



REAL ESTATE CENTER
TEXAS A & M UNIVERSITY



TEXAS HOUSING INSIGHT

JAMES P. GAINES
CHIEF ECONOMIST

WESLEY MILLER
RESEARCH ASSOCIATE

LUIS B. TORRES
RESEARCH ECONOMIST

PAIGE WOODSON
RESEARCH INTERN

2 1 2 0

2018 ANNUAL SUMMARY

TECHNICAL REPORT

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About this Report

Real Estate Center economists continuously monitor many facets of the global, national, and Texas economies. *Texas Housing Insight* is a summary of important economic indicators that help discern trends in the Texas housing markets. All measurements are calculated annually, unless stated otherwise.

This monthly publication provides data and insights on the Texas housing markets. We hope you find them useful. Your feedback is always appreciated. Send comments and suggestions to info@recenter.tamu.edu.

Dr. James Gaines, Dr. Luis Torres, Wesley Miller, and Paige Woodson

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2018 Annual Summary

The Texas housing market decelerated in 2018 with total sales rising just 1.7 percent. The modest increase, however, pushed annual transactions (through Multiple Listing Services) to a record 343,833. Sustained growth in the national and state economies supported housing demand, but low listings inventories and waning affordability continued to pinch the lower price cohorts. Builders ramped up construction activity, but supply constraints persisted for homes priced less than \$300,000, stressing more than two-thirds of the statewide market.

Single-family sales are projected to slow again in 2019 before bouncing back in 2020. This cooling period is necessary after multiple years of explosive growth, allowing the market to adjust in areas of extreme shortages and rapid affordability declines. The median price per square foot should still increase about 4 percent across the major metropolitan areas. Texas' healthy economy and labor market bodes well for housing demand, but slowing global growth and volatile oil prices present substantial challenges as the expansion continues. The Real Estate Center's single-family outlook for the state and the major MSAs is summarized as follows:

Single-Family Forecast	2018 (%)	2019 (%)	2020(%)	1991-2018 (%)
Texas				
Housing permits	5.7	2.1	1.0	5.4
Sales	1.8	0.9	3.4	4.6
Price per square foot	4.4	4.0	4.7	4.8
Austin				
Housing permits	9.6	0.2	1.3	11.4
Sales	2.3	2.8	3.0	6.1
Price per square foot	4.5	4.0	5.8	6.3
Dallas-Fort Worth				
Housing permits	5.3	3.3	0.6	4.7
Sales	-2.2	0.3	2.4	5.0
Price per square foot	5.3	4.4	4.9	4.6
Houston				
Housing permits	4.1	0.1	3.0	5.9
Sales	3.5	1.1	4.3	3.9
Price per square foot	3.1	4.6	5.1	5.3
San Antonio				
Housing permits	9.7	10.5	1.4	7.9
Sales	2.3	-1.0	6.7	6.8
Price per square foot	5.2	3.9	4.5	4.6

Note: Estimated with October/December 2018 data. 2018 housing permits are forecasted.

Source: Real Estate Center at Texas A&M University

Supply*

The Texas **Residential Construction Cycle (Coincident) Index**, which measures *current* construction activity, accelerated 7.2 percent annually as industry employment and wages elevated.

Momentum, however, moderated toward the end of the year. This balancing may continue into 2019, as indicated by the Texas **Residential Construction Leading Index**. Rising interest rates and a slowdown in the multifamily sector weigh on the 2019 outlook, but overall market fundamentals remain solid.

In response to supply shortages, developers accelerated activity at the earliest stage of the construction cycle. The number of **new vacant developed lots (VDLs)** in the Texas Urban Triangle surpassed 96,000 for the first time since 2007, with record levels for those developed for homes in the \$200,000 to \$400,000 range. Dallas-Fort Worth (DFW) accounted for nearly half of the total increase, posting positive growth for the eighth consecutive year. Lot development in the remaining major metros balanced around their respective five-year averages, with Houston and San Antonio well below pre-recessionary levels.

Lot development led to increases in **single-family housing construction permits**, with year-end projections hovering around 120,000 as December 2018 data become available. The tally through November already surpassed 2017 annual totals in all major metros. Dallas was the exception but is projected to close the year with a decade-high above 25,000 permits. North Texas development continued to stretch into the suburbs, supporting permit growth in Fort Worth. Permit issuance was particularly strong in Houston and Austin with 2018 totals projected above 40,000 and 16,000, respectively.

Total Texas housing starts accelerated to start the year but hit a slow patch during the summer as the multifamily sector adjusted. In the single-family sector, however, housing starts trended positively with growing momentum in the supply-chain. More than 93,000 single-family homes broke ground in the major metros, 70 percent of which were in DFW and Houston. Austin and San Antonio started more than 16,200 and 11,700 homes, respectively, outpacing the larger metros in per capita terms.

A total of \$3.3 billion poured into Texas' single-family market amid economic and population growth. **Single-family private construction values** posted annual increases in most of the major metros after accounting for inflation. Houston posted the largest growth at 8.2 percent due to residual stimulus from Hurricane Harvey rebuilding efforts and higher oil prices in the first half of the year. DFW construction values, however, declined despite positive movements in supply factors.

Supply-side growth and softer demand snapped a seven-year decline in Texas' **total months of inventory (MOI)**, settling at an annual average of 3.3 months. The MOI bottomed out in 2017 just above three months and methodically inched upward for most of the past year. That said, more

* All measurements are annually unless stated otherwise.

progress is necessary to balance the market. About six months of inventory is considered the equilibrium level. A steady stream of new listings hitting the market, particularly in the \$200,000 - \$400,000 range, should slowly chip away at housing shortages.

In percentage terms, the uptick in MOI was most pronounced in North Texas due to a multiyear stint below two months. The supply of available listings relaxed to 2.7 and 2.1 months in Dallas and Fort Worth, respectively. Constraints improved marginally in Austin to 2.3 MOI. Conditions were slightly better in Houston and San Antonio with MOI rising to 3.5 and 3.2 months, respectively. Nevertheless, all of the major markets continue to be supply constrained.

Demand

A record 343,833 Texas homes sold through Multiple Listing Services in 2018, but the rate of increase slowed from 4.1 to 1.7 percent. The bottom end of the market (consisting of homes priced less than \$200,000) continued to drag on activity due to a lack of supply and rising construction costs.

At the metropolitan level, Houston led the major metros with 3.4 percent growth, followed by San Antonio and Austin at 2.9 and 1.4 percent, respectively. The North Texas market, however, adjusted to massive home-price appreciation over the past five years. Dallas and Fort Worth sales fell 3.0 and 1.2 percent, respectively, with most of the decline occurring at the lower end of the market.

Despite slower sales activity, the national and statewide economic expansion maintained healthy levels of housing demand. The **average days on market** (DOM) balanced at 58 days as homes continued to sell at a rapid clip. Austin and Houston homes sold similarly at an average of 56 days, while San Antonio's DOM ticked up to 57 days. Housing demand softened in North Texas but remained strong relative to the rest of the state. Dallas homes averaged 44 days on the market, a week longer relative to 2016. On the other hand, Fort Worth homes averaged 39 DOM over the past three years.

Rising interest rates weighed on housing demand throughout most of the year. The **ten-year U.S. Treasury bond yield** averaged 2.9 percent, its highest annual value since 2010, as markets juggled the combination of a strong U.S. economy but slower growth in Europe and China. The **Federal Home Loan Mortgage Corporation's 30-year fixed-rate** ticked up similarly above 4.5 percent. Higher interest rates disproportionately affected refinance mortgage applications in Texas, which declined nearly 40 percent over the year. Mortgage applications for new-home purchases, however, increased nearly 10 percent relative to 2017.

Prices

Softer sales activity and improvements in supply moderated home-price gains after substantial appreciation since the Great Recession. The **Texas median home price** increased 4.5 percent year

over year (YOY), as opposed to 7.2 percent average annual growth between 2012 and 2017. Although the rate of increase decelerated, the median price still jumped \$10,000 to \$231,660.

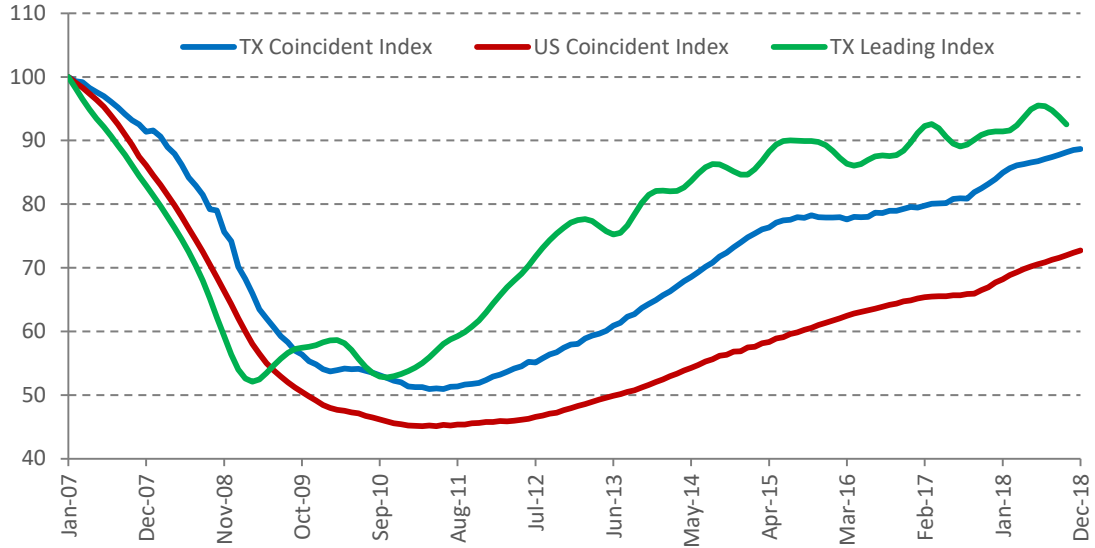
The median home price in Austin (\$304,900) and Dallas (\$284,770) remained well above the rest of the state, rising 4.1 and 3.2 percent annually. The Fort Worth median increased \$13,540 to just shy of the statewide level. Houston maintained annual growth over 3 percent for the second straight year, pushing the median above \$234,350. San Antonio was the only major metro to experience median home-price acceleration, rising 5.4 percent to \$221,500.

The **Texas Repeat Sales Index** is a better measure of changes in single-family home values and provides insight into how the typical Texas home prices evolve. The index corroborated 4.5 percent price growth statewide but suggested less appreciation in the major metros. The Austin and San Antonio indices decelerated to 3.8 and 4.1 percent YOY growth, respectively, while the Houston index rose 2.7 percent. Dallas observed the largest deceleration with annual growth slowing from 6.1 to 3.9 percent. In Fort Worth, the repeat sales index indicated 5.5 percent annual appreciation as opposed to 6.2 percent growth in the median price.

Despite slower price growth, home-price appreciation outpaced wages and weighed on housing affordability. Texas' affordability remained favorable compared with other states but continued a steady decline that began in 2013. The **Texas Housing Affordability Index** fell to 1.4, indicating that a family earning the median income could afford a home 40 percent more than the median sale price. For much of the past decade, Texans enjoyed the capability of affording homes priced twice that of the median. Fort Worth and Houston tied for the highest affordability among major metros at 1.5 but suffered substantial declines over the past year. The San Antonio index hovered slightly above the state level but trended downward. In Austin and Dallas, the affordability index dropped to 1.3. Decreased housing affordability presents a growing challenge to Texas' demographic advantages that have supported its economic prosperity over the past decade.

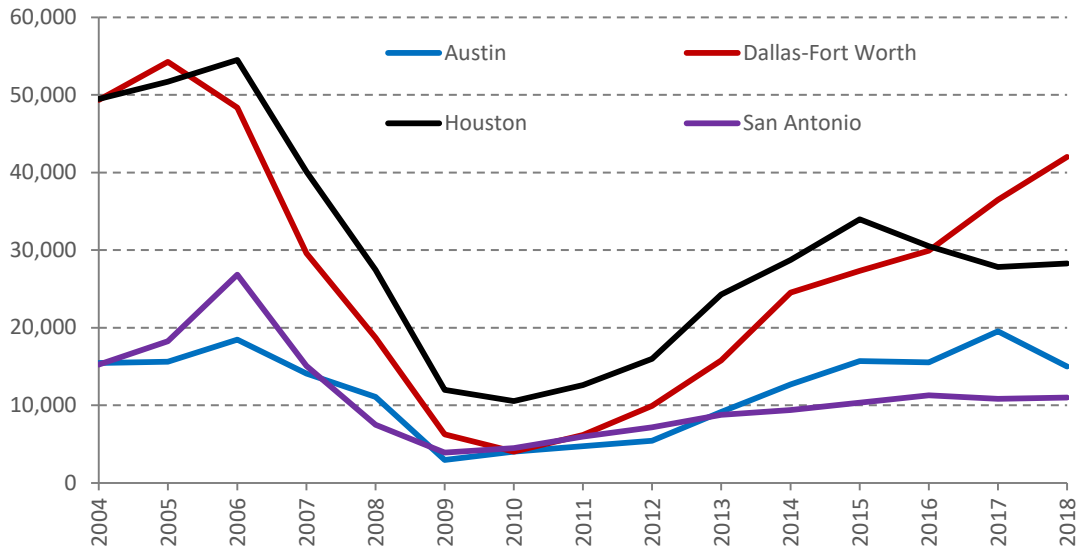
Supply

Residential Construction Coincident Indicator
(Index Jan 2007 = 100)



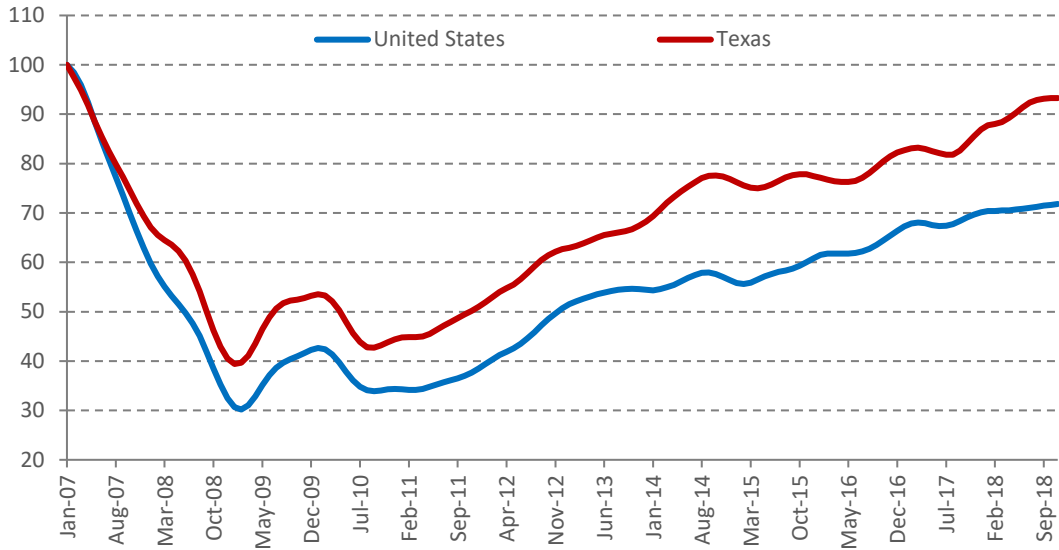
Note: Trend-Cycle Component. November and December data for the Texas Leading Index are unavailable due to the government shutdown.
Sources: Real Estate Center at Texas A&M University and Federal Reserve Bank of Dallas

New Vacant Developed Lots
(Inventory)



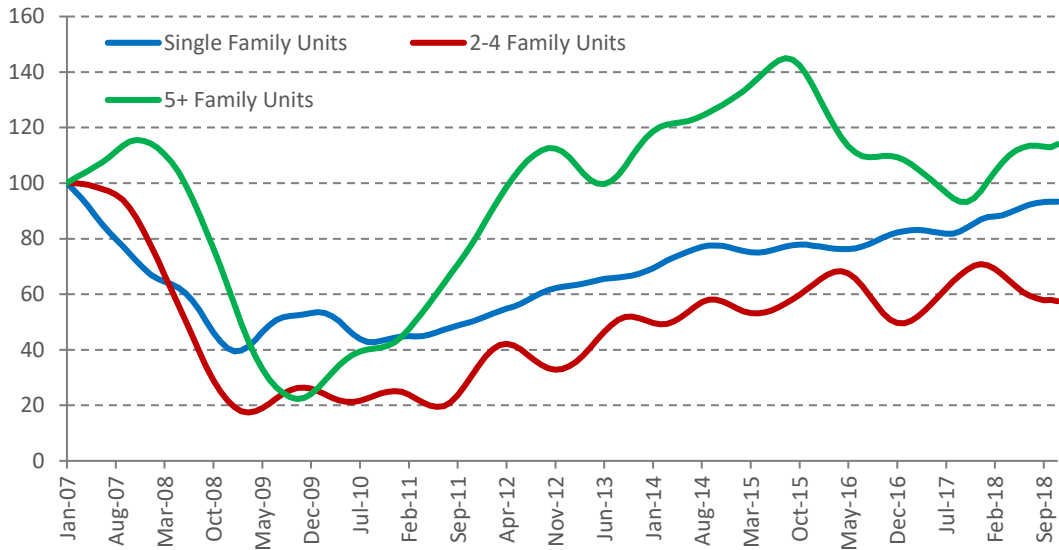
Note: Annual sum.
Source: Metrostudy

Single-Family Housing Construction Permits (Index 2007 = 100)



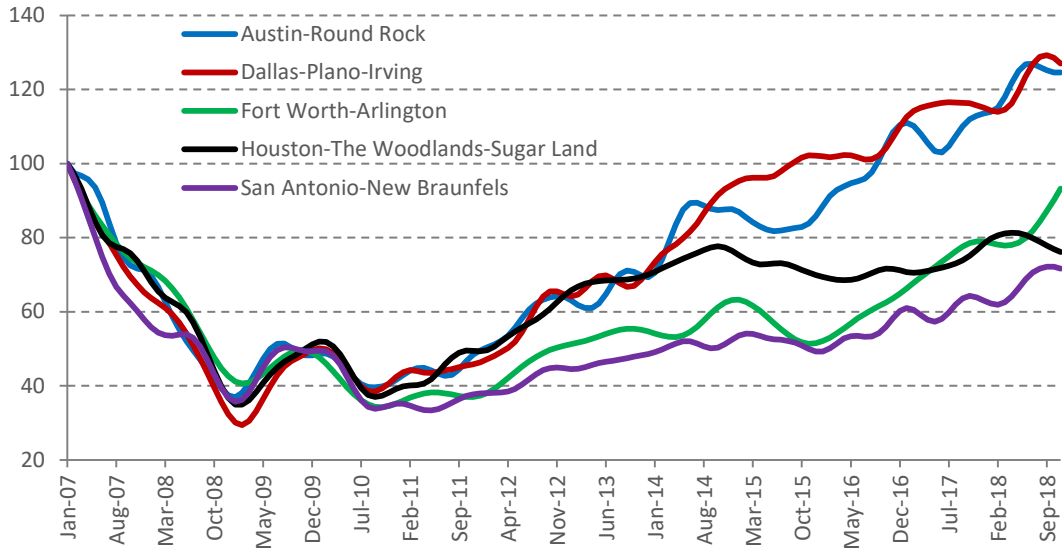
Note: Trend-Cycle Component. December data are unavailable due to the government shutdown.
Sources: U.S. Census Bureau and Real Estate Center at Texas A&M University

Texas Housing Construction Permits (Index 2007 = 100)



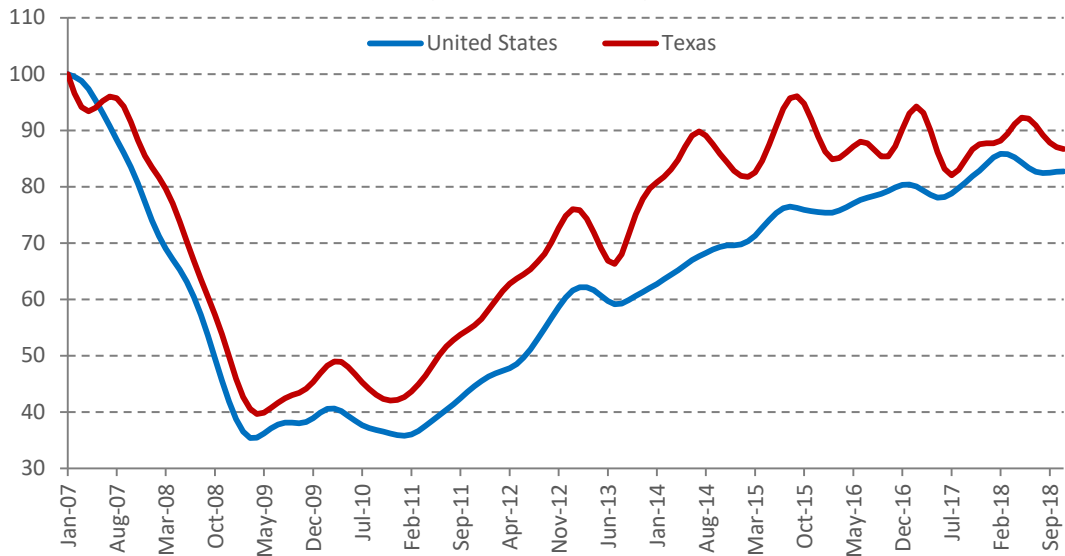
Note: Trend-Cycle Component. December data are unavailable due to the government shutdown.
Sources: U.S. Census Bureau and Real Estate Center at Texas A&M University

Major Metros Single-Family Housing Construction Permits
(Index 2007 = 100)



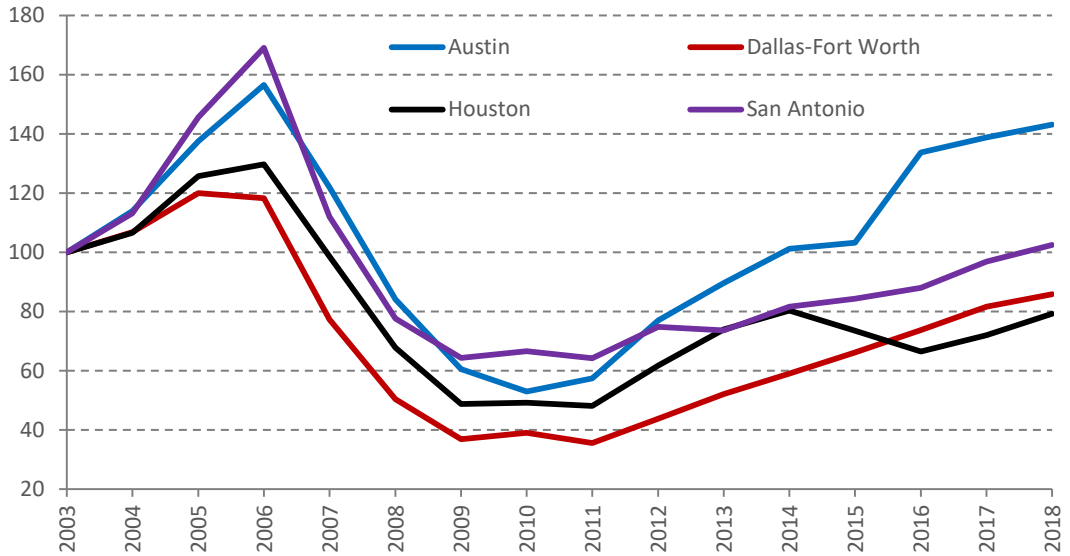
Note: Trend-Cycle Component. December data are unavailable due to the government shutdown. Fort Worth is missing data for Somervell County.
Sources: U.S. Census Bureau and Real Estate Center at Texas A&M University

Housing Starts
(Index 2007 = 100)



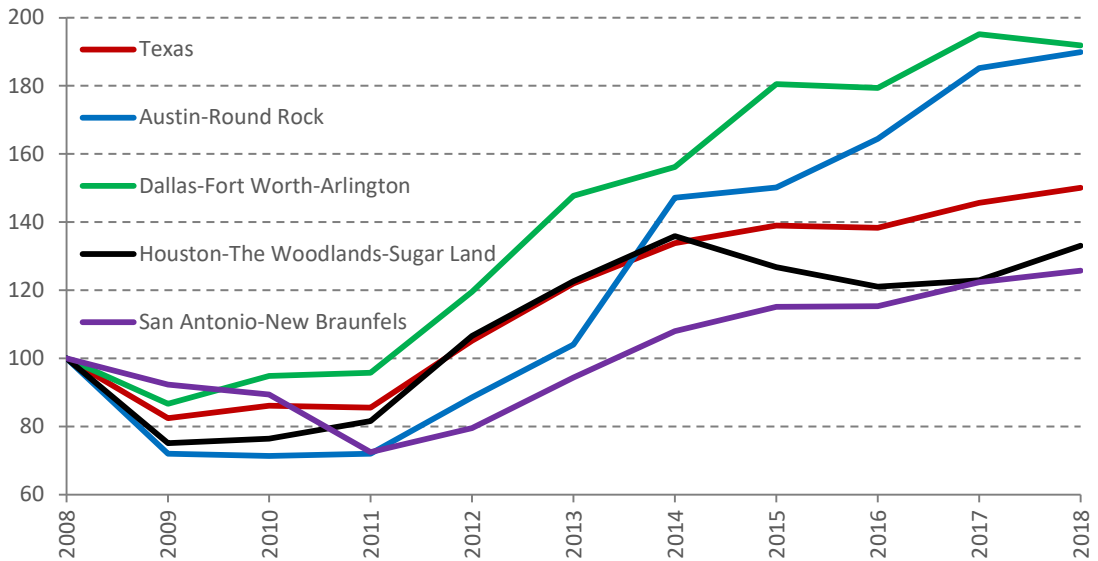
Note: Trend-Cycle Component. December data are unavailable due to the government shutdown.
Sources: U.S. Census Bureau and Bank of Tokyo-Mitsubishi UFJ

Major Metros Housing Starts (Index 2003 = 100)



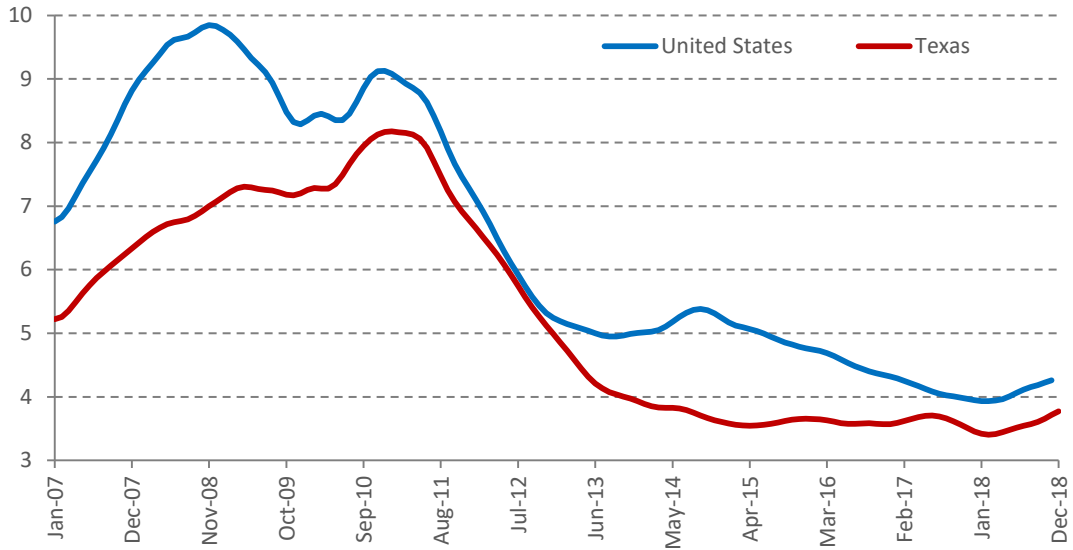
Note: Annual sum.
Source: Metrostudy

Total New Private Single-Family Construction Value (Index 2008 = 100)



Note: Annual sum.
Source: Dodge Analytics

Total Months of Inventory (Months)

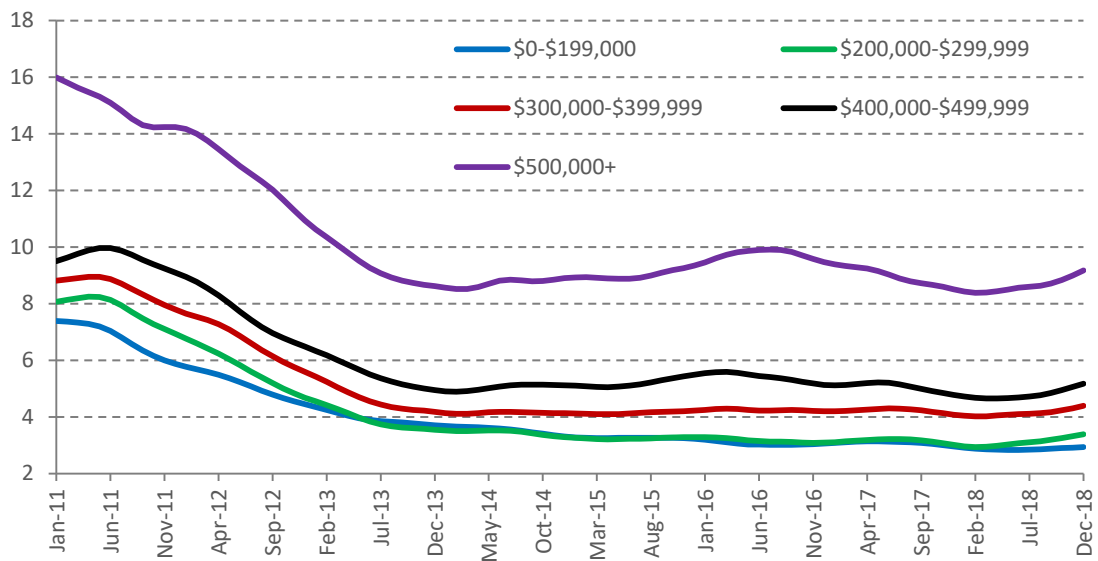


Note: Trend-Cycle Component. Months of inventory for the United States is estimated using weights for all existing homes and new single-family homes; new nonsingle-family homes are not included. Texas includes all existing and new homes. December data for the U.S. Months of Inventory are unavailable due to the government shutdown.

For more information, see [Months of Inventory](#).

Sources: U.S. Census Bureau, National Association of Realtors, and Real Estate Center at Texas A&M University

Texas Months of Inventory by Price Cohort (Months)



Note: Trend-Cycle Component.

Source: Real Estate Center at Texas A&M University

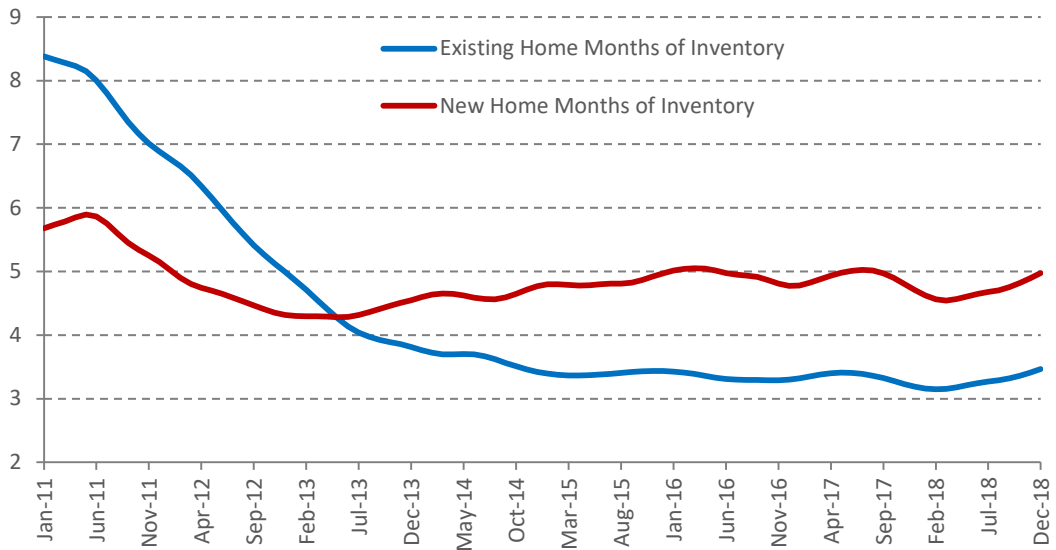


**Texas Months of Inventory by Price Cohort
(December 2018)**



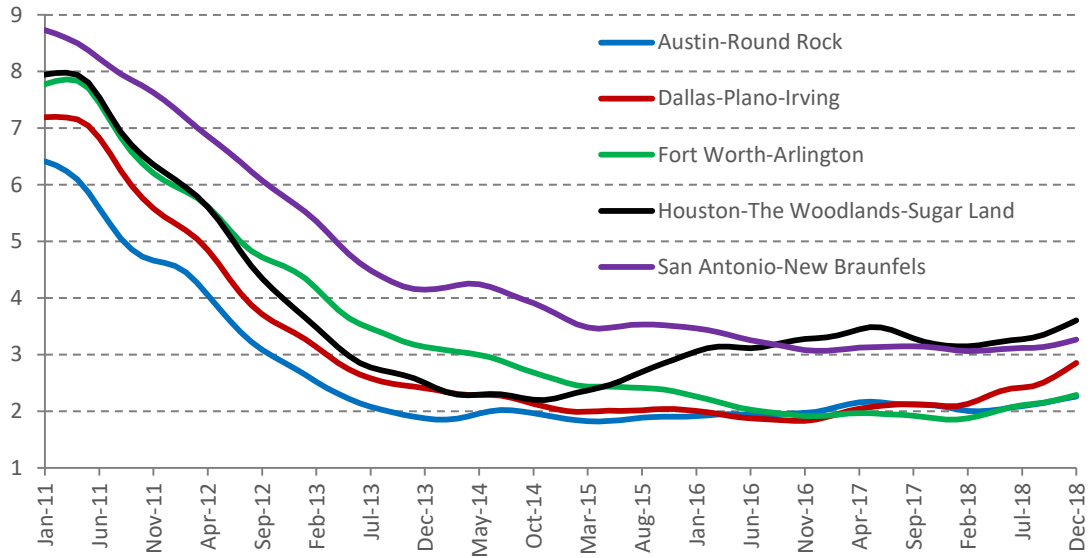
Note: Seasonally adjusted.
Source: Real Estate Center at Texas A&M University

**Texas Existing and New Home Months of Inventory
(Months)**



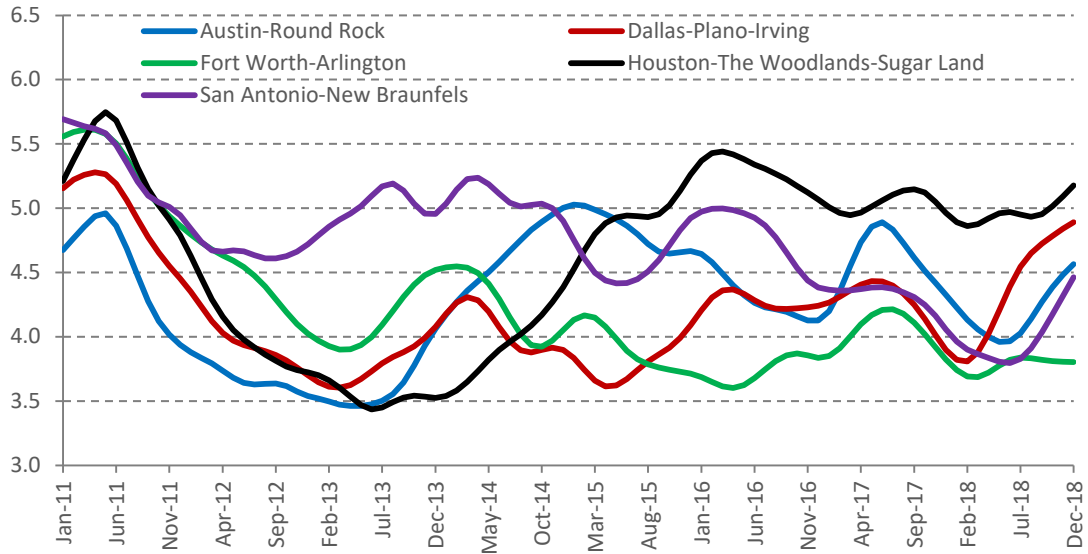
Note: Trend-Cycle Component.
Source: Real Estate Center at Texas A&M University

Major Metros Existing Home Months of Inventory (Months)



Note: Trend-Cycle Component.
Source: Real Estate Center at Texas A&M University

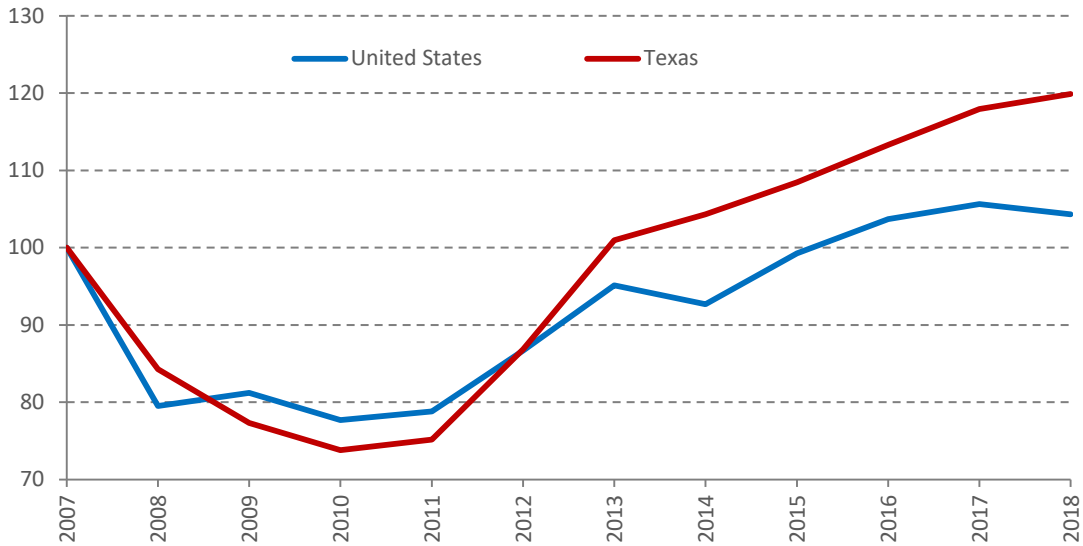
Major Metros New Home Months of Inventory (Months)



Note: Trend-Cycle Component.
Source: Real Estate Center at Texas A&M University

Demand

Housing Sales
(Index 2007 = 100)

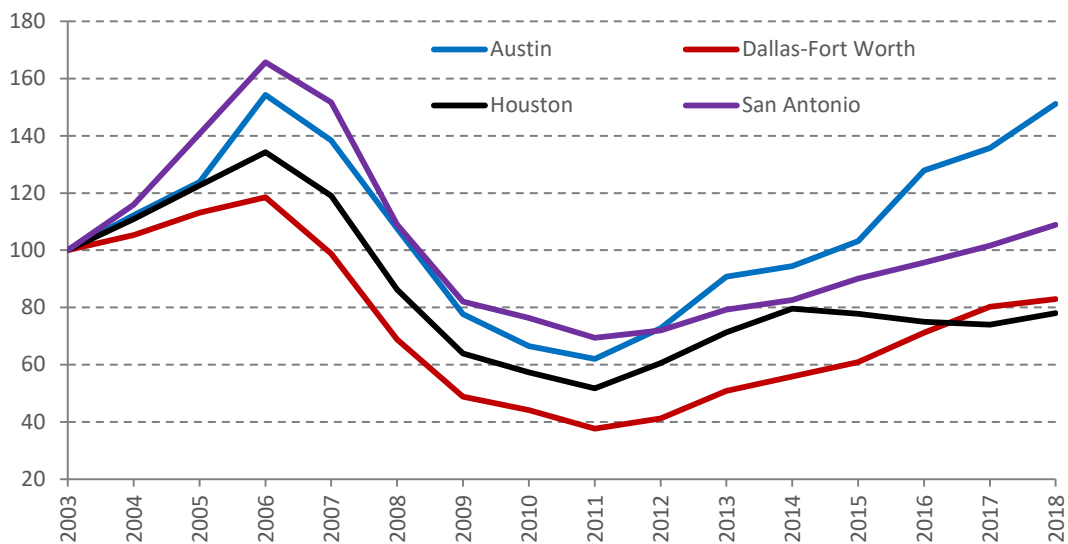


Note: Annual sum. Sales for the United States include all existing homes and new single-family homes; new non-single-family homes are not included. Texas includes all existing and new homes. December data for the United States are forecasted due to the government shutdown.

For more information see [Housing Sales](#).

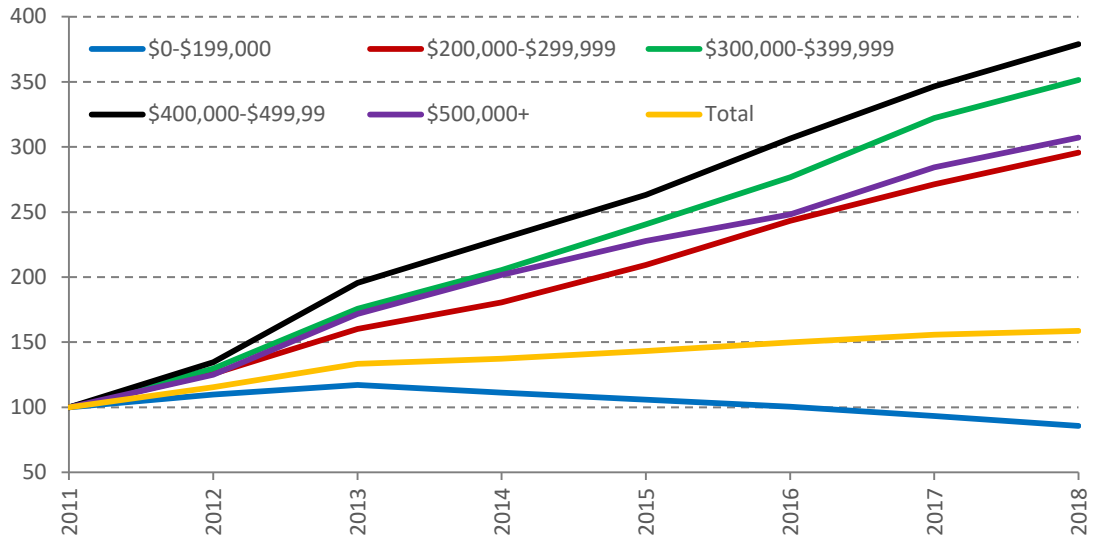
Sources: U.S. Census Bureau, National Association of Realtors, and Real Estate Center at Texas A&M University

Major Metros Housing Sales
(Index 2003 = 100)



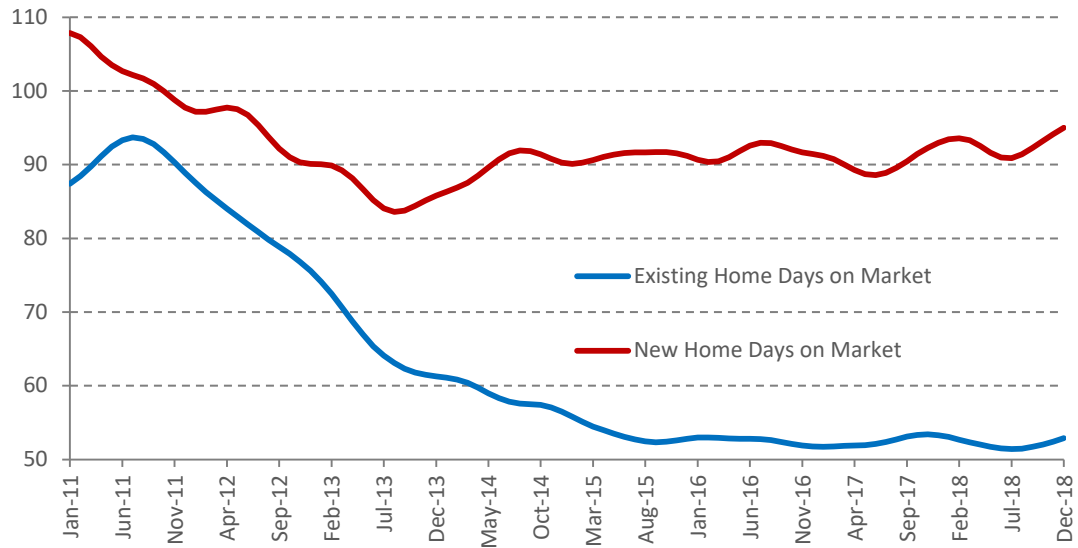
Note: Annual sum.
Source: Metrostudy

Texas Housing Sales by Price Cohort (Index Jan 2011 = 100)



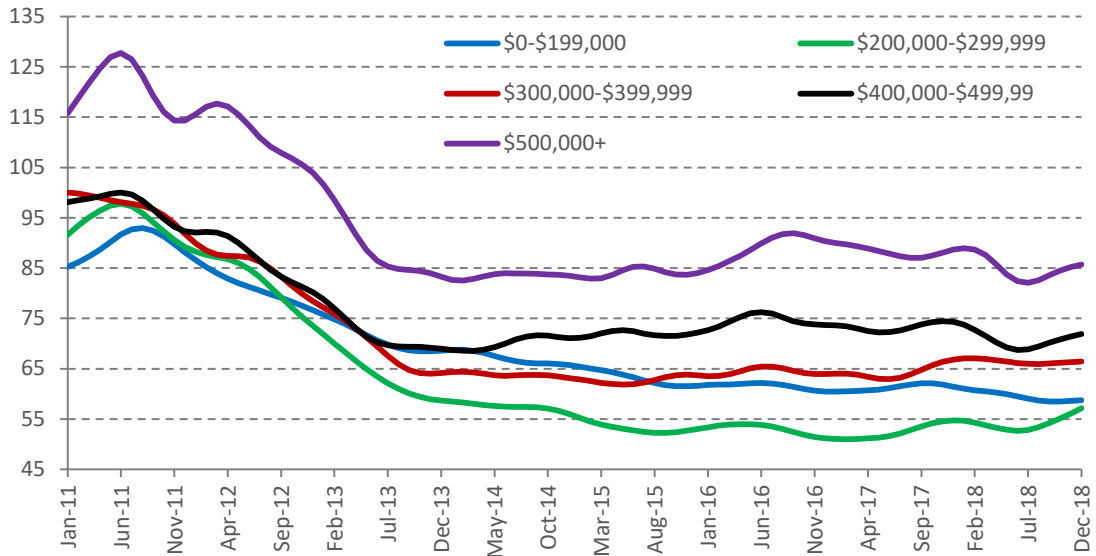
Note: Annual sum.
Source: Real Estate Center at Texas A&M University

Texas Homes Days on Market (Days)



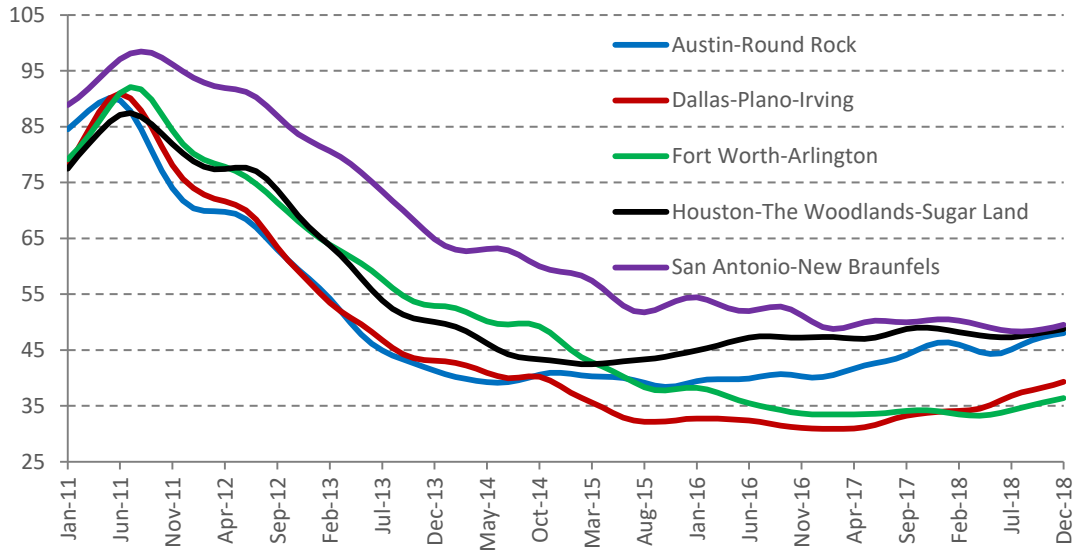
Note: Trend-Cycle Component. For single-family homes.
Source: Real Estate Center at Texas A&M University

Texas Home Days on Market by Price Cohort (Days)



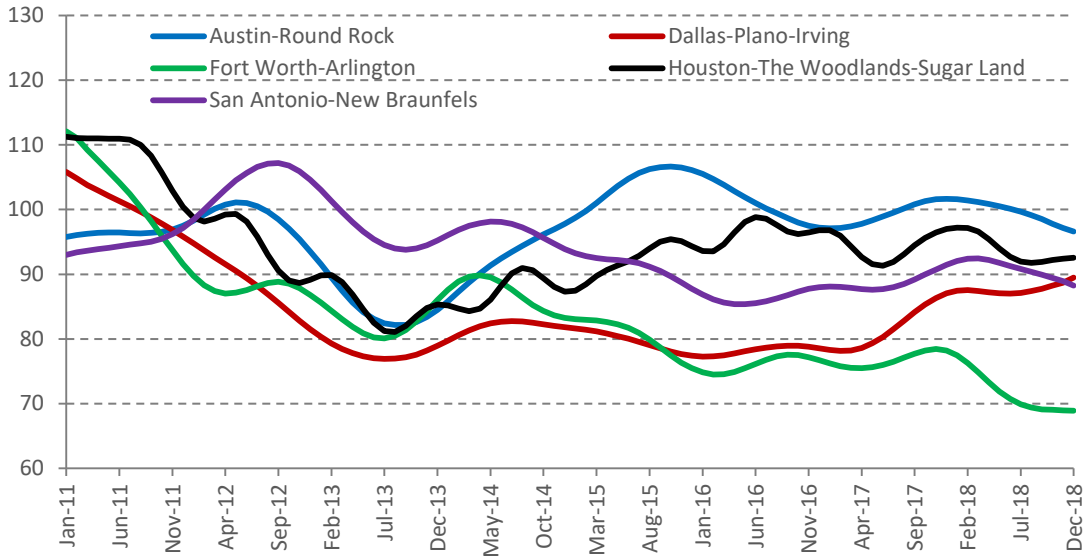
Note: Trend-Cycle Component. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros Existing Homes Days on Market (Days)



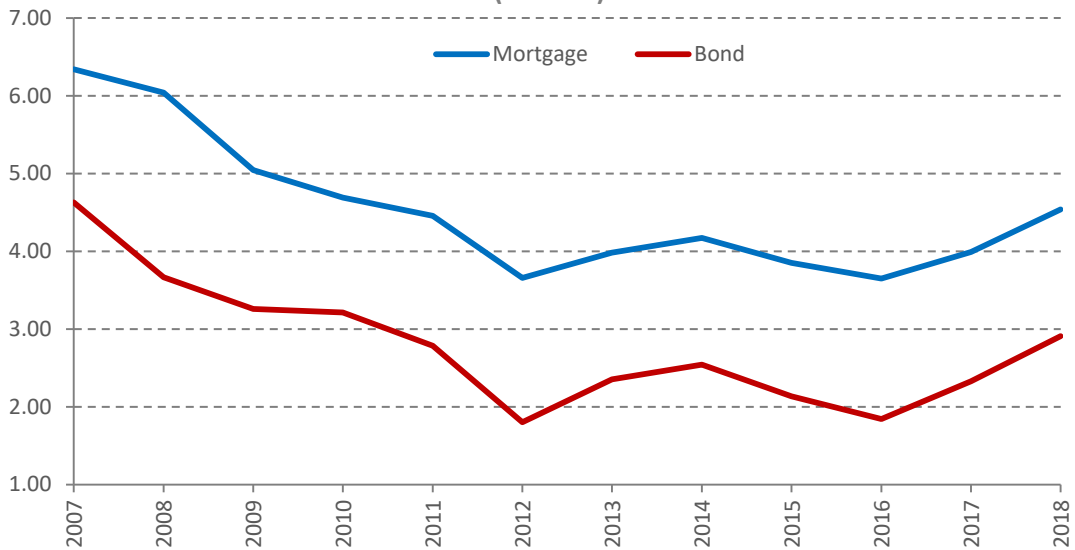
Note: Trend-Cycle Component. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros New Homes Days on Market (Days)



Note: Trend-Cycle Component. For single-family homes.
Source: Real Estate Center at Texas A&M University

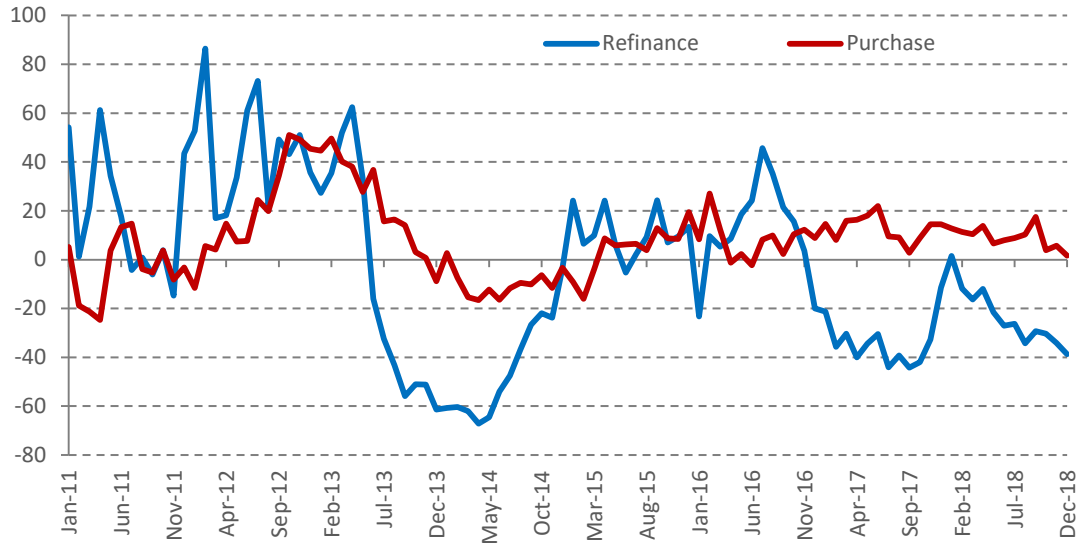
30-Year Mortgage Rate and 10-Year Treasury Yield (Percent)



Note: Annual average.
Sources: Federal Home Loan Mortgage Corporation and Federal Reserve Board



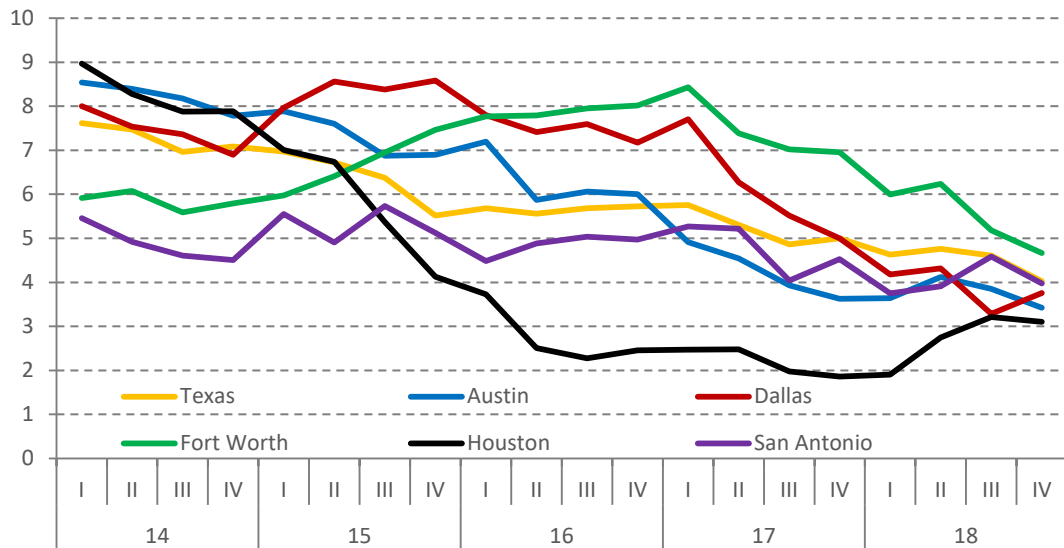
Texas Mortgage Applications (Year-over-Year Percentage Change)



Source: Mortgage Bankers Association

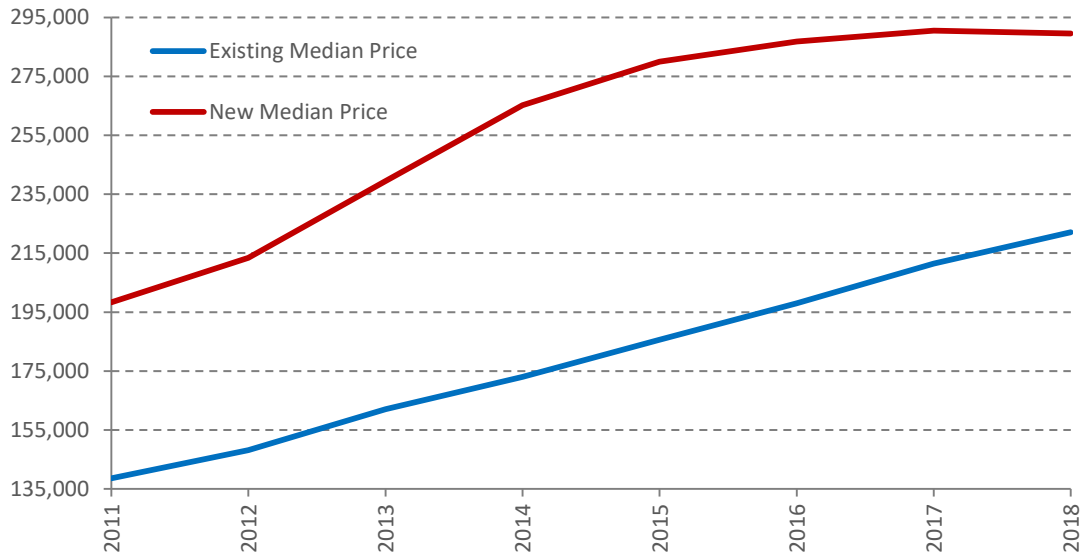
Prices

Real Estate Center Repeat Sales Housing Price Index (Year-over-Year Percentage Change)



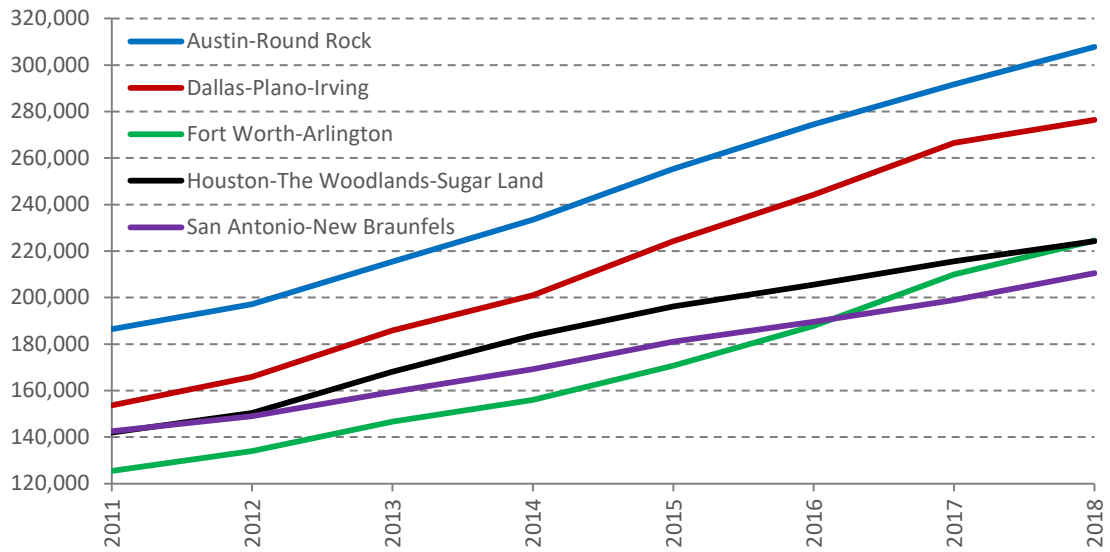
Note: The Repeat Sales Housing Price Index tracks real home price appreciation for residential single-family homes.
Source: Real Estate Center at Texas A&M University

Texas Existing and New Home Median Sales Price (\$)



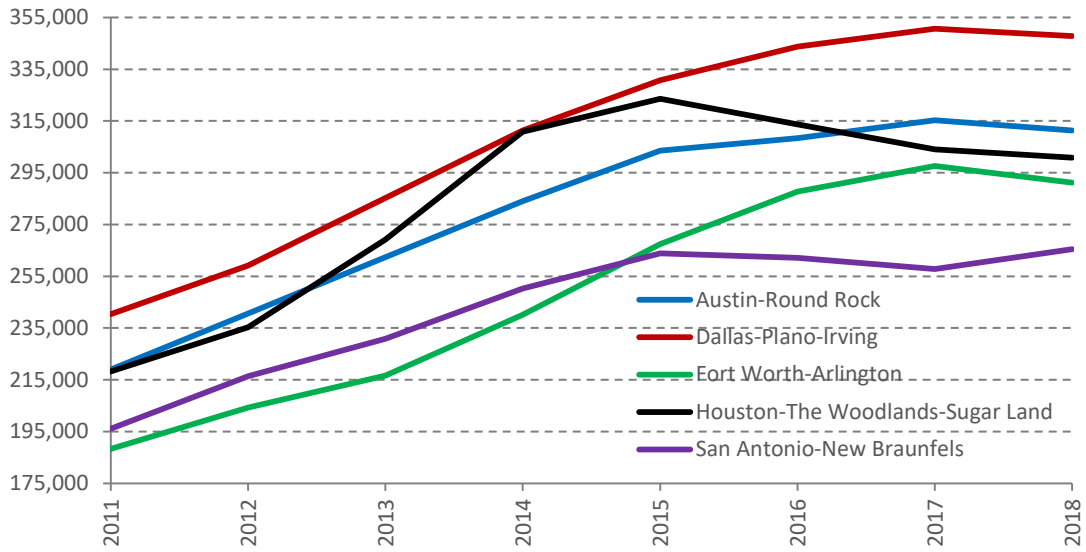
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros Existing Home Median Sales Price (\$)



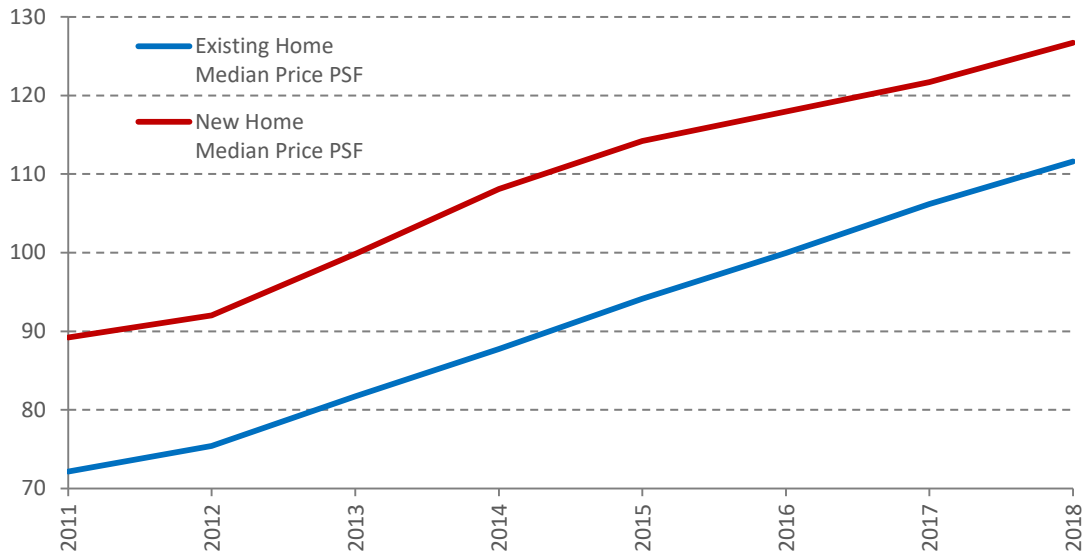
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros New Home Median Sales Price (\$)



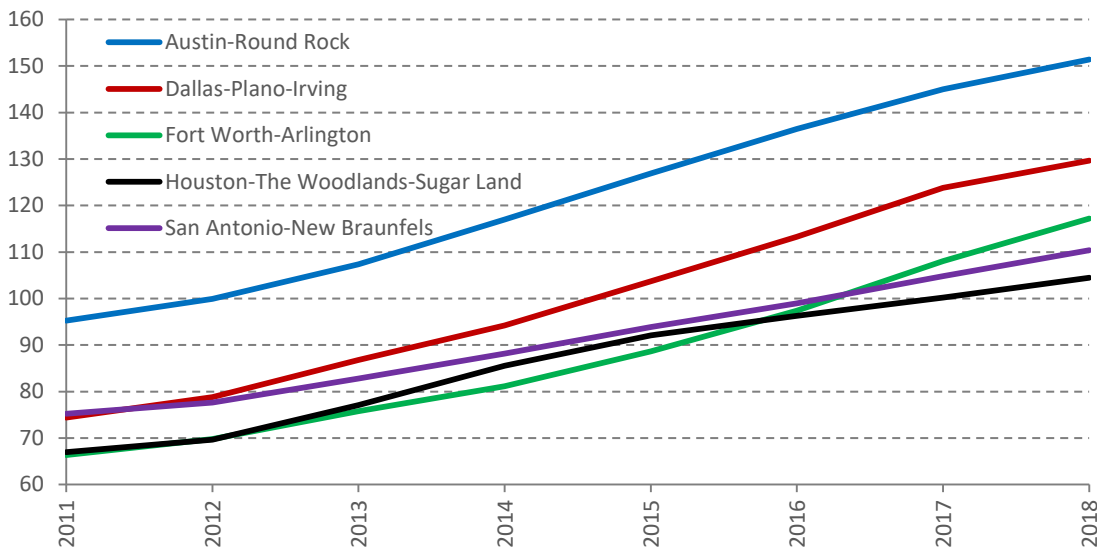
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Texas Home Median Price Per Square Foot (\$)



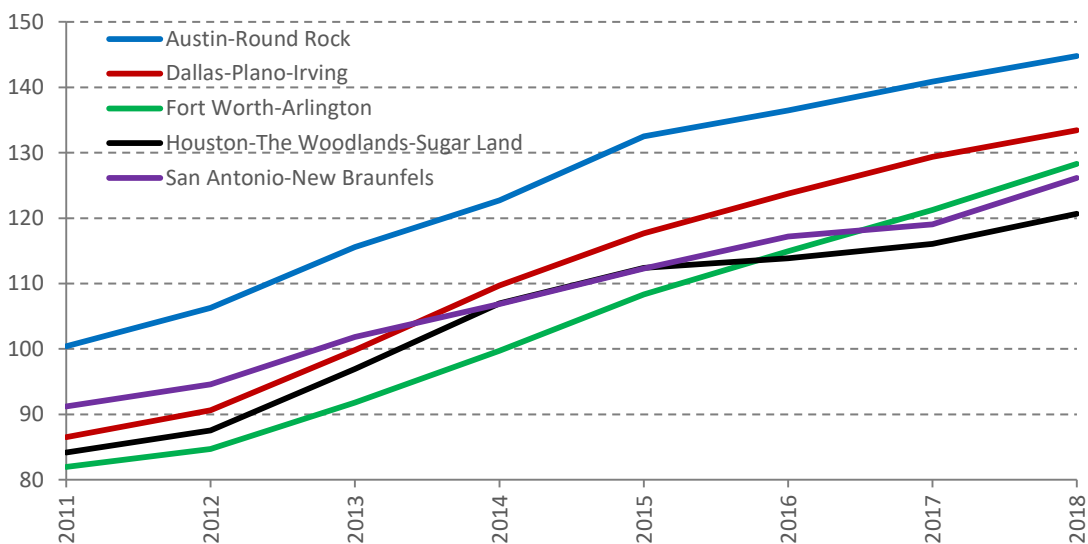
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros Existing Home Median Price Per Square Foot (\$)



Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

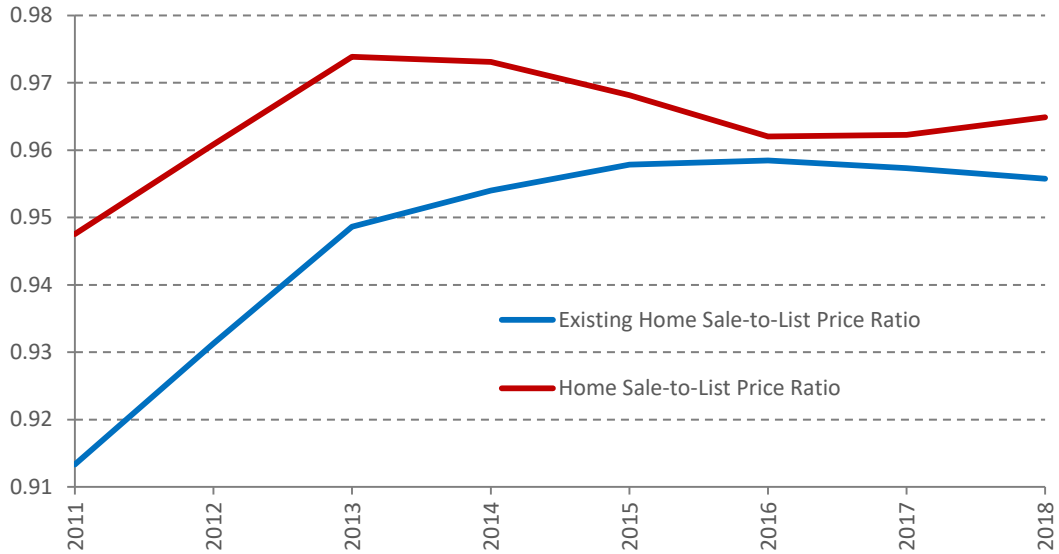
Major Metros New Home Median Price Per Square Foot (\$)



Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

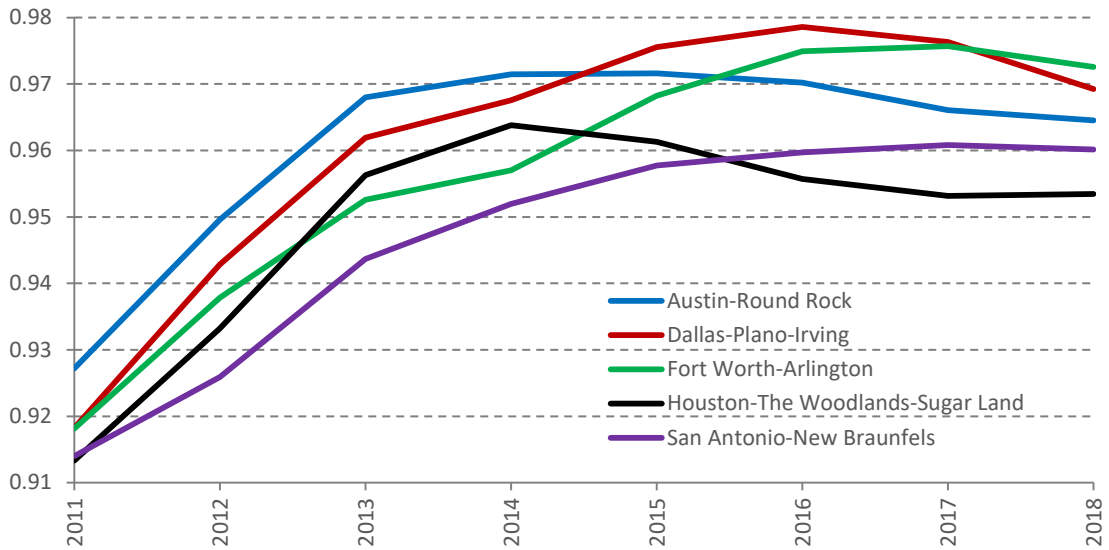


Texas Home Sale Price to List Price Ratio (%)



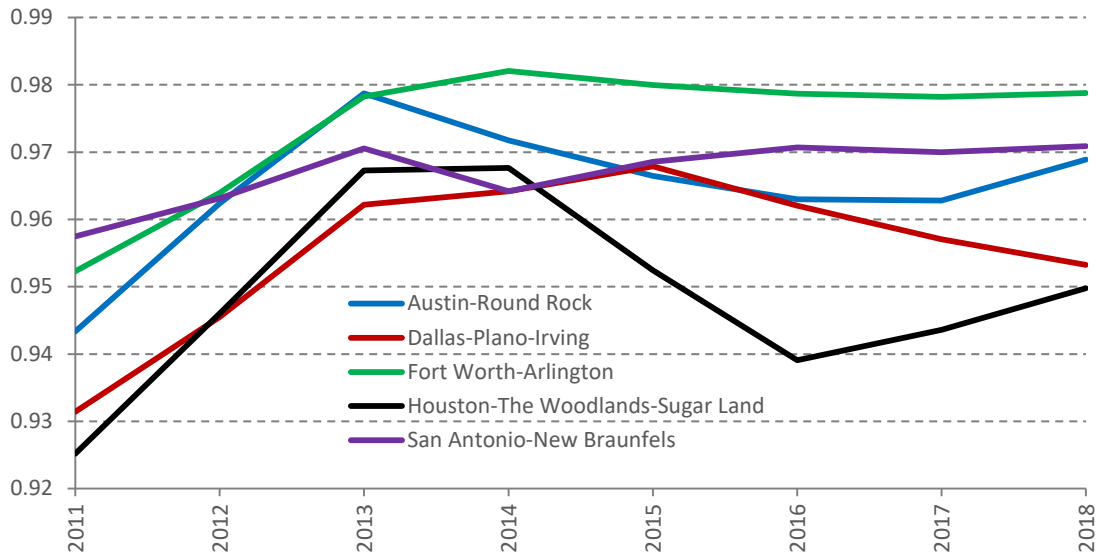
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros Existing Home Sale Price to List Price Ratio (%)



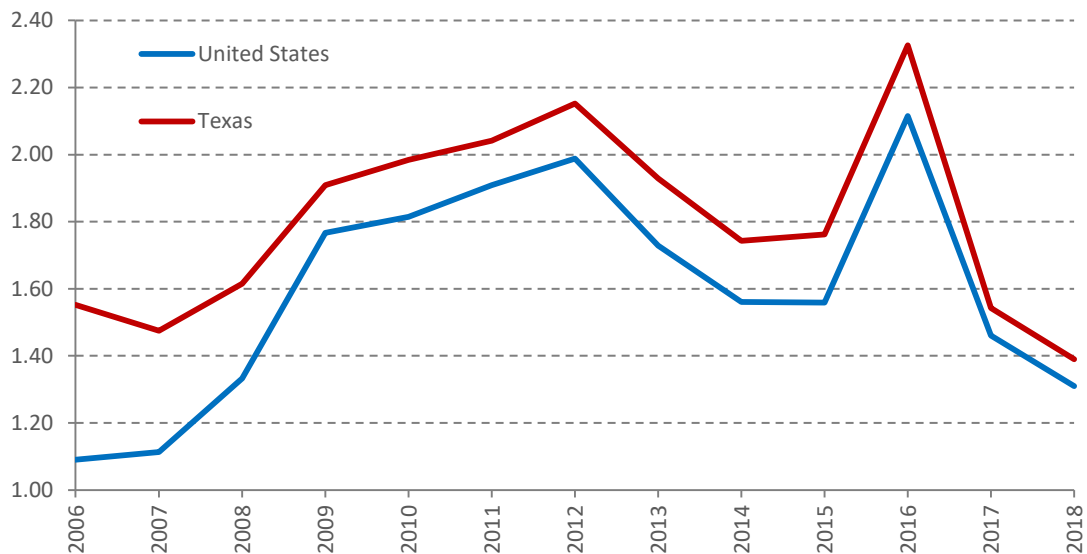
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Major Metros New Home Sale Price to List Price Ratio (%)



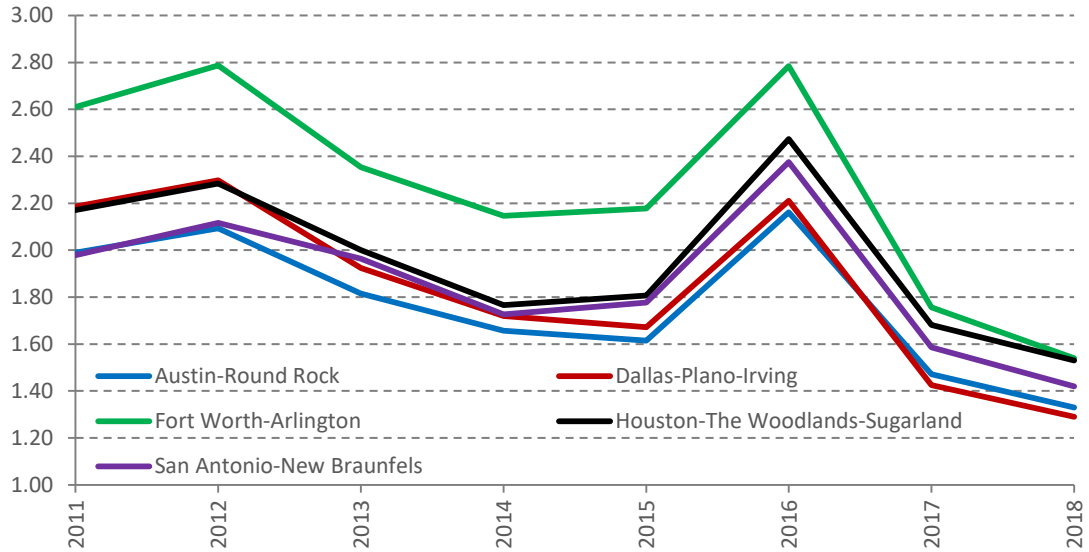
Note: Annual average. For single-family homes.
Source: Real Estate Center at Texas A&M University

Real Estate Center Housing Affordability Index (Ratio)



Note: Annual rate. The Texas Housing Affordability Index (HAI) reflects the relationship between the current median family income in a locale and the computed amount required to purchase a median priced home. Fourth-quarter median price data for the United States is forecasted.
Source: Real Estate Center at Texas A&M University

Real Estate Center Major Metros Housing Affordability Index (Ratio)



Note: Annual rate. The Texas Housing Affordability Index (HAI) reflects the relationship between the current median family income in a locale and the computed amount required to purchase a median priced home.
Source: Real Estate Center at Texas A&M University





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

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