College Station-Bryan Economic and Housing Outlook 2020

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Recessionary Fears

Stock Market Woes Raise a Nagging Fear: Is a Recession Near?

Nearly half of US CFOs fear a 2019 recession

People Are Really Worried About a Recession.
### Eleven Expansions Since 1950

**Average Duration:** 61 months

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 1949</td>
<td>July 1953</td>
<td>46 months</td>
</tr>
<tr>
<td>Jun 1954</td>
<td>Aug 1957</td>
<td>39 months</td>
</tr>
<tr>
<td>May 1958</td>
<td>Apr 1960</td>
<td>24 months</td>
</tr>
<tr>
<td>Mar 1961</td>
<td>Dec 1969</td>
<td>106 months</td>
</tr>
<tr>
<td>Dec 1970</td>
<td>Nov 1973</td>
<td>36 months</td>
</tr>
<tr>
<td>Apr 1975</td>
<td>Jan 1980</td>
<td>58 months</td>
</tr>
<tr>
<td>Aug 1980</td>
<td>Jul 1981</td>
<td>12 months</td>
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<tr>
<td>Dec 1982</td>
<td>Jul 1990</td>
<td>92 months</td>
</tr>
<tr>
<td>Apr 1991</td>
<td>Mar 2001</td>
<td>120 months</td>
</tr>
<tr>
<td>Dec 2001</td>
<td>Dec 2007</td>
<td>73 months</td>
</tr>
<tr>
<td>June 2009</td>
<td>present</td>
<td>124 months</td>
</tr>
</tbody>
</table>

*New Record!!*

Source: NBER; Real Estate Center at Texas A&M University
U.S. Economy: 2019 Started Out Well, But Definite Slowdown

- Real GDP growth 2019YTD ~2.5% Average Q1 & Q2
- Spending PCE +4.1% 2Q2019 Main support for 2019 GDP
- Jobs 2019YTD ~1,050,000 ~150,000/month
- Unemployment rate 3.7% Lowest since Dec. 1969
- U.S. Productivity +2.3% 2Q2019 Down from 3.5% Q1
- Average hourly earnings +3.1% 1H2019 Vs. 2.8% 1H2018
- Inflation CPI 1.8%, Core PCE Price Index 1.6% FED watch
- Industrial Production ISM Prod. Index 47.8 Vs. 60.5 Jan.
- U.S. #1 oil producer and net exporter petro-based products
Jobs Continue to be Created

U.S. Total Nonfarm Jobs

Since 2010 +21.7 million jobs, 16.8%
~197,600 jobs/month

Average Unemployment Rate 5.9%

Unemployment Rate (right)

Jobs (left)

Source: BLS/Haver Analytics; Real Estate Center at Texas A & M University
People Are Spending and Buying Things

Y/Y Percent Change in Personal Consumption Expenditures

Source: BEA, St. Louis FED; Real Estate Center at Texas A&M University
INTEREST RATES:

Inverted Yield Curve Concern
Inflation persists below 2%
• Over the past half-century, yield-curve inversions have reliably predicted all seven U.S. recessions, beginning roughly a year in advance.

• The yield curve's forecasting record since 1968 has been perfect: not only has each inversion been followed by a recession, but no recession has occurred in the absence of a prior yield-curve inversion.
Texas Economy
Texas Economic Outlook: 2019/2020
Positive but Slower Growth Than 2018

- **U.S. Economy** stays relatively strong
- **Employment:** ~2.5% from 2.3% in 2018 (revised)
- **GDP:** 3% 2019 from 3.2% 2018 (1Q19 5.1%)
- **Energy sector** oil prices $40-$60/bl. Stability??
- **Population** expansion continues, but at slower pace
- **Exports** doing well and contributing to economy – trade agreements and value of dollar major uncertainty
- **Retail Sales** steady but not significantly higher
Texas Annual Jobs

2014-2018 +1,262,500 jobs; average 252,500/year, 2.15%/year

2019-2023 +1,166,600 jobs; average 233,300/year, 1.8%/year

2014 +3.1%
2015 +2.4%
2016 +1.2%
2017 +1.8%
2018 +2.3%

Sources: Texas Workforce Commission, Real Estate Center at Texas A&M University
Texas Per Capita Personal Income

+34% 2009-2018
Average 3.3%/year

2009, $36,740
2018, $49,161
2023, $56,991

Sources: Haver Analytics, Census Bureau; Real Estate Center at Texas A&M University
<table>
<thead>
<tr>
<th>Year</th>
<th>Jobs, NSA (Dec-Dec)</th>
<th>Population (July-July)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>216,200</td>
<td>439,887</td>
</tr>
<tr>
<td>2011</td>
<td>236,200</td>
<td>402,776</td>
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<tr>
<td>2012</td>
<td>373,300</td>
<td>433,903</td>
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<tr>
<td>2013</td>
<td>300,800</td>
<td>400,952</td>
</tr>
<tr>
<td>2014</td>
<td>420,900</td>
<td>475,157</td>
</tr>
<tr>
<td>2015</td>
<td>151,800</td>
<td>500,444</td>
</tr>
<tr>
<td>2016</td>
<td>150,000</td>
<td>449,982</td>
</tr>
<tr>
<td>2017</td>
<td>253,900</td>
<td>399,734</td>
</tr>
<tr>
<td>2018</td>
<td>276,100</td>
<td>379,128</td>
</tr>
<tr>
<td>2019-2023</td>
<td>1,166,600</td>
<td>2,456,703</td>
</tr>
</tbody>
</table>

Sources: US Census Bureau; Texas Workforce Commission; Real Estate Center at Texas A&M University
Texas Major MSAs Employment Growth 2018, 2019 & 2020

Percent Growth in Annual Employment

2018 2019e 2020p

Austin
2.3 2.7 3.0

Dallas
2.4 3.5 2.6

Fort Worth
1.9 2.1 2.6

Houston
2.1 2.6 2.4

San Antonio
1.7 2.2 2.5

Texas
2.3 2.4 2.5

Sources: TWC; Real Estate Center at Texas A&M University
Weekly Active Texas Rig Count & Price of WTI

Rig Count up 277, +160% since May 2016

Source: Baker Hughes; EIA; RE Center at Texas A&M University
College Station – Bryan MSA Economy

Brazos, Burleson & Robertson Counties
College Station-Bryan Employment by Industry

- Mining, Logging and Construction, 6%
- Manufacturing, 4%
- Trade, Transportation, and Utilities, 14%
- Information, 1%
- Financial Activities, 3%
- Professional and Business Services, 8%
- Education and Health Services, 10%
- Leisure and Hospitality, 14%
- Other Services, 3%
- Government, 37%

Sources: Texas Workforce Commission, Real Estate Center at Texas A&M University
<table>
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<tr>
<th>Year</th>
<th>Employment</th>
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<tr>
<td>1990</td>
<td>62,400</td>
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<tr>
<td>1991</td>
<td>64,900</td>
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<td>1993</td>
<td>72,000</td>
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<td>1994</td>
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<td>1995</td>
<td>81,000</td>
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<tr>
<td>2016</td>
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<tr>
<td>2017</td>
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<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
</tbody>
</table>

Source: Texas Workforce Commission; Real Estate Center at Texas A&M University
CS-B Monthly Jobs

Average 2% per year growth rate

Sources: BLS/Haver Analytics, Real Estate Center at Texas A&M University
CS-B & Texas Unemployment Rates

Sources: TWC/Haver Analytics; Real Estate Center at Texas A&M University
Per Capita Personal Income

Source: BEA/Haver Analytics; Real Estate Center at Texas A&M University
Demographics
96 counties lost population over the 8 year period.

87% E of I-35

67% in Urban Triangle

Estimated Population Change, Texas Counties, 2010 to 2018

Source: U.S. Census Bureau, 2017 Vintage Population Estimates; Texas State Demographer’s Office
From 1970 to 2010 (40 years), Texas added 13.9 million people

2000-2010 Projection

Revised 2018 Projection (2010-2015 Rate)

From 2010 to 2050 (40 years), Texas will probably add ~22 million people (revised)

Sources: U.S. Census Bureau, Texas State Data Center 2018 Population Projection
Single-Year Age Distribution of Texas 2018

Source: U.S. Census Bureau, National Population by Characteristics: 2010-2018
Projected Population Change, Texas Counties, 2010-2050

Source: Texas State Data Center 2012 Population Projections, 2000-2010 Migration Scenario
CS-B Population

2010-2050
~172,500, +75%

Sources: U.S. Census Bureau; Texas State Demographer’s Office 2018 Projection & 2000-2010 Scenario; Real Estate Center at Texas A&M University
CS-B Projected Population by Age

Sources: Texas State Demographer's Office, 2018 Projection; Real Estate Center at Texas A&M University
Texas Housing Market
Factors Affecting Home-buying Demand into 2020

- Limited **inventory**, especially key prices
- Higher prices - **affordability**
- “Ease” of mortgage **financing**
- Near historically low **interest rates**
- Concerns about general economy – fear of recession or jobs
- Negative **press coming off record year(s)**
Annual Texas Home Sales & Prices

2018
Sales 1.7% Prices ~4%
2019p
Sales ~3.5%, Prices ~4.0%

2010-2018
Sales +63%, Average Price +49%, Median Price +59%

Source: TAR Data Relevance Program; Real Estate Center at Texas A&M University
Texas Median HH Income & Median Home Price Indexed to 1989

Sources: U.S. Census Bureau; Haver Analytics; Real Estate Center at Texas A&M University
Texas Months’ Inventory Still Quite Low

Mo. Inventory = Current month’s total listings / 12 mo. moving avg. of monthly sales

Source: Real Estate Center at Texas A&M University (New & Used Homes Sold thru MLS’s)
Texas SF Building Permits

1995-2017 average
104,854/year

2015 +2.3%
2016 +1.0%
2017 +9.6%
2018 +8.7%
2019p -5%

Source: US Census Bureau; NAHB; Real Estate Center at Texas A&M
Texas MF Building Permits

1995-2018 average 46,873/year
2017 14.5%; 2018p -3%

Source: US Census Bureau, Real Estate Center at Texas A&M
Texas Residential Construction Leading and Coincident Indexes

Jan 2000=100

Source: Real Estate Center at Texas A&M University
College Station – Bryan Housing Market
Housing Report for College Station-Bryan

Spotlight on August 2019

Economic News

August MSA jobs increased from 115,100 to 118,200, according to the latest figures published by the Texas Workforce Commission. This marks a 2.69% year-over-year (YoY) increase compared with August 2018, a net increase of 3,100 new jobs. Over the past five years, the job growth rate has increased at an average annual rate of 2.50%.

In addition, the unemployment rate for August decreased to 3.00% from 3.30% in 2018.

Housing Update

Sales volume for single-unit residential housing increased 7.85% YoY from 293 to 316 transactions. Year-to-date sales reached a total of 2,451 closed listings. Dollar volume rose from $78.95 million to $90.78 million.

The average sales price rose 6.62% YoY from $269,449 to $287,288, while the average price per square foot subsequently rose from $132.82 to $138.14. Median price rose 0.85% YoY from $235,000 to $237,000, while the median price per square foot also rose from $130.12 to $135.64.

Months inventory for single-unit residential housing rose from 4.5 to 5.6 months supply, and days to sell rose from 89 to 97.

<table>
<thead>
<tr>
<th>Table 1: Month Activity</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>August: 316</td>
<td>August: 293</td>
</tr>
<tr>
<td></td>
<td>YoY %: 7.85%</td>
<td>YoY %: -2.98%</td>
</tr>
<tr>
<td></td>
<td>YTD: 2,451</td>
<td>YTD: 2,451</td>
</tr>
<tr>
<td></td>
<td>YoY %: -1.37%</td>
<td>YoY %: -1.37%</td>
</tr>
<tr>
<td>Dollar Volume</td>
<td>$90,782,910</td>
<td>$78,948,625</td>
</tr>
<tr>
<td></td>
<td>YoY %: 14.99%</td>
<td>YoY %: 1.85%</td>
</tr>
<tr>
<td>Median Close Price</td>
<td>$237,000</td>
<td>$235,000</td>
</tr>
<tr>
<td></td>
<td>YoY %: 0.85%</td>
<td>YoY %: 6.92%</td>
</tr>
<tr>
<td>New Listings</td>
<td>426</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td>YoY %: 7.85%</td>
<td>YoY %: 5.05%</td>
</tr>
<tr>
<td>Active Listings</td>
<td>1,536</td>
<td>1,265</td>
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<tr>
<td></td>
<td>YoY %: 21.42%</td>
<td>YoY %: 18.00%</td>
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<tr>
<td>Months Inventory</td>
<td>5.6</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>YoY %: 23.53%</td>
<td>YoY %: 17.44%</td>
</tr>
<tr>
<td>Days to Sell*</td>
<td>97</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>YoY %: 8.99%</td>
<td>YoY %: 14.10%</td>
</tr>
<tr>
<td>Average Price PSF</td>
<td>$138.14</td>
<td>$132.82</td>
</tr>
<tr>
<td></td>
<td>YoY %: 4.01%</td>
<td>YoY %: 2.76%</td>
</tr>
<tr>
<td>Median Price PSF</td>
<td>$135.64</td>
<td>$130.12</td>
</tr>
<tr>
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<td>YoY %: 4.24%</td>
<td>YoY %: 1.17%</td>
</tr>
<tr>
<td>Median Square Feet</td>
<td>1,822</td>
<td>1,845</td>
</tr>
<tr>
<td></td>
<td>YoY %: -1.25%</td>
<td>YoY %: 5.19%</td>
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<tr>
<td>Close to Original List Price</td>
<td>95.11%</td>
<td>95.51%</td>
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<tr>
<td></td>
<td>YoY %: -0.42%</td>
<td>YoY %: -0.87%</td>
</tr>
</tbody>
</table>

* Days to Sell = Days on Market + Days to Close

About the data used in this report

Data used in this report come from the Texas REALTOR® Data Relevance Project, a partnership between the Texas Association of REALTORS® and local REALTOR® associations throughout the state. Analysis is provided through a research agreement with the Real Estate Center at Texas A&M University.
August CS-B Existing SF Home Stats

August 2019 Market Statistics - College Station-Bryan MSA

**Median Price**
$246,500  ▲ 4.9% YoY

+4.9% Y/Y

**Closed Sales**
243  ▲ 4.3% YoY

+4.3% Y/Y

**Active Listings**
1,016  ▲ 16.0% YoY

**Months Inventory**
5.0  ▲ 0.7 YoY

GROWTH TREND FOR CLOSED SALES AND MEDIAN PRICE

TRANSACTION TIME STATS
- Days on Market: 61 (8 days more than August 2018)
- Days to Close: 31 (1 day more than August 2018)
- Total Days: 92 (9 days more than August 2018)

HOME VALUATION STATS
- Median Price/Sq Ft: $134.66  ▲ 3.6% YoY
- +3.6% Y/Y
- Median Home Size: 1,911 sq ft
- Median Year Built: 2002
- Close/Original List: 94.8%

Source: TR MarketViewer; Real Estate Center at Texas A&M University
## August CS-B New SF Home Stats

### August 2019 Market Statistics - College Station-Bryan MSA

<table>
<thead>
<tr>
<th>Median Price</th>
<th>Closed Sales</th>
<th>Active Listings</th>
<th>Months Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$331,250</strong></td>
<td><strong>22</strong> ▼ ▼ <strong>-21.4% YoY</strong></td>
<td><strong>261</strong> ▲ <strong>59.2% YoY</strong></td>
<td><strong>9.0</strong> ▲ <strong>4.4 YoY</strong></td>
</tr>
</tbody>
</table>

**Growth Trend for Closed Sales and Median Price**

**Transaction Time Stats**

- **Days on Market**: 70 (34 days less than August 2018)
- **Days to Close**: 47 (11 days more than August 2018)
- **Total Days**: 117 (23 days less than August 2018)

**Price Distribution**

- < $100k: 0.0%
- $100-199k: 0.0%
- $200-299k: 31.8%
- $300-399k: 59.1%
- $400-499k: 5.0%
- $500-749k: 0.0%
- $750-999k: 0.0%
- $1M+: 0.0%

**Home Valuation Stats**

- **Median Price/Sq Ft**: **$153.09** ▲ **7.1% YoY**
- **Median Home Size**: **2,137 sq ft**
- **Median Year Built**: **2019**
- **Close/Original List**: **97.8%**

Source: TR MarketViewer; Real Estate Center at Texas A&M University
CS-B MSA Annual Home Sales
Brazos, Burleson & Robertson Counties

Sales 2018 -1.5%;
2019p Sales ~1%
Price ~3%

Source: BCS Regional Association of REALTORS®;
Real Estate Center at Texas A&M University
Annual CS-B Home Sales per 1,000 Population

1992-2002 Average 7.0

2012-2018 Average 12.8
76% of sales in $150k to $400k range

Source: BCS Regional Association of REALTORS®; Real Estate Center at Texas A&M University
Annual CS-B Home Prices

Since 2010:
Average Price up 50%
Median Price up 48%

Source: BCS Regional Association of REALTORS®;
Real Estate Center at Texas A&M University
CS-B MSA Annual SF New Home Sales
Brazos, Burleson & Robertson Counties

Source: BCS Regional Association of REALTORS®; Real Estate Center at Texas A&M University
CS-B 2018 New Home Sales
Through the MLS by Price

2018 Sales

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Sales</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>$0 - $69,999</td>
<td>0</td>
<td>0.0%</td>
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<tr>
<td>$70,000 - $99,999</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>$100,000 - $149,999</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>$150,000 - $199,999</td>
<td>50</td>
<td>11.4%</td>
</tr>
<tr>
<td>$200,000 - $249,999</td>
<td>61</td>
<td>13.9%</td>
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<tr>
<td>$250,000 - $299,999</td>
<td>59</td>
<td>13.4%</td>
</tr>
<tr>
<td>$300,000 - $399,999</td>
<td>155</td>
<td>35.3%</td>
</tr>
<tr>
<td>$400,000 - $499,999</td>
<td>63</td>
<td>14.4%</td>
</tr>
<tr>
<td>$500,000 - $749,999</td>
<td>46</td>
<td>10.5%</td>
</tr>
<tr>
<td>$750,000 - $999,999</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>$1,000,000 +</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

63% of sales in $200k to $400k range

Source: BCS Regional Association of REALTORS®; Real Estate Center at Texas A&M University
CS-B Median New Home Prices

2013 - 2018 +88%
Median Size 2017 2,320 sq.ft.
Median Size 2018 2,208 sq.ft.
Price/sq.ft. 2018 $147.89

Source: BCS Regional Association of REALTORS®; Real Estate Center at Texas A&M University
CS-B Monthly SF Sales

Source: BCS Regional Association of REALTORS®; Real Estate Center at Texas A&M University
CS-B SF Months’ Inventory

Source: BCS Regional Association of REALTORS®;
Real Estate Center at Texas A&M University
CS-B Months Inventory
High Priced Homes

Source: BCS Regional Association of REALTORS®; Real Estate Center at Texas A&M University
Texas and CS-B Housing Affordability Indexes

Source: Real Estate Center at Texas A&M University
CS-B Single-Family Building Permits

2017 -5%; 2018 -11.4%
2019YTD -4.4%
Average 873/year since 1995

In the past 6 years permitted 6,443 SF homes

Source: U.S. Census Bureau; Real Estate Center at Texas A&M
In the past 7 years permitted 6,946 MF units and 879 2-4 units.
Overall Apartment Rent vs. Occupancy
(Effective Avg. Rent per Unit per Month All Properties)

Current Effective Rental Rate vs Occupancy Level
(Overall Market August, 2019)

Bryan/Col. Sta. Drops To 82% Occupancy

Source: ALN Apartment Data
Real Estate Center at Texas A&M University
College Station-Bryan Economic and Housing Outlook 2020

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