

September 26, 2017

Texas Service Sector Activity Strengthens Further

What's New This Month

For this month's survey, Texas business executives were asked supplemental questions on the impact from Hurricane Harvey. 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 service sector growth picked up slightly in September, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, edged up from 14.2 in August to 15.9 in September.

Labor market indicators reflected slower employment growth and slightly longer workweeks this month. The employment index moved down a point to 3.5. The hours worked index fell from 8.3 to 2.7.

Perceptions of broader economic conditions reflected less optimism in September. The general business activity index dipped three points to 12.4. The company outlook index dropped eight points to 7.7, with 21 percent of respondents reporting that their outlook improved from last month and 14 percent noting it worsened.

Price and wage pressures were mostly unchanged this month. The selling prices index held steady at 4.7. The wages and benefits index inched up a point to 15.6, although the majority of firms continued to note no change in compensation costs.

Respondents' expectations regarding future business conditions reflected more optimism in September. The index of future general business activity rose from 21.3 to 28.0. The index of future company outlook moved up three points to 29.4. Indexes of future service sector activity, such as future revenue and employment, continued to reflect optimism this month.



Retail Sales Growth Improves

Retail sales improved notably again in September, according to business executives responding to the Texas Retail Outlook Survey. The sales index surged 16 points to 32.8 in September, its highest reading in three years. Inventories increased at a slower pace this month.

Labor market measures indicated slight employment gains and longer workweeks this month. The employment index edged up to 0.9. The hours worked index fell from 11.3 to 5.1.

Retailers' perceptions of broader economic conditions reflected more optimism in September. The general business activity index jumped from 9.7 to 19.3. The company outlook index surged 14 points to 22.8, with 31 percent of respondents reporting that their outlook improved from last month and 8 percent noting it worsened.

Retail price pressures were unchanged while wage pressures increased this month. The selling prices index was similar to last month at 18.6. The wages and benefits index moved up six points to 20.0, although the majority of firms continued to note no change in compensation costs.

Retailers' perceptions of future broader economic conditions reflected more optimism in September. The index of future general business activity rose sharply from 11.6 to 31.2. The index of future company outlook advanced 13 points to 31.1, its highest reading this year. Indexes of future retail sector activity continued to reflect optimism this month.

The Texas Retail Outlook Survey (TROS) is a component of the TSSOS that uses information only from respondents in the retail and wholesale sectors.

Next release: October 31, 2017

Data were collected Sept. 12–20, and 298 Texas business executives responded to the survey. The Dallas Fed conducts the Texas Service Sector Outlook Survey monthly to obtain a timely assessment of the state's service sector activity. Firms are asked whether revenue, employment, prices, general business activity 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.

Texas Service Sector Outlook Survey

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

						%	%	%
					Trend**	Reporting	Reporting	Reporting
Indicator	Sep Index A	Change I	ndicator Direction*	(Months)	Increase	No Change	Decrease	
Revenue	15.9	14.2	+1.7	Increasing	94	34.7	46.4	18.8
Employment	3.5	4.6	-1.1	Increasing	91	12.2	79.1	8.7
Part-Time Employment	2.1	3.4	-1.3	Increasing	15	8.6	84.9	6.5
Hours Worked	2.7	8.3	- 5.6	Increasing	11	9.6	83.6	6.9
Wages and Benefits	15.6	14.8	+0.8	Increasing	96	18.1	79.4	2.5
Input Prices	25.2	25.6	-0.4	Increasing	101	27.2	70.8	2.0
Selling Prices	4.7	4.7	0.0	Increasing	19	11.8	81.1	7.1
Capital Expenditures	14.8	14.7	+0.1	Increasing	97	19.9	75.1	5.1

General Business Conditions
Current (versus previous month)

						%	%	%
					Trend**	Reporting	Reporting	Reporting
Indicator	Sep Index Au	ıg Index (Change	Indicator Direction*	(Months)	Improved	No Change	Worsened
Company Outlook	7.7	15.5	-7.8	Improving	15	21.4	64.8	13.7
General Business Activity	12.4	15.1	-2.7	Improving	13	23.4	65.6	11.0

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

						%	%	%
					Trend**	Reporting	Reporting	Reporting
Indicator	Sep Index A	ug Index (Change I	ndicator Direction*	(Months)	Increase	No Change	Decrease
Revenue	45.7	44.3	+1.4	Increasing	103	54.6	36.5	8.9
Employment	24.9	26.4	- 1.5	Increasing	102	32.1	60.7	7.2
Part-Time Employment	8.7	6.4	+2.3	Increasing	63	12.6	83.5	3.9
Hours Worked	4.3	6.8	-2.5	Increasing	13	8.4	87.5	4.1
Wages and Benefits	43.7	40.4	+3.3	Increasing	129	45.1	53.5	1.4
Input Prices	47.1	42.4	+4.7	Increasing	129	48.9	49.3	1.8
Selling Prices	29.9	26.2	+3.7	Increasing	101	35.4	59.1	5.5
Capital Expenditures	29.7	22.9	+6.8	Increasing	102	36.7	56.2	7.0

General Business Conditions Future (six months ahead)

						%	%	%
					Trend**		Reporting	
Indicator	Sep Index Au	ıg Index (Change I	ndicator Direction*	(Months)	Improved	No Change	Worsened
Company Outlook	29.4	26.2	+3.2	Improving	19	38.2	53.0	8.8
General Business Activity	28.0	21.3	+6.7	Improving	19	34.4	59.2	6.4

Texas Retail Outlook Survey

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

						%	%	%
			a l .		Trend**	Reporting	Reporting	Reporting
Indicator	Sep Index A	ug Index	Change I	ndicator Direction*	(Months)	Increase	No Change	Decrease
Retail Activity in Texas								
Sales	32.8	16.9	+15.9	Increasing	2	49.1	34.6	16.3
Employment	0.9	-0.6	+1.5	Increasing	1	8.9	83.1	8.0
Part-Time Employment	-3.2	1.7	-4.9	Decreasing	1	11.3	74.2	14.5
Hours Worked	5.1	11.3	-6.2	Increasing	3	16.4	72.3	11.3
Wages and Benefits	20.0	13.6	+6.4	Increasing	79	23.6	72.8	3.6
Input Prices	26.4	26.6	-0.2	Increasing	20	29.9	66.6	3.5
Selling Prices	18.6	18.1	+0.5	Increasing	5	26.5	65.6	7.9
Capital Expenditures	17.8	21.7	-3.9	Increasing	14	19.4	79.0	1.6
Inventories	5.9	23.5	- 17.6	Increasing	12	25.8	54.3	19.9
Companywide Retail Activ	ity							
Companywide Sales	25.6	10.7	+14.9	Increasing	2	39.5	46.7	13.9
Companywide Internet Sales	14.7	18.1	-3.4	Increasing	8	20.5	73.7	5.8

General Business Conditions, Retail Current (versus previous month)

						%	%	%
					Trend**	Reporting		Reporting
Indicator	Sep Index Au	g Index	Change I	Indicator Direction*	(Months)	Improved	No Change	Worsened
Company Outlook	22.8	8.6	+14.2	Improving	2	30.9	61.0	8.1
General Business Activity	19.3	9.7	+9.6	Improving	4	28.3	62.7	9.0

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

						%	%	%
					Trend**	Reporting	Reporting	Reporting
Indicator	Sep Index A	ug Index	Change I	ndicator Direction*	(Months)	Increase	No Change	Decrease
Retail Activity in Texas								
Sales	33.7	34.4	-0.7	Increasing	103	45.9	42.0	12.2
Employment	13.0	19.1	-6.1	Increasing	4	19.9	73.2	6.9
Part-Time Employment	3.7	-2.0	+5.7	Increasing	1	9.3	85.1	5.6
Hours Worked	2.3	3.8	-1.5	Increasing	2	8.8	84.7	6.5
Wages and Benefits	32.7	30.3	+2.4	Increasing	105	33.2	66.3	0.5
Input Prices	42.6	43.9	-1.3	Increasing	101	45.9	50.8	3.3
Selling Prices	40.0	36.2	+3.8	Increasing	101	43.3	53.3	3.3
Capital Expenditures	26.2	22.8	+3.4	Increasing	12	29.5	67.2	3.3
Inventories	14.8	15.0	-0.2	Increasing	11	29.0	56.8	14.2
Companywide Retail Activit	ty							
Companywide Sales	35.0	34.9	+0.1	Increasing	102	44.6	45.8	9.6
Companywide Internet Sales	13.7	23.7	-10.0	Increasing	14	20.5	72.7	6.8

General Business Conditions, Retail Future (six months ahead)

						%	%	%
Indicator	Sep Index A	ıg Index	Change	Indicator Direction*	Trend** (Months)		Reporting No Change	
Company Outlook	31.1	17.9	+13.2	Improving	10	39.0	53.1	7.9
General Business Activity	31.2	11.6	+19.6	Improving	13	36.6	58.0	5.4

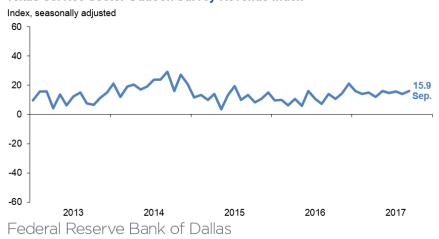
^{*}Indicator direction refers to this month's index. If index is positive (negative), indicator is increasing (decreasing) or improving (worsening). If zero, indicator is unchanged.

Data have been seasonally adjusted as necessary.

^{**}Number of months moving in current direction.

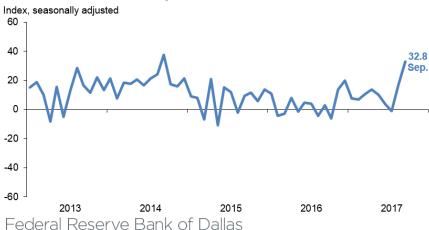
Texas Service Sector Outlook Survey

Texas Service Sector Outlook Survey Revenue Index



Texas Retail Outlook Survey

Texas Retail Outlook Survey Sales Index



Texas Service Sector Outlook Survey

September 26, 2017

Comments from Survey Respondents

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

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

- Good moisture has lifted crop yields and everyone's spirits. Auto sales are soft.
- Houston floods have a negative impact on our Houston operations for the oil and gas industry. Business was not great before and it's somewhat worse now. We are still plagued with costs still rising—mostly from regulations, insurance and now taxes.

Credit Intermediation and Related Activities

- Sales tax revenue is up year to date, and with current local economic activity from the World Championship Goat Cookoff, the start of dove hunting season and the infiltration of the wind generation construction crews, we should realize continued increases in sales tax for McCulloch County and the surrounding area. The Central Texas area and extending into West Texas has had steady rains up until the beginning of September, which is unusual but bodes well for going into the autumn and winter months for beef cattle and goat producers, with market reports showing steady to firm pricing.
- Our banks and our customers have storm damage. The recovery should increase revenue.
- My bank has been significantly impacted by Hurricane Harvey, but it's too early to adequately assess the total impact. We will know more in 90 days.

Real Estate

- We do not yet know the extent of Hurricanes Harvey and Irma's effects.
- The fall season and holidays will cause sales to slow. San Antonio continues to have a stable economy.

Telecommunications

Houston now has two challenging issues to include oil prices and Hurricane Harvey. I believe it will take a year or more to recover from Hurricane Harvey, and we are hopeful during this time frame oil prices will exceed \$60 a barrel, which will help improve the Houston economy. We are concerned that three flooding events in less than 16 months may inhibit any Fortune 1000 companies considering locating to the Houston area, and we may see some leave the area.

Professional, Scientific and Technical Services

- We are still maintaining a focus on Washington and a number of items going on there—from tax reform, to the Federal Reserve, to rhetoric around North Korea, the latter being somewhat troubling as there is a fair amount of uncertainty around what happens here. Something negative coming out of this inflammatory rhetoric we believe could have a very negative impact on the market and likely our clients and, as a result, us. There is a lot to watch in coming months.
- We have seen a strong uptick in orders from U.S. and overseas (Europe, Middle East and China) customers.
- We are still cautiously optimistic that work levels will be sustained through year-end. If tax reform is enacted prior to year-end, that will be a major boost for the professional services sector.
- 2017 has been another great year for the real estate industry, but we have noticed a decrease in residential and commercial orders over the past few months. The next few months will paint a better picture of where this market is headed, but it definitely feels like it is slowing down.
- We feel that the latter half of 2017 is improved over the first half of the year, thus, our projection of improved revenue. We project that 2018 will be similar to the latter half of 2017, which may allow us to hire to a small extent.
- Low oil prices are still depressing the pipeline market.
- The hurricanes have been a disruption to normal business activity. I expect things to get back on track soon.

- The construction side has upticked slightly; however, the number of proposals relative to future work has continued a downward slide since last November. Revenue, a relatively good indication of construction activity, is off about 12 percent from last year.
- Hurricane Harvey has delayed several projects that were to start at the end of August. Revenues for August were essentially zero, so
 Hurricane Harvey did not reduce my revenue from August, but the expected increase has not materialized.

Management of Companies and Enterprises

• We expect increased loan demand associated with repairs, construction and equipment purchases related to Hurricane Harvey recovery efforts and related contractors performing recovery services.

Administrative and Support Services

- The corporate aviation sector inspections continue to increase with major-type inspections coming due and not being delayed or deferred. This sector would be our largest increase in service calls since last quarter. The commercial aviation sector inspections continue to be relatively flat for revenue. With the newer aircraft frames coming into the inventory of operators, the first structural inspections due are being scheduled out further in time. The oil and gas sector inspections continue to be relatively flat—some minor maintenance-type replacement of parts and components are the main items being inspected at this time. The industrial sector inspections for newly machined parts for industrial assemblies has increased 20 percent since last quarter. We expect this market to increase as more requests for quotes are being generated as of the last quarter, and our capture rate for these has increased. Our biggest issue is regulatory issues with quality systems and the manpower that they require as they are nonproductive for revenue. The oversight cost has increased dramatically, and we have had to increase our selling prices to compensate for these costs.
- Some of the slowdown is a result of the hurricanes as our Houston office is shut down right now and we don't see the recovery happening quickly.

Ambulatory Health Care Services

- I estimate approximately 50 percent loss of revenue for the month of September due to Hurricane Harvey. We paid all of our employees full wages so we will experience a significant loss for the month. Fortunately, we have the financial strength to weather this economic blow.
- Hurricane Harvey impacted all four of the counties in our catchment area and has caused a significant decrease in our revenue and productivity. We expect to rebound by November 2017.
- Hurricane Harvey will have an impact on revenues in September; however, we still anticipate growth over the next six months. The number of employees will continue to increase related to our new division launch. Average workweeks should decrease as we get past the hurdles of a new division launch. Wages continue to increase due to low unemployment in DFW. Capital expenditures will increase at the start of the new year/budget cycle. The impact of the hurricane worsened the outlook for the near future.
- An increase in benefit costs (health coverage) is expected for 2018 at around 6 percent.

Nursing and Residential Care Facilities

• Labor shortages are driving overtime costs up. It is very difficult to find qualified employees.

Amusement, Gambling and Recreation Industries

■ We are looking at increases in costs that are hard to gauge and are out of our control. Our health care premiums were quoted as a 21 percent increase. The building we are in sold for what we thought was a whopping \$550 per square foot. We were ready for a large increase in property taxes; that was before the building across the street just sold for \$663 per square foot. That will reset the property taxes even higher. Property insurance is most assuredly going to rise to help cover the costs of the hurricanes, and the Texas Workforce Commission will need to increase its taxes to us to help cover the costs of all the people out of work from the hurricane. The parking and transportation issues are atrocious in Austin, with the city currently planning to reduce traffic lanes and add bike lanes as well as bus lanes. More of my time is dedicated to these types of issues rather than focusing on managing our business.

Accommodation

- Houston is our largest feeder market for our hotel. This is in direct relationship to Hurricane Harvey: We are definitely feeling the
 effects in the short term.
- Houston is the No. 1 feeder market for hotel stays, and the Gulf Coast is also a significant source of business. The impact of Hurricane Harvey, combined with the already weakened oil and gas sector, has resulted in trip and meeting cancellations and is reducing our future booking pace through the fall months.

Food Services and Drinking Places

- We have continuing problems with hiring and keeping cooks and dishwashers.
- The volume of business is falling off by about 5 percent (for the first time in at least five to six years). Sales are falling at the same rate.

 Traffic count is down.
- We did have five stores in Corpus Christi, Victoria and Houston that sustained some damage from the hurricane. We will have some additional capital expenditures for those sites, but were back up and running in less than a week at all locations. Sales have been strong post-reopening. We will be adding a new location in 2018—thus higher capital expenditures. We are planning normal raises and a small price increase to cover in January 2018. Overall, business remains strong.
- Hurricane damage and recovery will create strong economic changes.
- We are running flat. We are up but by less than the price increases we have taken (1 percent). That trend did not change when school started. Wages and benefits will be up in the new year because we have already received a preliminary notice of a very major price increase for health care—more than 10 percent. We are in the process of implementing a price increase effective today, the beginning of our new fiscal period, which is estimated to net 1.33 percent. So, no impact in the current portion of this response, but an immediate impact in the forward-looking portion of this response.
- The Federal Reserve continues to report no increase in wages despite lower unemployment. This is an inaccurate statement in the service industry. We are starting high school kids at \$12 an hour to staff our stores with good employees. A year ago, that number was \$10 an hour.

Personal and Laundry Services

■ Two new locations will be opening in the next three weeks. As a result of the new locations, we are hiring more employees. Every five years, we are having to increase prices just to keep up with inflation. Prices for our services will be increasing in October by almost 17 percent. The last price increase was in August 2012, and our next price increase, if needed, will not occur again until the year 2022 or later. There has been a significant increase in competition over the last three years and as a result, employee wages have been increasing substantially in order to attract and retain good employees. Our three largest expenditures for business operations in order are labor, rent and products. Over the last 12 months, these business expenses have increased by 12 percent, 8 percent and 18 percent, respectively.

Religious, Grantmaking, Civic, Professional and Similar Organizations

- Damage to our physical plant from Hurricane Harvey has affected our operations in that some of our campuses are closed for repairs.
- We have been heavily affected by Hurricanes Harvey and Irma.

Support Activities for Transportation

■ At this time, it is hard to judge the intermediate term (next three to six months) impact of Hurricane Harvey on our business activity.

Utilities

■ The initial impact from Hurricane Harvey is going to be negative as demand has declined. The longer-term impact, however, is expected to be positive as construction ramps up and previously vacant apartments and homes are rented. This should ultimately be positive for the Houston economy as federal funds flow through the economy.

Merchant Wholesalers, Durable Goods

■ A segment of our customer base responds to disasters. With Hurricanes Harvey and Irma, there will be a significant amount of work for at least the next three to six months. These disasters could add 20 percent to our revenue. Due to these disasters, we hire temporary and/or part-time workers, also the average workweek increases for our existing staff. We are about to launch a new e-commerce site and expect to see sales growth from this endeavor.

Merchant Wholesalers, Nondurable Goods

- Hurricane Harvey put a huge dent in sales the end of August and early September. I am keeping an eye on receivables as we move
 through the recovery. We hope to have things back on track in the next few months.
- Hurricane Harvey had a very severe impact on revenue. Back-to-school sales are down and recovery is very slow. The outlook for the remainder of the year remains questionable.

Motor Vehicle and Parts Dealers

- Being in the auto and truck sales business in Houston, we are currently an outlier. Because of several hundred thousand flooded vehicles needing to be replaced, our sales are incredibly strong.
- Weather news seems to have the consumer distracted.
- Although general business/economic characteristics have not dramatically changed, there will be improved results in our area (Central Texas) due to the increased demand created by the damage caused by Hurricane Harvey. I expect improved results as a result of this extraordinary situation to last approximately six months.

Clothing and Clothing Accessories Stores

■ The reason for the decreases in sales, employees and general level of business activity in Texas is the impact from Hurricane Harvey.

Questions regarding the Texas Service Sector Outlook Survey can be addressed to Amy Jordan at amy.jordan@dal.frb.org.



Special Questions

September 25, 2017

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 Sep. 12–20, and 390 Texas business executives responded to the surveys. Among responding firms, 78 are located along the Gulf Coast*.

1. What has been Hurricane Harvey's net impact to your firm's revenue/production?

	Gulf	Rest of		
	Coast	Texas	All Firms	
	(percent)	(percent)	(percent)	
Negative	77	31	41	
No impact	10	60	50	
Positive	13	8	9	

2. What do you expect the hurricane's net impact to your firm's revenue/production will be over the next six months?

	Gulf	Rest of	All Firms (percent)	
	Coast	Texas		
	(percent)	(percent)		
Significant decrease	16	3	6	
Slight decrease	37	24	27	
No change on net	21	52	46	
Slight increase	17	16	17	
Significant increase	8	4	5	

3. Because of Hurricane Harvey, how do you expect your firm's ability to find and hire workers to change over the next six months?

	Gulf	Rest of		
	Coast	Texas	All Firms	
	(percent)	(percent)	(percent)	
Become significantly more difficult	13	6	7	
Become slightly more difficult	32	17	20	
No change on net	52	73	69	
Become slightly easier	3	4	4	
Become significantly easier	0	0	0	

The following three questions were posed only to firms that noted a negative net impact from Hurricane Harvey.

4. Due to Hurricane Harvey, for how many days, if any, did your establishment experience...

					A Rec	iuction in	
	A Con	A Complete Shutdown			Revenue/Production		
	Gulf	Gulf Rest of		Gulf	Rest of		
	Coast	Texas	All Firms	Coast	Texas	All Firms	
	(percent	(percent	:) (percent)	(percent) (percent) (percent)	
None	6	59	33	2	17	11	
One to five days	67	30	48	34	43	39	
More than five days	27	11	19	64	40	50	
Average number of days	5.1	2.3	3.7	10.3	6.8	8.3	
Average number of nonzero days	5.4	5.7	5.5	10.5	8.3	9.2	

A Daduction in

Note: Of the firms who experienced a reduction in revenue/production, 59 percent noted that it is still ongoing.

5. Because of Hurricane Harvey, to what extent will the following impede your firm getting back to business as usual over the next six months?

For each disruption, firms reported whether it will be a major or minor disruption or none at all.

	Major Extent (percent)		Not at All (percent)
Personnel disruptions	19	46	35
Loss of customer base	17	50	33
Transportation and/or supply chain disruptions	14	51	36
Repair of facility	10	31	58
Repair/replacement of other capital (inventory/equipment)	7	24	68
Restoration of utilities (power/water/gas)	7	24	69
Ability to hire workers	5	27	68
Other	8	5	86

Note: This question was posed only to firms that expect the hurricane's net impact to be a decrease in revenue/production over the next six months.

6. To what extent will your firm's damages and/or losses due to Hurricane Harvey be covered by insurance (if applicable)?

	Physical capital losses (percent)	Revenue/ Production losses (percent)	
Not at All	58	74	
Somewhat	27	18	
Mostly	14	8	

^{*}For our analysis, Gulf Coast includes the metropolitan statistical areas of Houston, Beaumont-Port Arthur, Corpus Christi and Victoria. NOTE: Survey respondents were given the opportunity to provide comments. These comments can be found on the individual survey Special Questions results pages, accessible by the tabs above.

Texas Manufacturing Outlook Survey

Data were collected Sep. 12–20, and 108 Texas manufacturers responded to the survey. Among responding firms, 23 are located along the Gulf Coast*.

1. What has been Hurricane Harvey's net impact to your firm's revenue/production?

	Gulf	Rest of		
	Coast	Texas	All Firms	
	(percent)	(percent)	(percent)	
Negative	83	28	40	
No impact	9	64	52	
Positive	9	8	8	

2. What do you expect the hurricane's net impact to your firm's revenue/production will be over the next six months?

	Gulf	Rest of		
	Coast	Texas	All Firms	
	(percent)	(percent)	(percent)	
Significant decrease	18	5	8	
Slight decrease	32	17	20	
No change on net	27	52	47	
Slight increase	14	21	19	
Significant increase	9	5	6	

3. Because of Hurricane Harvey, how do you expect your firm's ability to find and hire workers to change over the next six months?

	Gulf	Rest of		
	Coast	Texas	All Firms	
	(percent)	(percent)	(percent)	
Become significantly more difficult	25	6	10	
Become slightly more difficult	35	19	22	
No change on net	35	68	61	
Become slightly easier	5	8	7	
Become significantly easier	0	0	0	

The following three questions were posed only to firms that noted a negative net impact from Hurricane Harvey.

4. Due to Hurricane Harvey, for how many days, if any, did your establishment experience...

				A Red	luction in
A Con	nplete S	hutdown	Revenue/Production		
Gulf	Rest of		Gulf	Rest of	
Coast	Texas	All Firms	Coast	Texas	All Firms
(percent)	(percent) (percent)	(percent)	(percent)) (percent)
6	83	39	0	21	11
50	8	32	31	42	37
44	8	29	69	37	51
6.1	0.9	3.9	10.8	8.4	9.5
6.5	5.5	6.4	10.8	10.6	10.7
	Gulf Coast (percent) 6 50 44 6.1	Gulf Coast Rest of Texas (percent) (percent) 6 83 50 8 44 8 6.1 0.9	Gulf Coast Rest of Texas All Firms (percent) (percent) (percent) 6 83 39 50 8 32 44 8 29 6.1 0.9 3.9	Gulf Coast (percent) Rest of Texas (percent) Gulf Coast (percent) 6 83 39 0 50 8 32 31 44 8 29 69 6.1 0.9 3.9 10.8	A Complete Shutdown Gulf Rest of Coast Texas All Firms (percent) (percent) 6 83 39 0 21 50 8 32 31 42 44 8 29 69 37 6.1 0.9 3.9 10.8 8.4

Note: Of the firms who experienced a reduction in revenue/production, 48 percent noted that it is still ongoing.

5. Because of Hurricane Harvey, to what extent will the following impede your firm getting back to business as usual over the next six months?

For each disruption, firms reported whether it will be a major or minor disruption or none at all.

	Major	Minor	
	Extent	Extent	Not at All
	(percent)	(percent)	(percent)
Personnel disruptions	14	38	48
Transportation and/or supply chain disruptions	14	57	29
Loss of customer base	10	45	45
Repair of facility	10	24	67
Repair/replacement of other capital (inventory/equipment)	5	24	71
Restoration of utilities (power/water/gas)	5	19	76
Ability to hire workers	0	33	67
Other	0	0	100

Note: This question was posed only to firms that expect the hurricane's net impact to be a decrease in revenue/production over the next six months.

6. To what extent will your firm's damages and/or losses due to Hurricane Harvey be covered by insurance (if applicable)?

	Physical capital losses (percent)	Revenue/ Production losses (percent)
Not at All	68	81
Somewhat	21	15
Mostly	11	4

^{*}For our analysis, Gulf Coast includes the metropolitan statistical areas of Houston, Beaumont-Port Arthur, Corpus Christi and Victoria.

Special Questions Comments

These comments have been edited for publication.

Chemical Manufacturing

Hurricane Harvey, while it did not have a direct effect on our revenue or production times, is going to decrease our profitability due to our increased raw material costs (price increases are coming quicker than we can raise prices) and will reduce our cash flow due to higher inventory requirements.

Primary Metal Manufacturing

■ Technical people will become more in-demand in the regions of the hurricanes, making them harder to find for normal business.

Fabricated Metal Product Manufacturing

- We have two significant production equipment machines that we are still trying to troubleshoot to repair/restore electrical systems.
 The machines are too expensive to replace, and flood insurance only covers depreciated value, so we may be out of production longer than anticipated.
- Shipments to Southeast Texas customers were delayed a few days following Hurricane Harvey, but we have not seen any other impact to date.
- We haven't been able to hire employees all year. Houston is at full employment.

Machinery Manufacturing

■ Though our facility did not have any physical damage (even inside Houston), many of our employees were unable to come to work due to blocked roads, damage to their homes or damage to their relatives' homes. This caused our office to be shut down for several days.

Transportation Equipment Manufacturing

• We are about to begin hiring again in earnest. Our guess is that it may be easier to find workers since some may have been displaced from businesses that experienced major or total losses due to Hurricane Harvey. But we haven't yet started that process, so we really won't know for a month or two.

Furniture and Related Product Manufacturing

■ There has been a labor shortage of skilled trades for installation of our product for a while already. Hurricane Harvey may cause that to increase, which, if it does, will force lower construction rates in other areas where that labor was pulled from.

Food Manufacturing

• We were not affected by the storm, but many customers in areas hard-hit have lost facilities or are now producing less due to their demand decreasing.

Printing and Related Support Activities

■ We were not impacted at all, but many of our Houston-area customers were, and we lost a very nice quick-turn job that was going to be produced in Houston. But because they couldn't find truckers to bring printed materials into Texas amid worries about fuel shortages and closed roads, the job went to a different part of the country. It was worth 10 percent of our monthly billing.

Miscellaneous Manufacturing

• I feel that construction pay increases in Houston will cause Central Texas workers to migrate that way, thus exacerbating the current labor shortage and wage increases we have been facing.

Texas Service Sector Outlook Survey

Data were collected Sep. 12–20, and 282 Texas business executives responded to the survey. Among responding firms, 55 are located along the Gulf Coast*.

1. What has been Hurricane Harvey's net impact to your firm's revenue/production?

	Gulf Rest of	:
	Coast Texas	All Firms
	(percent) (percent	t) (percent)
Negative	75 33	41
No impact	11 59	50
Positive	15 8	10

2. What do you expect the hurricane's net impact to your firm's revenue/production will be over the next six months?

	Gulf	Rest of		
	Coast	Texas	s All Firms	
	(percent)	(percent)	(percent)	
Significant decrease	15	3	5	
Slight decrease	40	27	29	
No change on net	19	52	45	
Slight increase	19	15	16	
Significant increase	8	4	5	

3. Because of Hurricane Harvey, how do you expect your firm's ability to find and hire workers to change over the next six months?

	Gulf	Rest of	All Firms	
	Coast	Texas		
	(percent)	(percent)	(percent)	
Become significantly more difficult	8	5	6	
Become slightly more difficult	31	17	19	
No change on net	59	76	73	
Become slightly easier	2	2	2	
Become significantly easier	0	0	0	

The following three questions were posed only to firms that noted a negative net impact from Hurricane Harvey.

4. Due to Hurricane Harvey, for how many days, if any, did your establishment experience...

					A Red	luction in
	A Con	A Complete Shutdown		Revenue/Product		oduction
	Gulf	Rest of		Gulf	Rest of	
	Coast	Texas	All Firms	Coast	Texas	All Firms
	(percent) (percent	t) (percent)	(percent) (percent) (percent)
None	6	52	31	3	15	10
One to five days	75	36	54	35	43	40
More than five days	19	12	15	62	42	49
Average number of days	4.7	2.7	3.6	10.1	6.3	7.8
Average number of nonzero days	5.0	5.7	5.3	10.4	7.4	8.7

Note: Of the firms who experienced a reduction in revenue/production, 64 percent noted that it is still ongoing.

5. Because of Hurricane Harvey, to what extent will the following impede your firm getting back to business as usual over the next six months?

For each disruption, firms reported whether it will be a major or minor disruption or none at all.

	Major	Minor		
	Extent		Not at All (percent)	
	(percent)			
Personnel disruptions	20	49	31	
Loss of customer base	19	51	30	
Transportation and/or supply chain disruptions	14	49	38	
Repair of facility	11	33	56	
Repair/replacement of other capital (inventory/equipment)	8	24	68	
Restoration of utilities (power/water/gas)	8	25	67	
Ability to hire workers	7	25	68	
Other	10	7	83	

Note: This question was posed only to firms that expect the hurricane's net impact to be a decrease in revenue/production over the next six months.

6. To what extent will your firm's damages and/or losses due to Hurricane Harvey be covered by insurance (if applicable)?

	Physical capital losses (percent)	Revenue/ Production losses (percent)
Not at All	56	72
Somewhat	29	19
Mostly	15	10

^{*}For our analysis, Gulf Coast includes the metropolitan statistical areas of Houston, Beaumont-Port Arthur, Corpus Christi and Victoria.

Special Questions Comments

These comments have been edited for publication.

Credit Intermediation and Related Activities

- We are waiting to determine what delayed impacts the hurricane will have on our market areas. We have a low percentage of our loan portfolio in the affected areas and are waiting on assessments of those credits. We anticipate we will see the increased cost for gas continue and building materials as well. Our community saw an increase in occupation rates at hotels and provided sanctuary for a number of people in available facilities but expect that to be short term.
- Our employees and physical facilities were not impacted, but we had several prospects about to sign a contract with us that had to delay their decision-making due to Hurricane Harvey. We believe they will sign at some point, but this will have an impact on our sales bookings for the third and fourth quarters of 2017.
- We are a commercial bank, and the survey questions are difficult to answer because the major impact will be determined by the impact on our customers, and it's much too early to determine that impact.

Insurance Carriers and Related Activities

As a managing general agent for specialty carriers underwriting wind-exposed risks along the coast and inland including Houston, we expect to see 5 to 10 percent rate increases in premiums on new and renewal business over the next 12 months. We don't expect either Hurricanes Harvey or Irma to significantly impact the underwriting availability of coverage for wind-exposed risks.

 Our business is 300 miles inland. We have some clients who were in Hurricane Harvey's path, but most of their losses were insured (wind or flood) losses.

Real Estate

While we do not feel we will be directly impacted, we do recognize that any construction-related work we need in Austin, San Antonio or any of the Rio Grande Valley markets will probably be more costly and harder to accomplish due to labor or materials costs or shortages.

Rental and Leasing Services

■ I think there will be many opportunities to finance equipment to new and old customers, as many will have difficulty getting the down payment that lending firms require today. Their business has been flooded, and they don't have a cash flow right now; some will be new companies and not have sufficient credit history to meet the regulatory rules lenders require today, who will need quick, simple, easy, fast, skip payment, delayed payment, low interest rate, low down payment money available.

Professional, Scientific and Technical Services

- We lost time in the office but a number of our lawyers can work remotely. I expect we will see increased activity in hurricane-related claims in the months ahead.
- The economic impact of Hurricanes Harvey and Irma will have a significant impact upon the state of Texas.
- We are a professional engineering firm. We are expecting an uptick in project work. It is still too early to see if funding will be forthcoming for infrastructure projects.
- We were fortunate in that this was not a direct hit on the Houston metro area, and for the most part, power was maintained. This was key to us keeping folks—who were water-locked at home—engaged and working as best they could, particularly work-at-home staff, and also professionals who could work remotely. Some clients were no doubt offline. Our business continuity/disaster recovery plans worked very well, and we saw no systems disruption. The impact was isolated to Houston-based personnel and their inability to access the building for a couple of days, as folks were limited in ability to travel with widespread road flooding.
- I expect the rebuilding activity to have a net positive effect for the economy—notwithstanding the immediate negative impact—and therefore be an indirect positive effect on the economy throughout Texas.
- We expect significant cost increases on select building materials for our projects, possibly to the point of endangering going forward with construction on some projects. The increases are expected in drywall, metal studs and flooring materials.
- The overall effects of Hurricane Harvey on our business will be slight. We will have slightly higher costs this month due to lost production, but that will be made up in short order. About 15 percent of our staff were effected by flooding in their homes but all have returned to work while repairs are being made.
- We have received two small orders due to hurricane disruption but nothing significant enough to record. We cover San Antonio,
 Austin and South Texas and, thankfully, did not have much flooding in our footprint.

Management of Companies and Enterprises

■ We have two assessment areas. Only one was impacted to some extent. The impacted area was slightly affected, and the loss of production was due to power outage and not flooding. The impacted area is 100 percent operational. Some clients were negatively impacted but not a large segment. There has been some slowdown but minimal overall impact.

Administrative and Support Services

■ The effect we most see with Hurricane Harvey is the shipment of customers' parts to and from our lab.

Educational Services

• With construction/repair increasing in the Houston and Gulf Coast area, we are concerned about construction costs rising in Texas as well as availability of workers, etc.

Hospitals

- We are too far from the coast to be materially impacted.
- We expect costs to increase around Texas.

Social Assistance

As a food bank, we have sent a significant amount of food to the areas affected by Hurricane Harvey and have been providing meals
to evacuees. We have also seen increased donations and volunteers in response to the disaster.

Food Services and Drinking Places

- We got busier for a week or so because the hotels around us (Dallas suburbs) filled up with displaced Houstonians. That said, the hurricane had a very adverse effect on our Houston stores.
- Revenues for the recent period were down at the five stores impacted in Corpus Christi, Victoria and Houston. We were one of the first to reopen, and our sales have been very strong post-reopening. We are not sure how long this will last as other businesses get back on their feet.

Personal and Laundry Services

• Our business has not been impacted by Hurricane Harvey.

Texas Retail Outlook Survey

Data were collected Sep. 12–20, and 61 Texas retailers responded to the survey. Among responding firms, 16 are located along the Gulf Coast*.

1. What has been Hurricane Harvey's net impact to your firm's revenue/production?

	Gulf Rest of	
	Coast Texas All Firm	ns
	(percent) (percent) (percen	ıt)
Negative	63 24 34	
No impact	0 53 39	
Positive	38 22 26	

2. What do you expect the hurricane's net impact to your firm's revenue/production will be over the next six months?

Coast	Texas	All Firms
(percent)	(percent)	(percent)
0	0	0
44	30	33
19	34	30
25	25	25
13	11	12
	0 44 19 25	(percent) (percent) 0 0 44 30 19 34 25 25

3. Because of Hurricane Harvey, how do you expect your firm's ability to find and hire workers to change over the next six months?

	Gulf	Rest of		
	Coast	Texas	All Firms (percent)	
	(percent)	(percent)		
Become significantly more difficult	13	7	9	
Become slightly more difficult	38	21	26	
No change on net	44	71	64	
Become slightly easier	6	0	2	
Become significantly easier	0	0	0	

The following three questions were posed only to firms that noted a negative net impact from Hurricane Harvey.

4. Due to Hurricane Harvey, for how many days, if any, did your establishment experience...

					A Red	uction in
	A Complete Shutdown		Revenue/Production			
	Gulf	Rest of		Gulf	Rest of	
	Coast	Texas	All Firms	Coast	Texas	All Firms
	(percent)	(percent) (percent)	(percent)	(percent) (percent)
None	0	67	27	0	0	0
One to five days	89	33	67	30	71	47
More than five days	11	0	7	70	29	53
Average number of days	4.3	1.2	3.0	9.7	5.3	7.9
Average number of nonzero days	4.3	3.5	4.1	9.7	5.3	7.9

Note: Of the firms who experienced a reduction in revenue/production, 70 percent noted that it is still ongoing.

5. Because of Hurricane Harvey, to what extent will the following impede your firm getting back to business as usual over the next six months?

For each disruption, firms reported whether it will be a major or minor disruption or none at all.

	Major	Minor	Not at All (percent)
	Extent		
	(percent)		
Transportation and/or supply chain disruptions	29	57	14
Loss of customer base	13	67	20
Personnel disruptions	7	57	36
Restoration of utilities (power/water/gas)	7	33	60
Repair of facility	0	47	53
Repair/replacement of other capital (inventory/equipment)	0	47	53
Ability to hire workers	0	33	67
Other	0	0	100

Note: This question was posed only to firms that expect the hurricane's net impact to be a decrease in revenue/production over the next six months.

6. To what extent will your firm's damages and/or losses due to Hurricane Harvey be covered by insurance (if applicable)?

	Physical capital losses (percent)	Revenue/ Production losses (percent)
Not at All	63	63
Somewhat	25	25
Mostly	13	13

^{*}For our analysis, Gulf Coast includes the metropolitan statistical areas of Houston, Beaumont-Port Arthur, Corpus Christi and Victoria.

Special Questions Comments

These comments have been edited for publication.

Merchant Wholesalers, Durable Goods

• We have done business in Houston for over 35 years; we are serving and responding to our customer's needs for gypsum, insulation, roofing, doors, moulding and other related products as homeowners begin to repair their homes.

Motor Vehicle and Parts Dealers

- We are in the marine business and expect some revenue from repair or replacement of damaged boats, motors and equipment.
- We will experience a slight increase as a result of the number of vehicles being totaled. We aren't close enough to experience a major impact. Generally, the dealers in the impacted area will see a big increase in their overall business (new, preowned, certified preowned, rental, service loaner, parts, and service and collision centers).

Clothing and Clothing Accessories Stores

• Our corporate headquarters recovery took about a week; most stores took about five days to recover, but 10 stores had damage that will keep them closed until approximately Thanksgiving.

General Merchandise Stores

■ We have eight locations in Houston. One was flooded and will be closed for up to a couple of months.

Nonstore Retailers

• I expect our ability to hire personnel may be impacted to a minor extent but could be major. I expect the cleanup, repair and rebuild efforts will absorb a great deal of the workforce we would typically draw from, although I don't know to what extent this may be offset by companies and individuals from outside Houston coming in to assist/benefit from these efforts. I see this driving wages higher in the area.

Questions regarding the Texas Service Sector Outlook Survey can be addressed to Amy Jordan at amy.jordan@dal.frb.org.