Outlook for the Texas Economy

LUIS B. TORRES
RESEARCH ECONOMIST

WESLEY MILLER
RESEARCH ASSOCIATE

PAIGE SILVA
RESEARCH ASSOCIATE

JACOB STRAUS
RESEARCH INTERN

2046
NOVEMBER 2020 DATA
TECHNICAL REPORT
# About this Report

November 2020 Summary .......................................................... 4

## Economic Activity ................................................................. 10
- Gross Domestic Product ......................................................... 10
- Texas Business Cycle Index and Leading Index ......................... 10
- Major Metros Business Cycle Index ........................................ 11
- Consumer Confidence Index .................................................. 11

## Financial Activity ................................................................. 12
- 30-Year Mortgage Rate and Ten-Year Bond Yield ....................... 12
- Texas Mortgage Applications .................................................. 12
- Fixed 30-Year Mortgage Rates ............................................... 13

## Housing ............................................................................. 14
- Housing Sales .................................................................... 14
- Texas Residential Construction Index .................................... 14
- Major Metros Residential Leading Construction Index .............. 15

## Energy .............................................................................. 16
- Crude Oil and Natural Gas Prices .......................................... 16
- Texas Production of Crude Oil and Rig Count ......................... 16

## Employment .................................................................... 17
- Employment Growth Rate .................................................... 17
- Unemployment Rate ............................................................... 17
- Major Metros Unemployment Rate ......................................... 18
- Unemployment Insurance Claims: Initial Applications ........... 18
- Unemployment Insurance Claims: Continued Applications ...... 19
- Labor Force Participation Rate ............................................... 19
- Total Private Employee Hourly Earnings ............................... 20
- Major Metros Total Private Employee Hourly Earnings .......... 20
- Major Metros Employment Growth Rate ............................... 21

## Manufacturing ..................................................................... 22
- Manufacturing Employment ................................................... 22
- Major Metros Manufacturing Employment .............................. 22
- Manufacturing Employee Hourly Earnings ............................. 23
- Major Metros Manufacturing Employee Hourly Earnings ........ 23
- Manufacturing Outlook Survey ............................................. 24

## Construction ..................................................................... 25
- Construction Employment ...................................................... 25
- Construction Employee Hourly Earnings ............................... 25
Texas Construction Values .................................................................................................................. 26
Major Metros Total Construction Values........................................................................................ 26

**Services** ....................................................................................................................................... 27
Services Sector Outlook Survey ........................................................................................................ 27
Texas Retail Sector ............................................................................................................................ 27
CPI Inflation Rates ............................................................................................................................ 28
CPI Inflation Rates (Dallas-Fort Worth Components) ........................................................................ 28

**Trade** ........................................................................................................................................... 29
Real Trade Weighted Value of U.S. Dollar .......................................................................................... 29
Exports (All Commodities) ................................................................................................................ 29
Manufacturing Exports ....................................................................................................................... 30
Crude Oil Exports ............................................................................................................................. 30
Texas Exports by Country ................................................................................................................... 31
Texas Real Estate Research Center economists continuously monitor many facets of the global, national, and Texas economies. *Outlook for the Texas Economy* summarizes significant state economic activity and trends. All measurements are calculated using seasonally adjusted data, and percentage changes are calculated month over month, unless stated otherwise.

This publication is designed to be a one-stop resource for economic indicators. We hope you find them as useful as we do. Your feedback is always appreciated. Send comments and suggestions to info@recenter.tamu.edu.

Dr. Luis Torres, Wesley Miller, Paige Silva, and Jacob Straus
Summary

Economic activity slowed within Texas during November, but the state remained on the path to recovery. Payrolls expanded half a percent, double the rate of national growth, with Fort Worth leading the major Metropolitan Statistical Areas (MSAs) for the second straight month. Manufacturing and service-providing hiring contributed to the overall deceleration, but construction and retail employment growth picked up. Texas’ jobless rate, however, erased the previous month’s downtick. The Texas Real Estate Research Center’s Texas weekly leading index suggested economic improvement continued in December, albeit at a more moderate pace. The pandemic and associated uncertainty remained the greatest headwind to the Lone Star State’s comeback. Vaccine distribution and an approved second round of federal stimulus, however, promoted an optimistic outlook heading into the new year.

Third quarter 2020 gross domestic product (GDP) data revealed Texas’ economy rebounded 29.7 percent on a seasonally adjusted annualized rate (SAAR) from the pandemic-stricken preceding two quarters. Every industry except mining/quarrying/oil and gas extraction contributed to the Lone Star State’s upturn. Health care/social assistance, manufacturing, and accommodation/food services were among the sectors hit particularly hard during the economic shutdown, and they recorded the greatest growth rates in 3Q2020.

Texas’ economic recovery, however, moderated after a strong start to the fourth quarter, corroborated by the Dallas Fed’s Texas Business-Cycle Index, which increased 10.8 percent SAAR. Dallas and Houston indexes stabilized at 7.5 and 5.6 percent growth, respectively. Economic activity rose 4.3 percent in Fort Worth and inched up 1.2 percent in San Antonio. Austin’s metric grew 11.1 percent, faster than the statewide pace but slower than its clip the previous month.

The Texas Leading Economic Index (a measure of future directional changes in the business cycle) posted a seventh straight monthly gain with only the average weekly hours worked in manufacturing component hindering improvement. The Texas Consumer Confidence Index accelerated more than six points despite COVID-19 cases continuing to climb, compared with national confidence which fell 8.5 points.

Expansionary monetary measures by the Federal Reserve and positive news regarding the coronavirus vaccines lessened investors’ urges to buy safe haven assets. The ten-year U.S. Treasury

---

1 All measurements are calculated using seasonally adjusted data, and percentage changes are calculated month-over-month, unless stated otherwise.
bond yield inched up for the fourth straight month to 0.9 percent. Still, a resurgence in COVID-19 cases and persistent uncertainty surrounding the pandemic kept interest rates hovering at historically low levels. The Federal Home Loan Mortgage Corporation's 30-year fixed-rate fell to an unprecedented reading below 2.8 percent (series starting in 1971). Mortgage rates hovered around decades-low levels within Texas during October, sinking to an average of 2.89 percent for non-government-sponsored enterprise (GSE) loans, while the average interest rate for GSE loans was 2.95 percent. Home-purchase applications stabilized in November but remained up 16.7 percent YTD. Refinance applications nearly doubled since year-end after tripling in 2019, but the pace is expected to decelerate as lenders add more requisites and amid a shrinking pool of qualified households. (For more information, see Finding a Representative Interest Rate for the Typical Texas Mortgagor at https://www.recenter.tamu.edu/articles/research-article/Finding-Representative-Interest-Rate-2278.)

Total Texas housing sales stabilized in November following record-setting levels the previous month. The Texas Residential Construction Cycle (Coincident) Index, which measures current construction levels, ticked down as real wages and industry employment slowed. Hiring in residential construction, however, has generally been positive since the initial decline in March and April. The Residential Construction Leading Index decreased due to a fall in building permits and housing starts, normalizing after strong growth in the months when the economy first reopened. The real interest rate for the ten-year Treasury bill increased, which also weighed on future improvements. On the other hand, the metropolitan leading indexes trended upward in all but North Texas, where the same statewide factors contributed to a downward adjustment in the metric. (For additional housing commentary and statistics, see Texas Housing Insight at recenter.tamu.edu.)

The West Texas intermediate (WTI) crude oil spot price held at $40 as progress on the vaccine front offset renewed lockdown restrictions in Europe. Changes in global health and economic activity affect oil prices through demand expectations. Overall, the U.S. Energy Information Administration forecasts positive global consumption growth in 2021 after falling the past year amid pandemic-related disruptions. Steady price levels pulled Texas’ active rig count to its highest reading since May at 143. Crude oil production, however, fell for the third consecutive month to 4.6 million barrels per day in October. Meanwhile, the Henry Hub spot price flattened at $2.16 per million British thermal unit (BTU) as significantly warmer-than-average temperatures tempered demand. Prices are still anticipated to rise heading into 2021 but a lesser rate due to higher-than-expected storage levels.

Although Texas led the nation in jobs added during November, nonfarm employment growth decelerated, resulting in a 61,000-job increase compared with nearly double the gain the previous month. The Dallas Fed revised its annual employment projection from a 5.6 to a 5.3 percent contraction. Nevertheless, Texas’ unemployment rate rose to 8.1 percent, corroborating weak

---

2 Bond and mortgage interest rates are nonseasonally adjusted. Loan-to-value ratios, debt-to-income ratios, and the credit score component are also nonseasonally adjusted preliminary data. Texas data typically lags the Outlook for the Texas Economy by one month.

3 The release of crude oil production typically lags the Outlook for the Texas Economy by one month.
labor-market conditions. In contrast, the national average ticked down to 6.7 percent. The state’s labor force participation rate, however, improved to 63.2 percent compared with the U.S. rate of 61.5 percent. Joblessness jumped by more than a percentage point across Texas’ major metros, although local labor forces also expanded. Houston’s metric elevated 9.2 percent, followed by San Antonio and Fort Worth with 7.5 percent unemployment each. Joblessness in Dallas climbed to 7.4 percent. Austin was the exception with the rate ticking up less than a percentage point to 6 percent.

On the bright side, the number of Texans filing initial unemployment insurance claims decreased by 29,700 to 149,100 with claims rising during only one week during November (Figure 1). Initial claims also trended downward on the metropolitan level (Figure 2). Moreover, Texas’ average weekly continued unemployment insurance claims dropped throughout the month to 479,800. While reliability of the data is still a concern, total claims were still two-and-a-half times greater than pre-pandemic levels in February. Nevertheless, consistent declines in claims filed are positive indicators for the economic recovery.

Texas’ average real private hourly earnings rose 2.4 percent year over year (YOY) but fell short of the national growth rate of 4.1 percent. Since the onset of the pandemic, high-wage earners have seen an acceleration in wage growth, while low-income workers have observed a deceleration, reflecting the disparate impacts of the pandemic and its economic aftermath. Dallas led the state in nominal wages, paying an average of $31.48 per hour, jumping 7 percent after accounting for inflation. In real terms, Fort Worth boasted the highest annual percentage growth, surging 10.6 percent to $28.62. Outside of North Texas, hourly earnings improved at more moderate rates. Houston ($28.55) posted a 1.9 percent increase, while wages ticked up 2.1 and 0.6 percent YOY in Austin ($30.41) and San Antonio ($25.24), respectively.

Hiring slowed across the major metropolitan areas, but job growth hovered around the state average of half a percent. Dallas and Austin gained 11,300 and 6,100 new employees, respectively, with professional/business services leading the recovery. In Houston, the transportation/utilities, education/health services, and leisure/hospitality sectors were the largest contributors to the 18,200-job increase. Fort Worth and San Antonio were the exceptions, with the former nearly doubling the state’s growth rate after expanding payrolls by 9,900 workers. San Antonio employment flattened, adding just 200 positions due to contractions in education/health services and retail trade.

Momentum in Texas’ goods-producing sector decelerated in November, resulting in 4,500 jobs created. Energy-related employment contracted by 1,400 positions following a modest two-month uptick compared with 47,900 layoffs between March and August. Payroll expansions in the manufacturing industry were concentrated in the nondurable goods branch, which increased by 2,700 workers. On the other hand, 4,300 durable-goods employees were dismissed on top of stagnant hiring the previous month. While the Texas Manufactured Housing Survey reported new orders and sales declined for the second straight month, partially due to seasonal factors, the outlook remained favorable. Manufacturers planned for the future with significant investment in capital expenditures to combat supply-chain issues. Coinciding with the reduction in overall
manufacturing employment, **average hourly manufacturing earnings** moderated to 5.8 percent growth after accounting for inflation. Real industry wages in Dallas flattened, and Houston’s metric sank 7 percent YOY. In contrast, Fort Worth and San Antonio posted double-digit annual growth. The **Dallas Fed’s Manufacturing Outlook Survey** corroborated earnings data in addition to the employment index accelerating. Most business indicators also remained in positive growth territory, but the growth rates of the production, capacity utilization, and new orders metrics slowed. Comments revealed persistent uncertainty regarding the pandemic and the new presidential administration’s policies.

The construction industry was the only goods-producing sector to expand payrolls, gaining 7,500 new workers. The previous month’s 9,400-job increase, however, was revised downward by 3,000 positions. The jobs added were unlikely higher-paying positions, as **average hourly construction earnings** decreased 3.2 percent annually in real terms. Despite ongoing hiring, inflation-adjusted **total construction values** dropped 9.9 percent as residential activity pulled back from an all-time high the previous month. All four major metropolitan areas posted declines in both apartment and single-family values, but YTD construction in the latter sector still exceeded last year’s eleven-month sum by 13.7 percent. On the other hand, nonresidential construction values improved for the first time in four months as warehouse and hotel/motel values rebounded to their year-long averages, while school-building construction rose in every MSA except Houston.

Service-providing jobs recouped 56,500 positions but still fell 3.5 percent below year-end levels. Accelerated hiring in transportation/utilities resulted in 16,100 additional workers, while food services/drinking places expanded payrolls by 12,900 jobs. Professional/business services and health care/social assistance employment, however, contributed to the deceleration in overall job growth. The **Dallas Fed’s Service Sector Outlook Survey** supported the data with the employment index flattening for the second consecutive month as more respondents reported a decrease in revenues rather than an improvement. Moreover, outlook uncertainty increased amid rising COVID-19 cases, and both the company outlook and general business activity indexes tipped into negative growth territory. Expectations of future conditions, however, were stable.

Texas retailers added 5,800 employees to their ranks with employment at motor vehicle/parts dealers and gasoline stations gaining 1,000 and 2,000 workers, respectively. On the other hand, health/personal care stores and clothing/clothing accessories stores registered the largest contractions, laying off about 4,000 employees each. Inflation-adjusted retail sales stalled in November, plunging 7.1 percent YOY. Correspondingly, one-third of participants in the **Dallas Fed’s Retail Outlook Survey** noted decreased sales versus one-fifth who reported increased sales. The labor-market indexes indicated conditions worsened during the month, contrasting the data. On the bright side, perceptions of future business activity remained optimistic.

The **U.S. Consumer Price Index (CPI)** rose 1.2 percent YOY as food/beverage and housing prices stabilized at 3.7 and 2.0 percent growth, respectively. Medical prices decelerated, but the transportation index continued to be the main drag on the overall CPI. Excluding food and energy costs, core inflation increased 1.6 percent, persisting below the Fed’s 2 percent target. In DFW, the metric flattened with its year ago reading, pulled down by the transportation component.
The Texas trade-weighted value of the dollar fell for the fourth consecutive month in November, making domestic goods more affordable to the foreign buyer relative to the prior month. Furthermore, the metric ticked up just 1.5 percent YOY compared with double-digit annual growth in the second quarter. Nevertheless, Texas’ real commodity exports flattened at four-fifths of February’s record levels as manufacturing exports dropped 2.9 percent. Decreased transportation equipment and computer/electronic products shipments accounted for most of the decline. On the bright side, crude oil exports rebounded 16.3 percent due to increased purchases from the Netherlands and India. Values, however, remained less than half of the year-end reading.

The Center created a Texas weekly leading index to predict turning points in the Texas economy. (For more information, see COVID-19 Impact Projections on Texas Economy at https://www.recenter.tamu.edu/articles/special-report/COVID-19-Impact-Projections.) The index fluctuated during the month but decreased the last week of December (Figure 3), presenting a cautious outlook for the start of 2021. Initial unemployment claims skyrocketed at the beginning of the month but decreased the last week of December (Figure 3), presenting a cautious outlook for the start of 2021. Initial unemployment claims skyrocketed at the beginning of the month, and new business applications fell to pre-pandemic levels, signaling that economic activity is weakening. The real rate for the ten-year Treasury bill (which continues to exhibit a negative return in real terms) inched up throughout the month, offsetting improvements in the real WTI oil price. The economic recovery continues to be hindered by the incomplete reopening of the economy and uncertainty regarding the pandemic.

![Figure 1. Texas Weekly Initial Unemployment Claims and New COVID-19 Cases (2020)](image)

Note: Initial unemployment claims are seasonally adjusted.
Note: Initial unemployment claims are seasonally adjusted.

Sources: Texas Workforce Commission, U.S. Department of Labor Employment and Training Administration, and Texas Real Estate Research Center at Texas A&M University calculations.

Note: Data updated through December 26, 2020.
Source: Texas Real Estate Research Center at Texas A&M University
Gross Domestic Product
(Quarter-over-Quarter Percent Change)

Note: Seasonally adjusted annualized rate.
Source: Bureau of Economic Analysis

Texas Business Cycle Index and Leading Index
(Index Jan 2007 = 100)

Note: Seasonally adjusted. For more information, see Texas Business Cycle Index.
Source: Federal Reserve Bank of Dallas
Note: Seasonally adjusted. For more information, see Texas Business Cycle Index.
Source: Federal Reserve Bank of Dallas

Note: Trend-cycle component.
Source: Conference Board
30-Year Mortgage Rate and Ten-Year Bond Yield
(Percent)

Note: Nonseasonally adjusted.
Sources: Federal Home Loan Mortgage Corporation and Federal Reserve Board

Texas Mortgage Applications
(Year-over-Year Percentage Change)

Note: Seasonally adjusted.
Source: Mortgage Bankers Association
Note: Nonseasonally adjusted. The data for the most recent origination month is preliminary.
Sources: Federal Home Loan Mortgage Corporation and TrueStandings Servicing
Note: Trend-cycle component. Sales for the United States include all existing homes and new single-family homes; new non-single-family homes are not included. Texas includes all existing and new homes. For more information, see Housing Sales.
Sources: U.S. Census Bureau, National Association of Realtors, and Texas Real Estate Research Center at Texas A&M University.
Note: Trend-cycle component.
Sources: Texas Real Estate Research Center at Texas A&M University and Federal Reserve Bank of Dallas
Note: Trend-cycle component. For more information, see Crude Oil and Natural Gas Prices. Source: U.S. Energy Information Administration received from Thomson Reuters

Note: Trend-cycle component. For more information, see Texas Production of Crude Oil and Rig Count. Sources: Baker Hughes and U.S. Energy Information Administration
Employment Growth Rate
(Quarter-over-Quarter Annualized Percent Change)

United States
Texas

Note: Seasonally adjusted, three-month moving average. November 2020 is preliminary. For more information, see Employment Growth Rate. Source: Bureau of Labor Statistics

Unemployment Rate
(Percent)

United States
Texas

Note: Seasonally adjusted. November 2020 is preliminary. For more information, see Unemployment Rate. Source: Bureau of Labor Statistics
Note: Seasonally adjusted. November 2020 is preliminary. For more information, see Unemployment Rate.
Source: Bureau of Labor Statistics

Note: Seasonally adjusted. For more information, see Unemployment Insurance Claims: Initial Applications.
Source: Department of Labor
Unemployment Insurance Claims: Continued Applications

(United States)  (Texas)

Note: Seasonally adjusted. Average weekly continued claims.
Source: Department of Labor/Haver Analytics

Labor Force Participation Rate
(Percent)

Note: Seasonally adjusted. For more information, see Unemployment Rate.
Source: Bureau of Labor Statistics
Notes: Inflation adjusted, seasonally adjusted. November 2020 is preliminary.
For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Note: Seasonally adjusted, three-month moving average. November 2020 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Note: Seasonally adjusted, three-month moving average. November 2020 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics

Note: Seasonally adjusted, three-month moving average. November 2020 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Notes: Inflation adjusted, seasonally adjusted. November 2020 is preliminary. For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Note: Seasonally adjusted. For more information, see Manufacturing Outlook Survey. United States index is adjusted -50 to be on scale with Texas index.

Sources: Federal Reserve Bank of Dallas and Institute for Supply Management
Note: Seasonally adjusted, three-month moving average. November 2020 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics

Notes: Inflation adjusted, seasonally adjusted. November 2020 is preliminary. For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Note: Inflation adjusted trend-cycle component.
Source: Dodge Analytics
Note: Seasonally adjusted. For more information, see Services Sector Outlook Survey. United States index is adjusted -50 to be on scale with Texas index.
Sources: Federal Reserve Bank of Dallas and Institute for Supply Management

Note: Seasonally adjusted and inflation adjusted. For more information, see Texas Retail Sector. Sources: Retail Sector Outlook Survey from the Federal Reserve Bank of Dallas, Retail Sales from Texas Comptroller of Public Accounts
CPI Inflation Rates
(Year-over-Year Percent Change)

Note: Seasonally adjusted. For more information, see CPI Inflation Rates.
Source: Bureau of Labor Statistics

CPI Inflation Rates (Dallas-Fort Worth Components)
(Year-over-Year Percent Change)

Note: The Dallas-Fort Worth CPI is composed of the following major groups: Food and Beverages, Housing, Apparel, Transportation, Medical Care, Recreation, Education and Communication, and Other Goods and Services. The four major components are included in the graph above.
Source: Bureau of Labor Statistics
Real Trade Weighted Value of U.S. Dollar
(Index Jan 2007 = 100)

United States
Texas

Note: For more information, see Real Trade Weighted Value of U.S. Dollar.
Sources: Federal Reserve Bank of Dallas and Federal Reserve Bank of St. Louis

Exports (All Commodities)
(Year-over-Year Percent Change)

United States
Texas

Note: Seasonally adjusted. Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see Exports.
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau
Note: Seasonally adjusted. Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see Manufacturing Exports.
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau

Note: Seasonally adjusted. Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see Crude Oil Exports.
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau
Note: Trend-cycle component. For more information, see Exports.
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau
TEXAS A&M UNIVERSITY
Texas Real Estate Research Center

MAYS BUSINESS SCHOOL
Texas A&M University
2115 TAMU
College Station, TX 77843-2115

http://recenter.tamu.edu
979-845-2031

DIRECTOR
GARY W. MALER

ADVISORY COMMITTEE

TROY ALLEY, JR. CHAIRMAN
DeSoto
ALVIN COLLINS, VICE CHAIRMAN
Andrews

RUSSELL CAIN
Port Lavaca
TED NELSON
Houston

JJ CLEMENCE
Sugar Land
DOUG ROBERTS
Austin

DOUG JENNINGS
Fort Worth
C. CLARK WELDER
Fredericksburg

BESA MARTIN
Boerne
JAN FITE-MILLER, EX-OFFICIO
Dallas

LinkedIn
linkedin.com/company/recentertx

Instagram
@recentertx

YouTube
YouTube.com/realestatecenter

Facebook
@recentertx

Twitter
@recentertx