance on third-party manufacturers and cost of goods sold. Our customers are demanding significant discounts on goods, while our employees are expecting raises after two years of flat wage growth. We anticipate significant borrowing in the future to help cover these investments.
- We've begun manufacturing our own products. We opened a machine shop at a cost of $1.5 million, but our long-term savings and control of our business will be much greater with tight quality control.

Printing and Related Support Activities

- We are just starting to feel wage pressure.
- Over the past six or seven years, the printing industry as a whole has experienced many difficulties due to the economy. Even though the economy is improving, we have not seen an increase in sales. Over the past 18 months, printing has been a declining market. Digital sales have increased over the past few months due to the need for shorter runs for less money. As new business growth comes into the Dallas–Fort Worth area, we hope this will also bring a need for increased printing, improving our offset runs. As far as recruiting, we have very little turnover, and workers for mid-skilled positions are harder to find. Finding low-skilled workers is much easier, but we have the expense of training them. When material costs increase, which they have over the past six months, the increase is passed on to our customers through our quotes. The increases in materials have been around 1.5 percent.

Transportation Equipment Manufacturing

- Steel price increases that are unjustified is our biggest cost increase.

Paper Manufacturing

- We have not needed to expand our high-skilled staff. The factory staff is where we have needed expansion, and the market just doesn't have factory-experienced workers available. When we look for candidates for our training program, there is just not the trainable pool available.
- We are experiencing very tough employment conditions right now. There are not enough workers. We have to overpay to retain what we have. What has happened to the work ethic?
- Business volume is outstanding. Margins are terrible.

Food Manufacturing

- We have to pay more to incentivize workers to leave their jobs and come to work for us.

Texas Service Sector Outlook Survey

Data were collected May 15–23, and 233 Texas business executives responded to the survey.

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

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Increase wages and/or benefits	63.9	53.2	48.6
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	52.3	60.9	62.1
Increase variable pay, including bonuses	33.3	34.1	29.6
Improve working conditions	28.2	23.6	22.9
Offer additional training	26.9	36.4	34.0
Reduce education and other requirements for new hires	6.0	7.3	7.9
Other	7.4	8.2	7.1

2. **Are you having problems finding qualified workers when hiring?**

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Yes	66.1	62.9	65.3
No	33.9	37.1	34.7

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

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

4. **If your firm has experienced upward wage pressure over the past 12 months, for each category below please select the extent to which your firm raised wages (excluding benefits) in response:**

	None	Less than 4 percent	4 percent or more
Low-skill positions	27.6	40.4	32.1
Mid-skill positions	21.7	42.2	36.0
High-skill positions	29.8	29.8	40.4

5. **What annual percent change in wages and input prices did your firm experience in 2017 and what do you expect for 2018? Also, by how much did your firm change selling prices in 2017, and by how much do you expect to change selling prices in 2018?**

	2017 actual (percent)**	2018 expected (percent)**
Wages	4.0	4.7
Input prices (excluding wages)	3.1	4.4
Selling prices	2.2	3.3

6. **If your firm has experienced an increase in costs (including wages, benefits, other inputs, etc.), how has your firm's ability to pass those increases on to customers changed over the past year?**

	May '18 (percent)
Much easier now	3.1
Somewhat easier now	21.0
Similar to a year ago	42.1
Somewhat harder now	19.5
Significantly harder now	14.4

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

**Shown are trimmed means with the lowest and highest five percent of responses omitted.

Special Questions Comments

These comments have been edited for publication.

Broadcasting (Except Internet)

- We have probably not experienced upward wage pressure because our internal "minimum wage" is $10 an hour.

Telecommunications

- We can't raise our rates or our customers will move their business offshore.

Credit Intermediation and Related Activities

- Wages for processors have increased because there are not enough qualified candidates. We are having to hire right out of college and having to train, which takes time.

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

- We are scared about the increasing deficit and continued growth of entitlement programs.

Insurance Carriers and Related Activities

- Our premium rates are fixed and set by the state of Texas.

Rental and Leasing Services

- From mechanics to sales representatives, people are impossible to find. The oilfield is heating up and providing crazy high wages.
- Competition is too heavy in the heavy construction equipment sales industry to raise sales prices much, if at all.

Professional, Scientific and Technical Services

- We increased salaries in January an average of 4 percent across our staff.
- We are a services company, so our primary input price is wages.
- Longer-term (more than one year) contracts are restricting our pricing flexibility.

Administrative and Support Services

- We have had to offer wage increases to keep qualified workers.
- Clients are turning away business and working overtime because they cannot find workers even with pay increases of 10 percent or more.
- We now offer convention, conference, trade mission and translation services.
- We are not funded by the customer; our funding is based on hotel lodging revenues and a percentage of certain tax collections.
- Competition dictates the potential for price increases. Texas has very competitive markets.

Educational Services

- We are working hard with our local high schools to build programs for craft labor in vocational agriculture programs because we fear a lack of craftsmen to build, repair and maintain our projects.

Ambulatory Health Care Services

- We've had to raise wages to match what we are having to pay new hires.
- We cannot pass along cost increases; we are restricted by contracts and government regulation.
- As an imaging center, prices are established by CMS (Centers for Medicare & Medicaid Services) and payers. Price adjustments are always down—a deflationary business environment. We are extremely efficient.
- As a medical provider, we often do not have control regarding payer reimbursement levels with the exception of a few procedures.

Social Assistance

- We are a nonprofit and don't charge for our services.

Amusement, Gambling and Recreation Industries

- Austin is growing very fast, and there are about the same number of people available to work in the lower-skilled jobs.

Accommodation

- Improved flow is more achievable based on the increase in revenue, driven by both price increases and volume growth.

Food Services and Drinking Places

- Some areas in San Antonio and Dallas have become more competitive.

Personal and Laundry Services

- Wage pressure has increased by almost 20 percent.

Religious, Grantmaking, Civic, Professional and Similar Organizations

- We are not currently hiring.

Texas Retail Outlook Survey

Data were collected May 15–23, and 45 Texas retailers responded to the survey.

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

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	65.9	60.9	66.0
Increase wages and/or benefits	56.8	41.3	56.6
Increase variable pay, including bonuses	36.4	43.5	39.6
Improve working conditions	27.3	26.1	24.5
Offer additional training	18.2	32.6	34.0
Reduce education and other requirements for new hires	6.8	10.9	13.2
Other	4.5	4.3	5.7

2. **Are you having problems finding qualified workers when hiring?**

	May '18 (percent)	Feb. '18 (percent)	Nov. '17 (percent)
Yes	82.2	75.5	76.4
No	17.8	24.5	23.6

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

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

4. **If your firm has experienced upward wage pressure over the past 12 months, for each category below please select the extent to which your firm raised wages (excluding benefits) in response:**

	None	Less than 4 percent	4 percent or more
Low-skill positions	2.9	52.9	44.1
Mid-skill positions	9.1	45.5	45.5
High-skill positions	37.0	29.6	33.3

5. **What annual percent change in wages and input prices did your firm experience in 2017 and what do you expect for 2018? Also, by how much did your firm change selling prices in 2017, and by how much do you expect to change selling prices in 2018?**

	2017 actual (percent)**	2018 expected (percent)**
Wages	3.8	4.5
Input prices (excluding wages)	3.5	5.3
Selling prices	3.5	5.3

6. **If your firm has experienced an increase in costs (including wages, benefits, other inputs, etc.), how has your firm's ability to pass those increases on to customers changed over the past year?**

	May '18 (percent)
Much easier now	2.4
Somewhat easier now	24.4
Similar to a year ago	31.7
Somewhat harder now	24.4
Significantly harder now	17.1

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

**Shown are trimmed means with the lowest and highest five percent of responses omitted.

Special Questions Comments

These comments have been edited for publication.

Merchant Wholesalers, Nondurable Goods

- Our entire industry is facing upward pricing pressure. This is making it easier for us to pass along the industry increases.

Motor Vehicle and Parts Dealers

- It is difficult to find commissioned salespeople and high-skilled auto technicians.
- The cost of health care and property and casualty insurance has increased significantly. We also have concerns on the increase in interest rates.
- We do not measure specific wage growth in our workforce. We are having to increase our pay scale for new hires. We are seeing difficulty passing increased costs on to the consumer due to margin compression from internet sales activity.

Building Material and Garden Equipment and Supplies Dealers

- We get a lot of applicants who think they have skills but really do not. This always happens when the economy picks up.
- Recent federal tax legislation has increased the after-tax cost of labor by over 20 percent. Legislative pushback on the Affordable Care Act and Medicaid cuts are expected to result in cost increases for both employers and employees.
- Things we used to not charge for we are using as upgrades and charging to make up for input prices rising.

Truck Transportation

- Trucking is seeing an acute shortage of truck drivers.

Clothing and Clothing Accessories Stores

- As a retailer, input prices do not really apply.

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