

Finding Affordable Housing in Texas

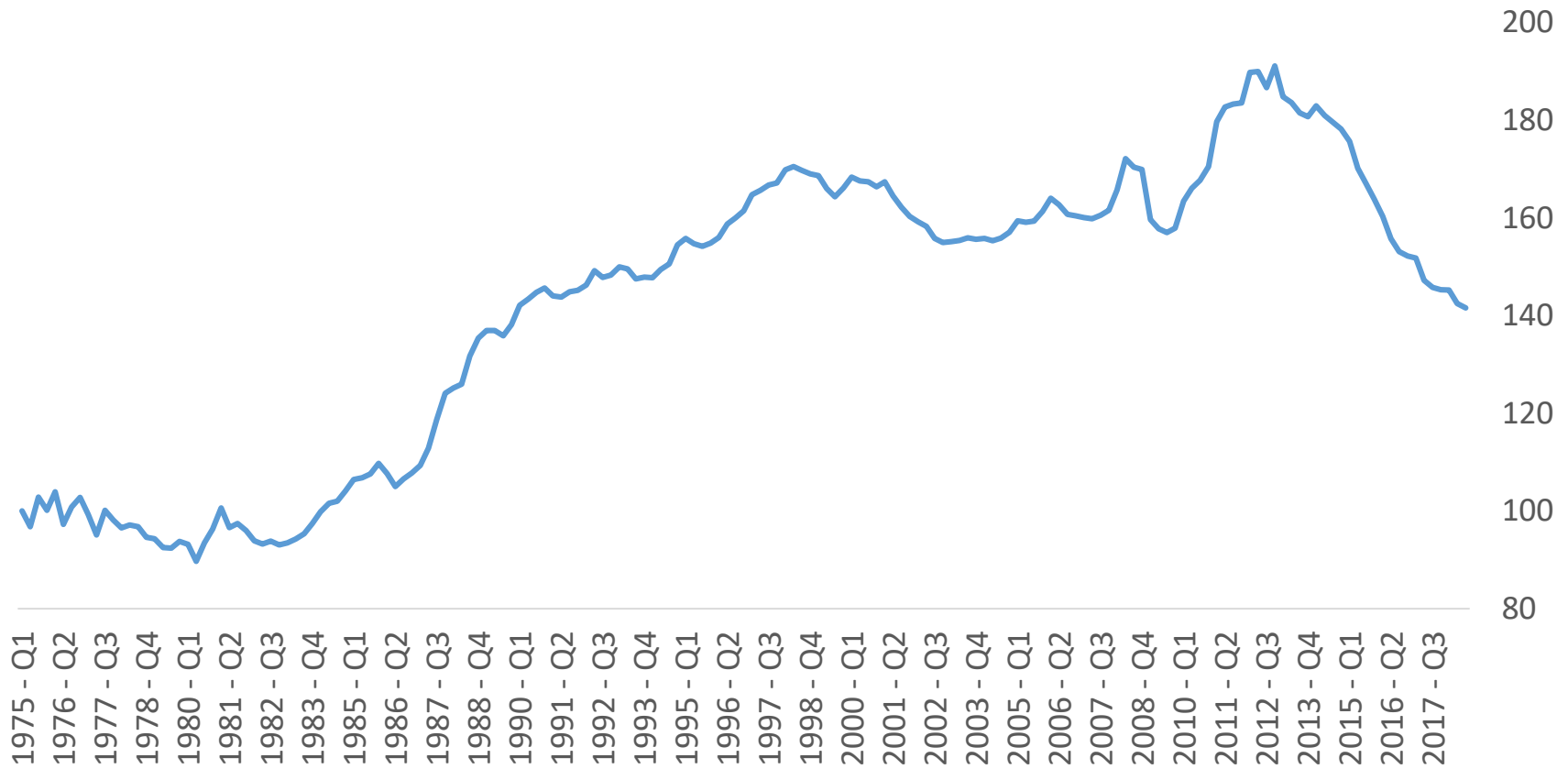
PhD Luis Torres

March 5, 2019

26th Texas Community Development Conference

After 2012, Texas housing prices have been rising faster than incomes

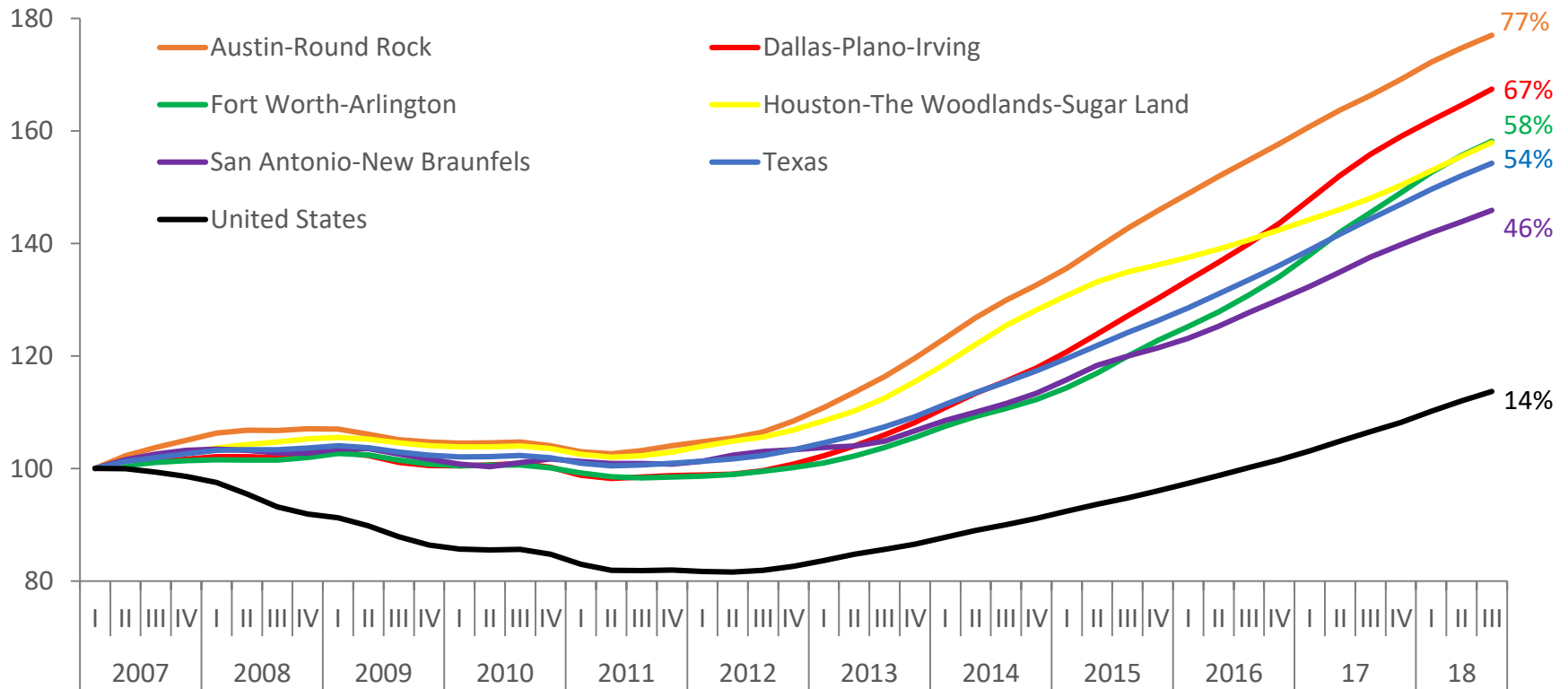
Ratio Texas Personal Income Per Capita to House Prices
(Index 1Q1975=100)



Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

Constrained supply plus strong demand = accelerated price gains

House Price Index
(Index 1Q2007=100)

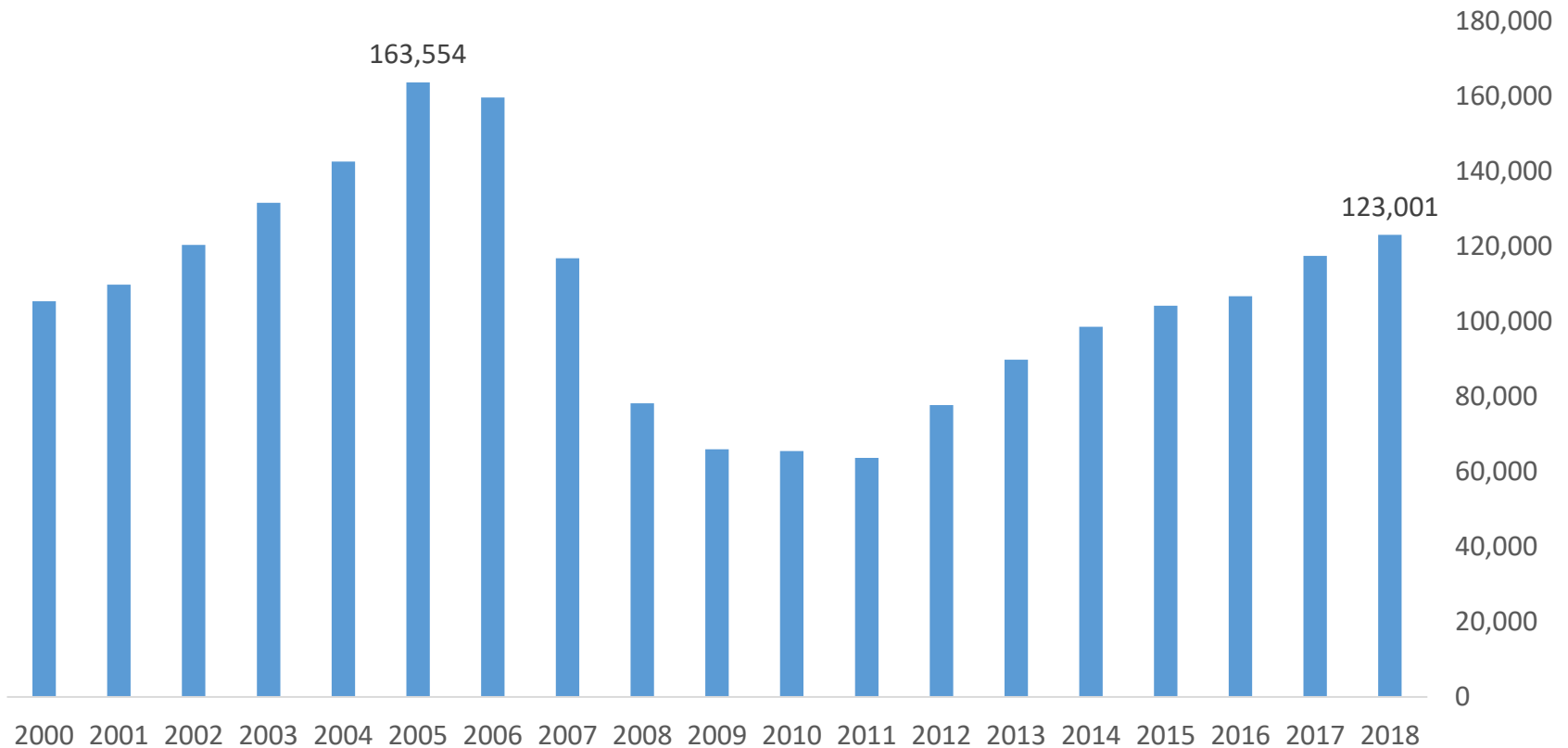


Note: Seasonally adjusted.

Sources: Federal Housing Finance Agency and Real Estate Center at Texas A&M University.

Single-family permits haven't recovered from pre-crisis levels

**Texas Single-Family Construction Permits
(#)**



Sources: U.S. Census Bureau, Real Estate Center at Texas A&M University, and author's calculations.

Fundamentals influence price movements in housing markets

Supply side:

- Building permits
- Housing starts
- Land costs
- Construction costs
- Regulation

Demand side:

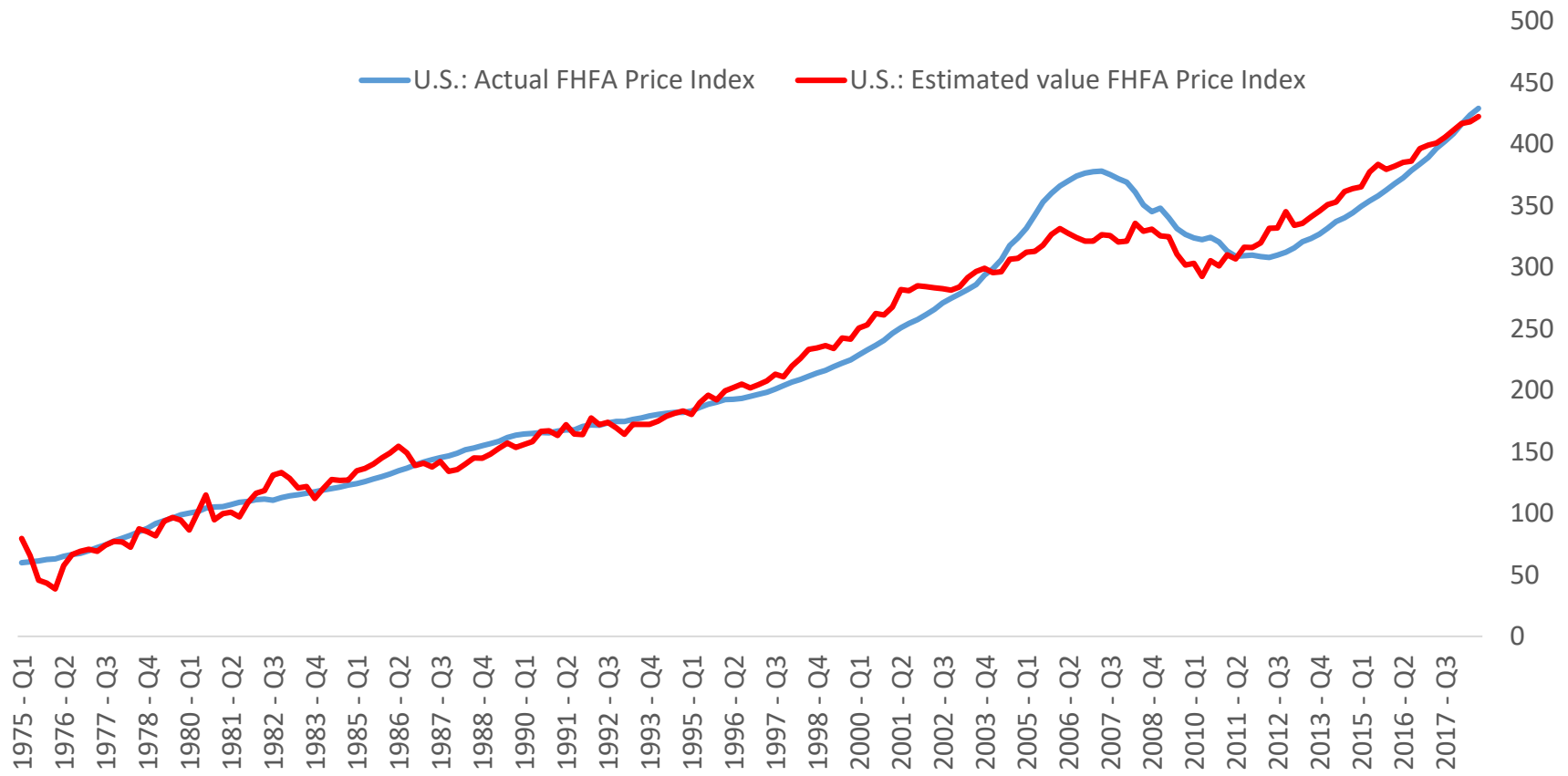
- Demographics
- Income growth
- Employment growth
- Interest rates
- Locational characteristics (schools, work centers, and transportation)

Comparing estimated values to actual prices might show price misalignments

- The Federal Housing Finance Agency (FHFA) house price index.
- Methodology used by Case-Shiller (2003) applied to Texas and major MSAs (Austin, Dallas-Fort Worth, Houston, and San Antonio).
- Methodology was one of first to point out formation of a housing bubble in U.S. housing market.

Estimates confirm Case-Shiller results from 1Q2004 to 2Q2011 leading to housing boom and subsequent bust

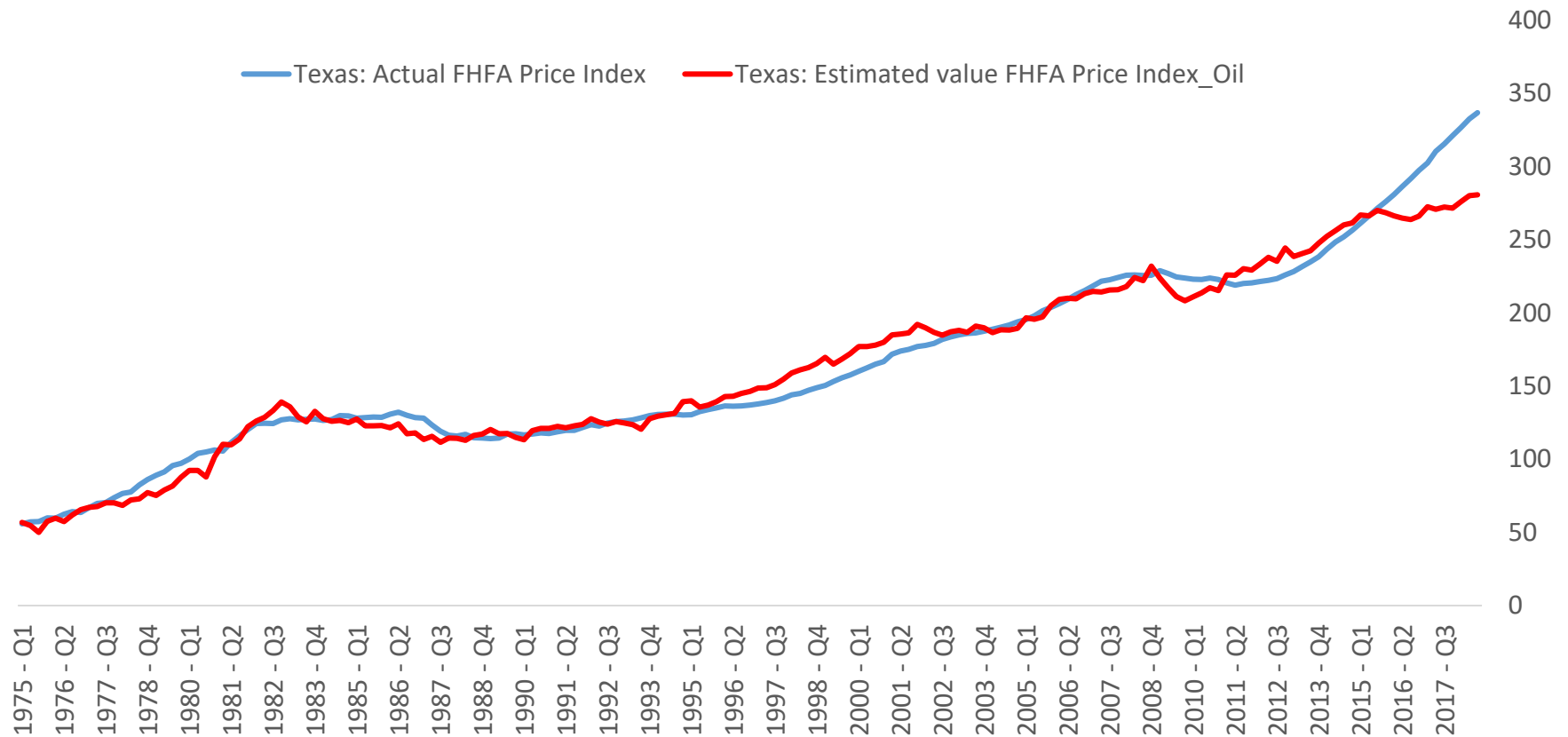
Case-Shiller U.S. Home Price Estimates
(Index 1Q1975=100)



Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

Misalignment since 3Q2015 suggests recent price changes cannot be explained by supply and demand

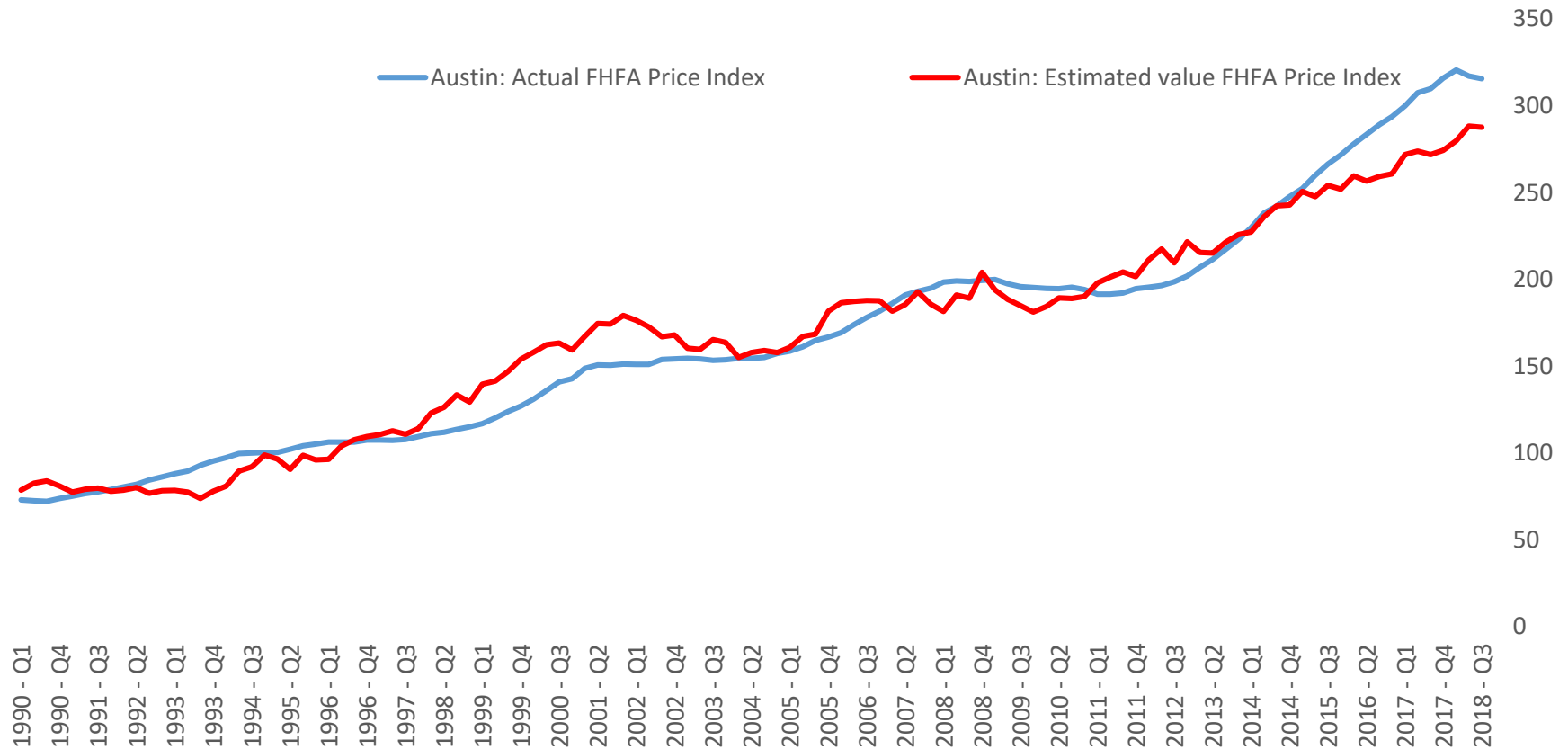
Case-Shiller Texas Home Price Estimates
(Index 1Q1975=100)



Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

Same misalignment observed in Austin since 1Q2014 . . .

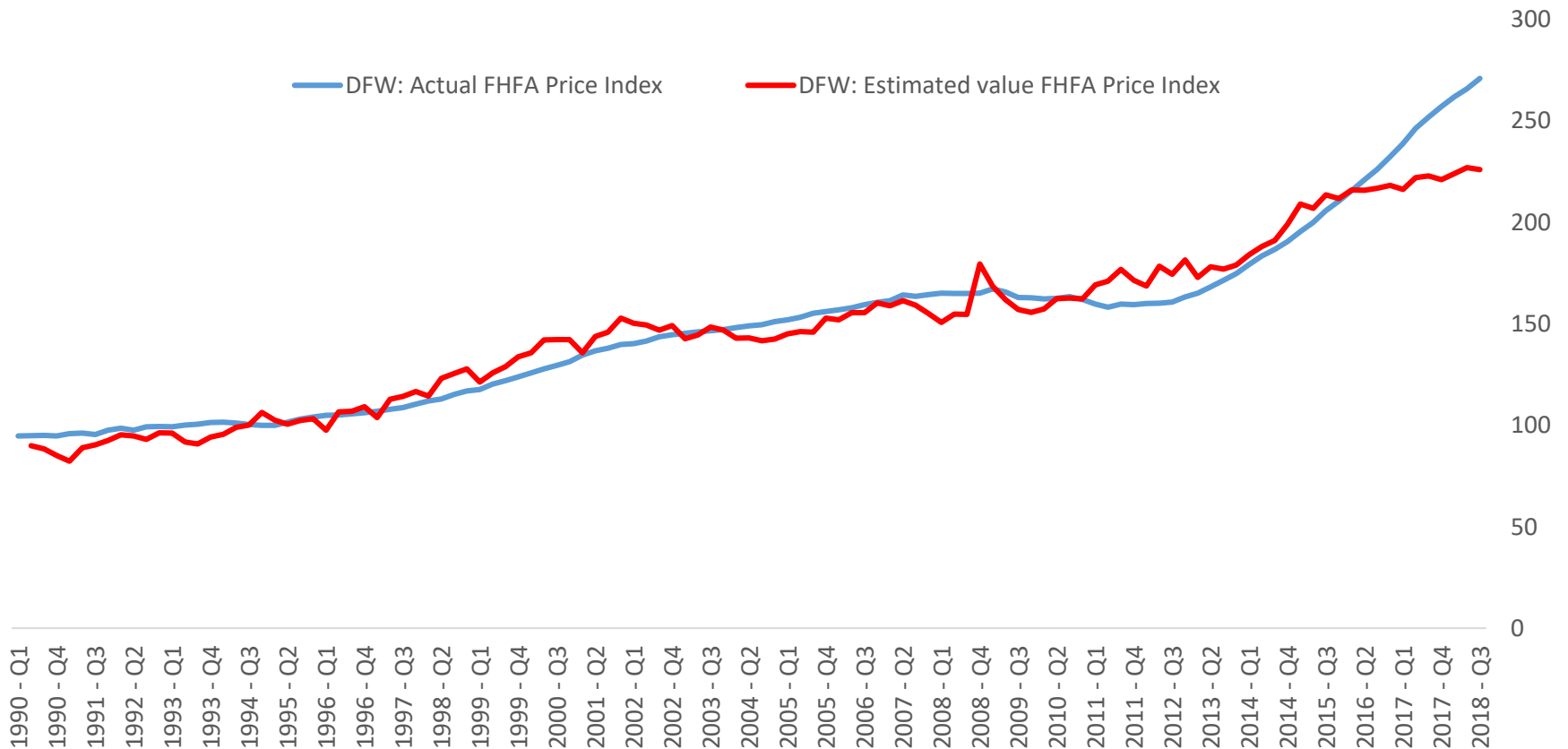
Case-Shiller Austin Home Price Estimates
(Index 1Q1975=100)



Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

... in DFW since 2Q2016

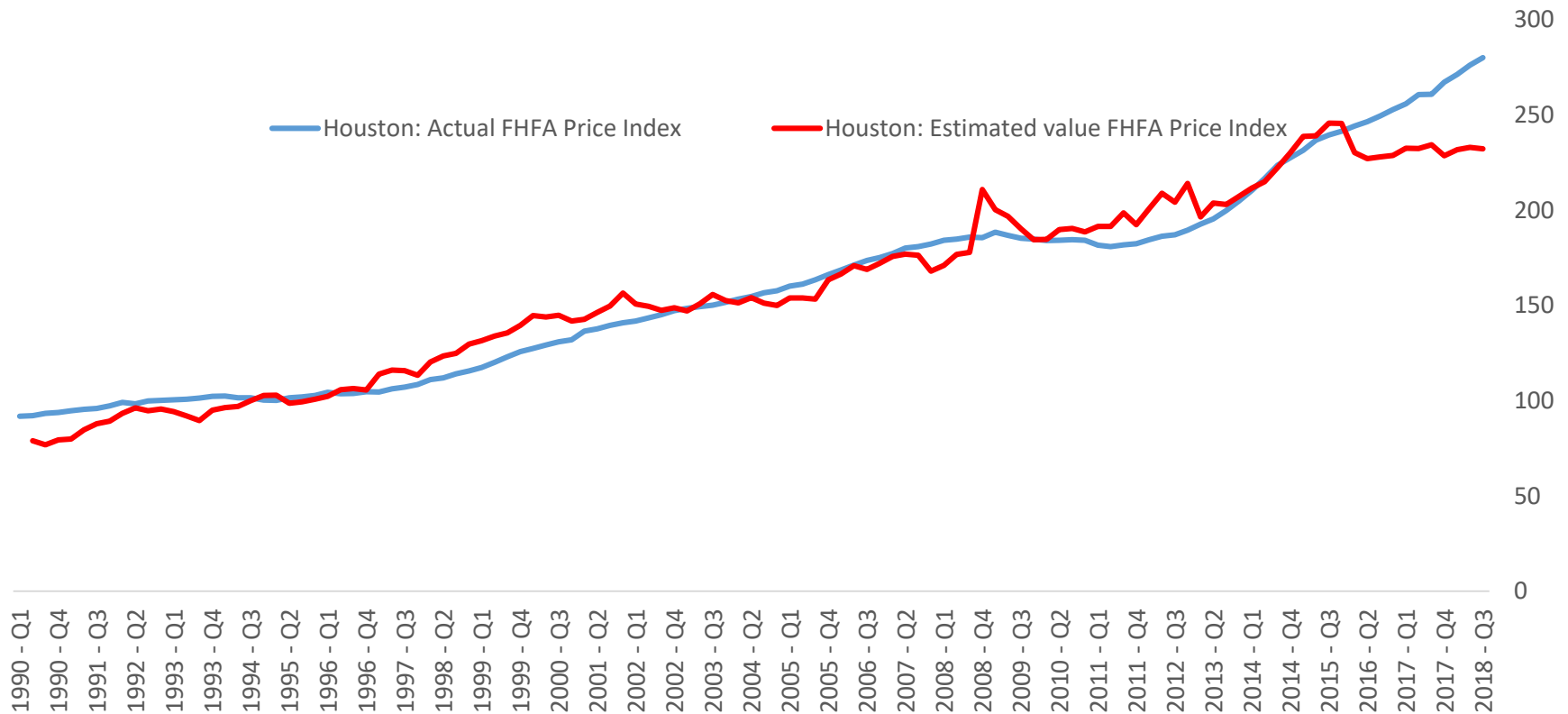
Case-Shiller DFW Home Price Estimates (Index 1Q1975=100)



Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

... in Houston since 1Q2016

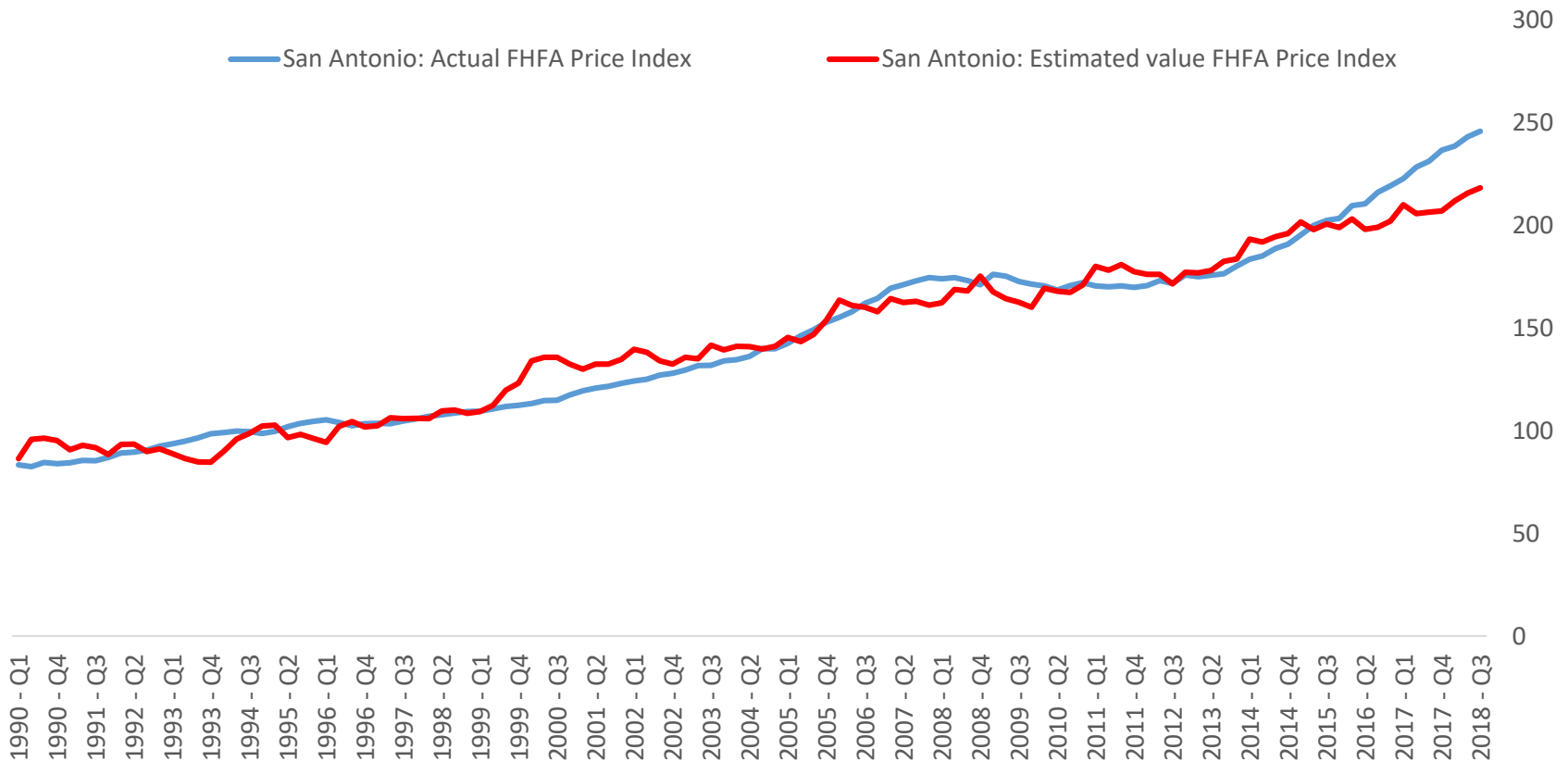
Case-Shiller Houston Home Price Estimates (Index 1Q1975=100)



Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

... in San Antonio since 2Q2015. Possible overvaluation of home prices at state and MSA levels

**Case-Shiller San Antonio Home Price Estimates
(Index 1Q1975=100)**



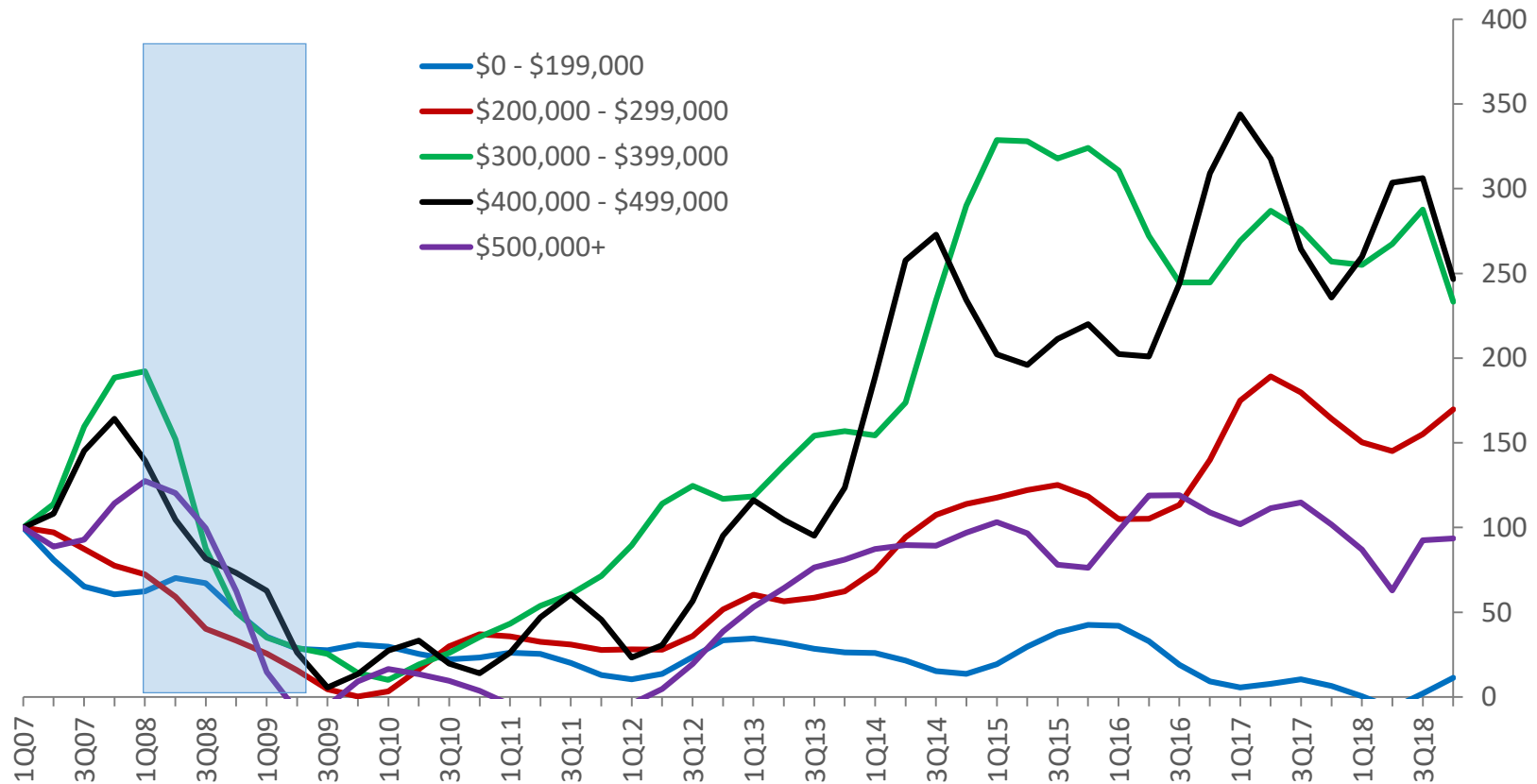
Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author's calculations.

Housing starts represent supply fundamentals

- Are they capturing the supply constraints faced by homebuilder?
- In aftermath of 2008–09 Great Recession, housing supply held back by lack of developed land
 - ✓ resulting in upward pressures on land costs for homebuilders.
- Other constraints:
 - high costs of labor and materials,
 - reduced profit margins, and
 - incentive to construct homes priced more than \$300,000.

Supply of vacant developed lots never came back for homes with a sales price below \$200,000 in Austin . . .

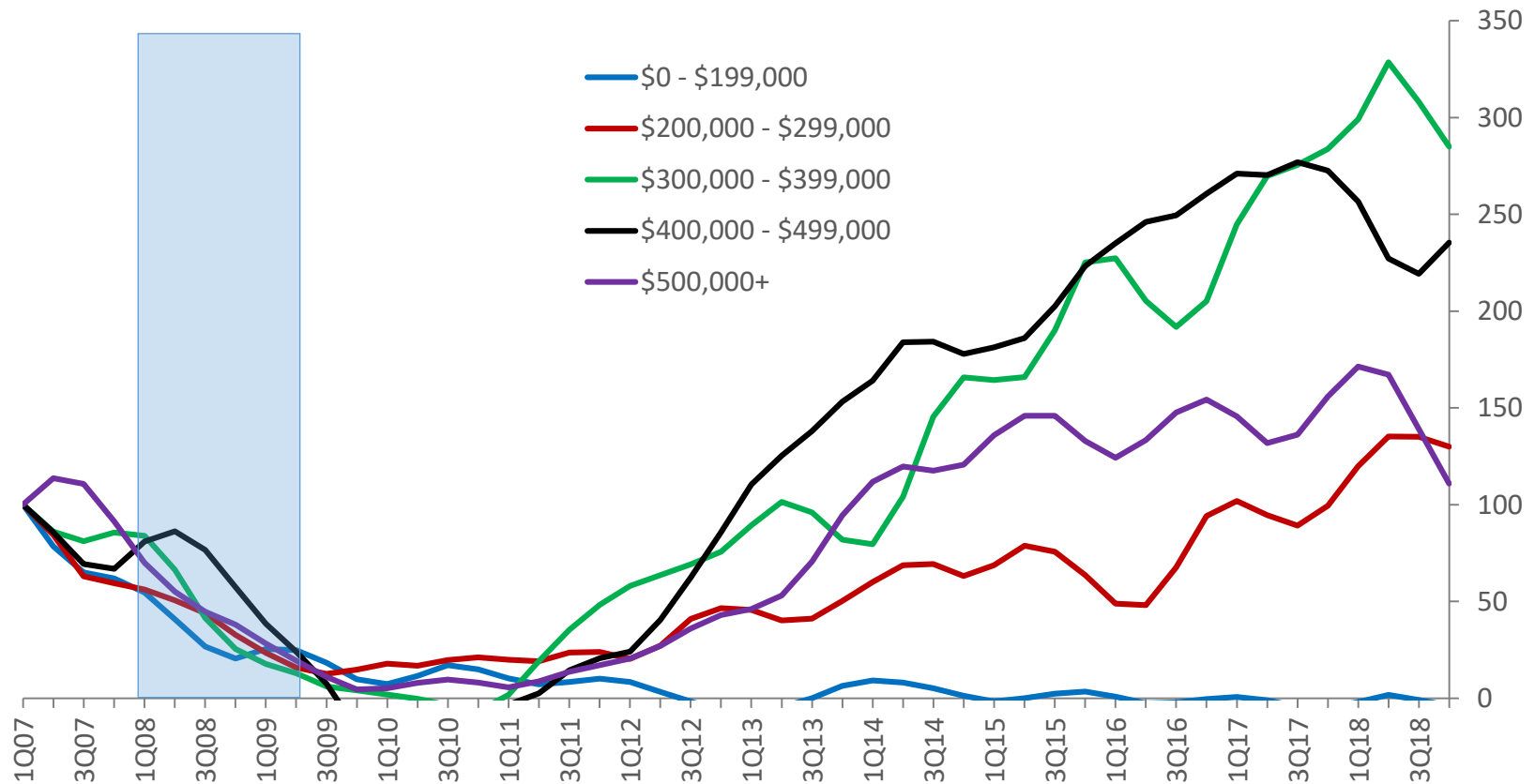
Austin Vacant Developed Lot Supply
(Index Jan2007=100)



Note: Trend-Cycle Component. Shaded area refers to US recession
Source: Metrostudy.

in DFW . . .

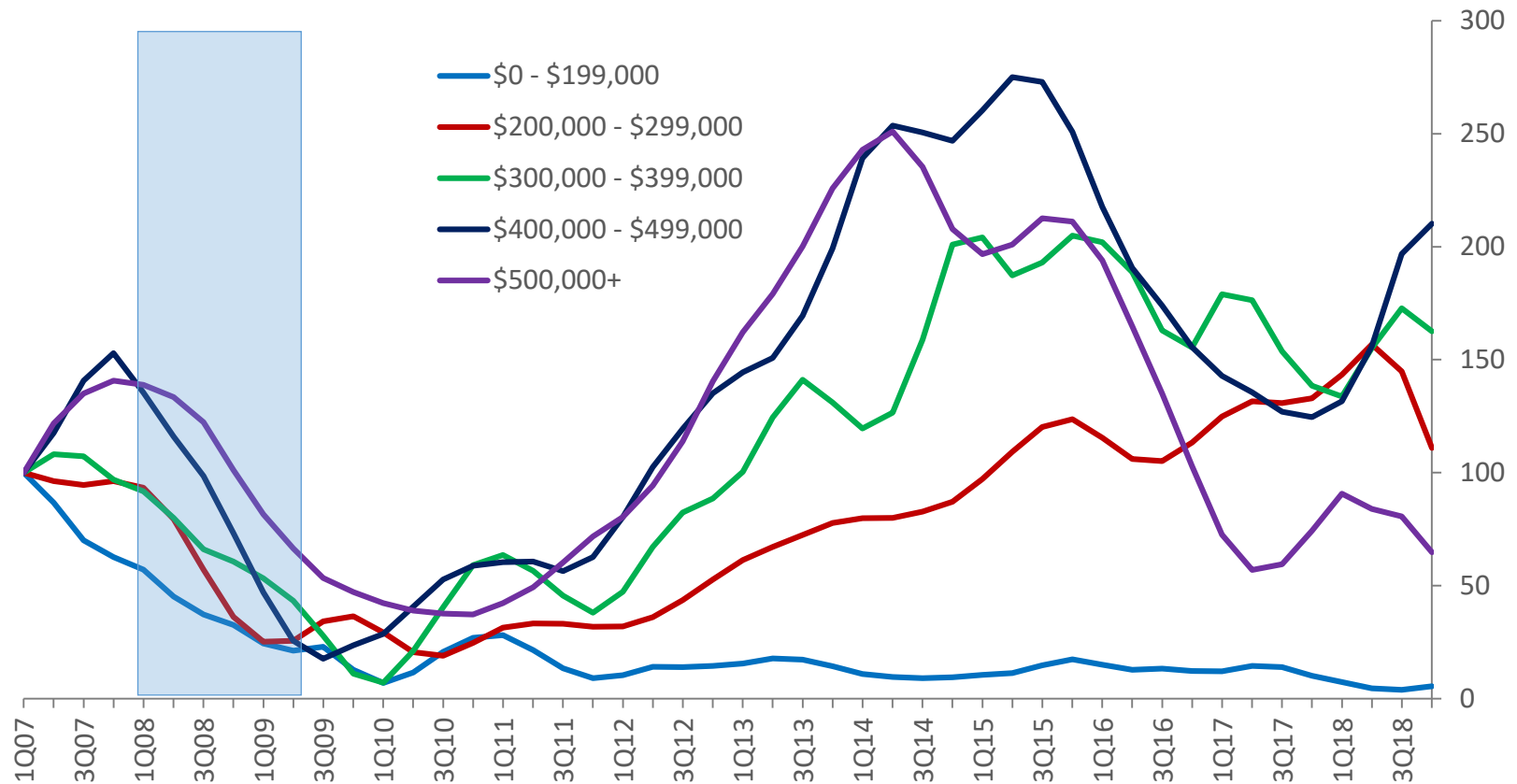
DFW Vacant Developed Lot Supply (Index Jan2007=100)



Note: Trend-Cycle Component. Shaded area refers to US recession
Source: Metrostudy.

in Houston . . .

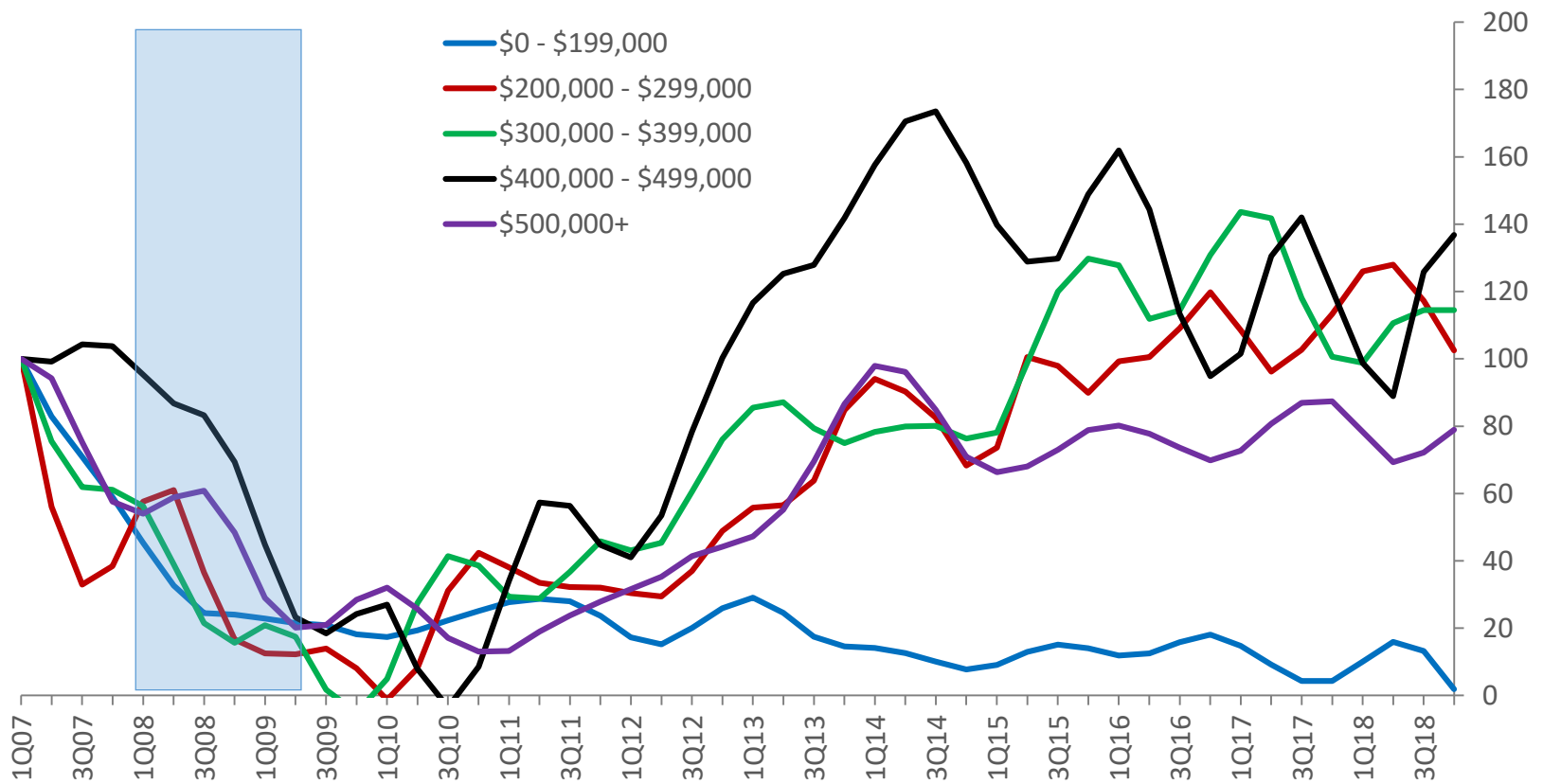
**Houston Vacant Developed Lot Supply
(Index Jan2007=100)**



Note: Trend-Cycle Component. Shaded area refers to US recession
Source: Metrostudy.

...in San Antonio

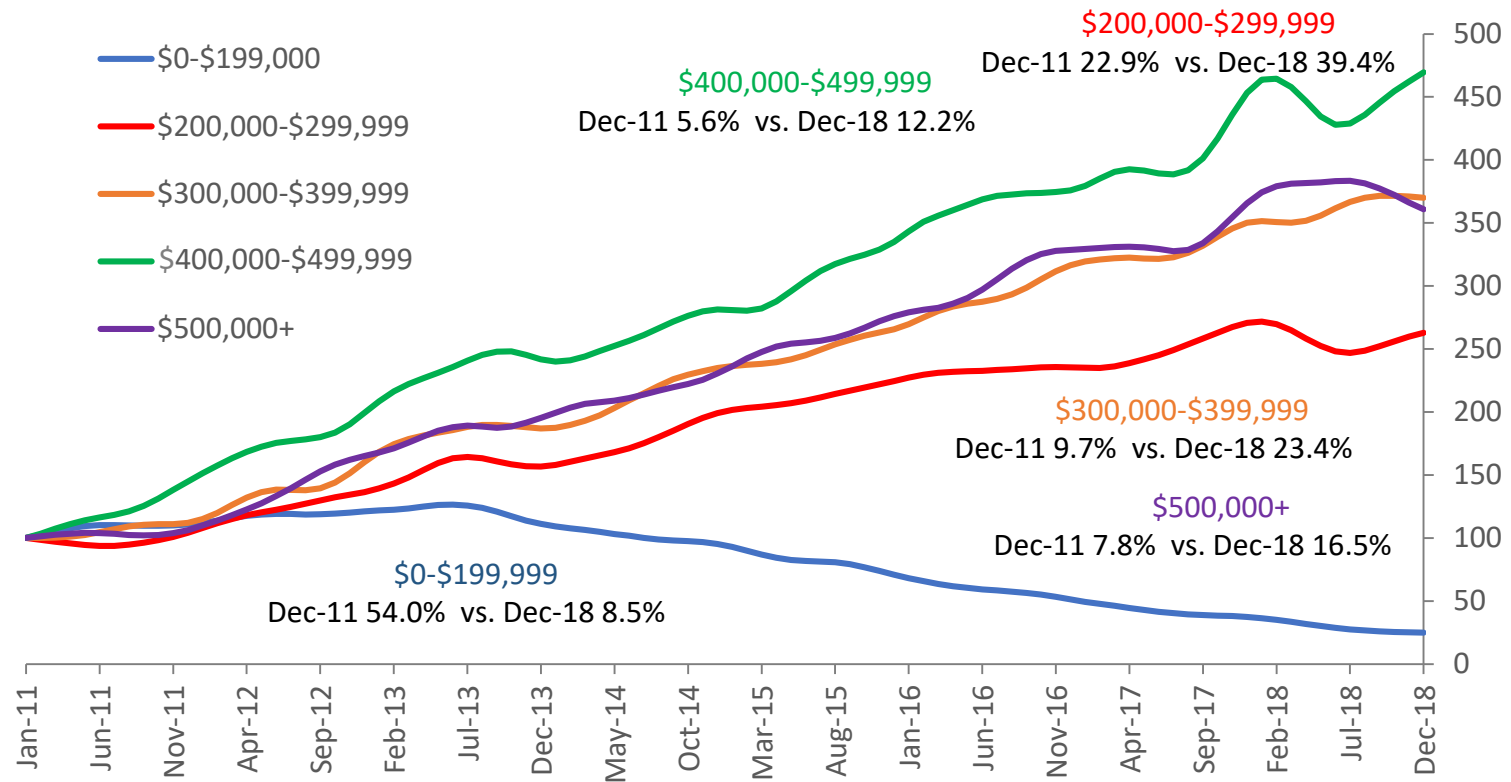
San Antonio Vacant Developed Lot Supply
(Index Jan2007=100)



Note: Trend-Cycle Component. Shaded area refers to US recession
Source: Metrostudy.

Causing sales to decline in Austin ...

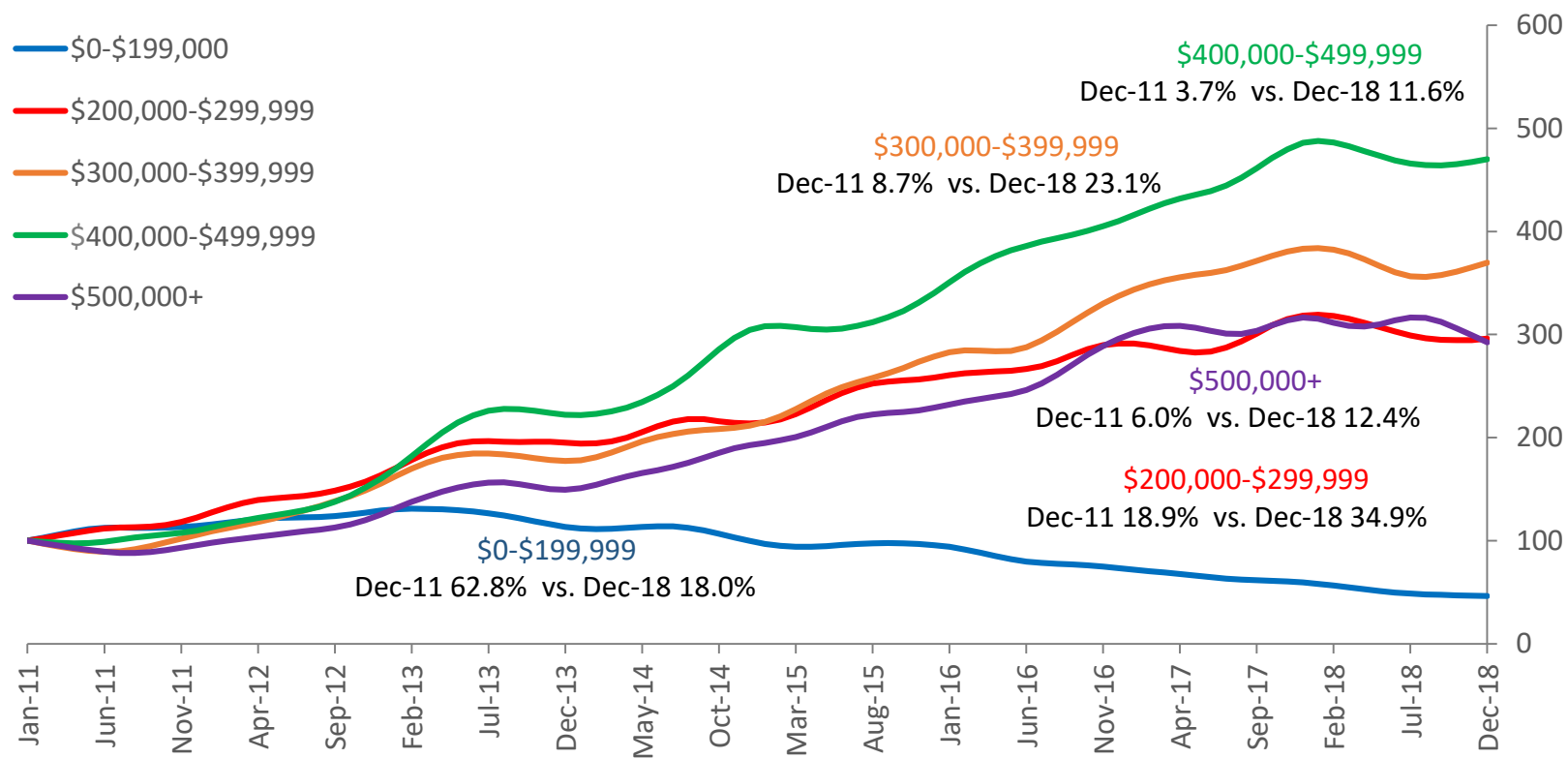
Austin Housing Sales by Price Cohort
(Index Jan2011=100)



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

in Dallas ...

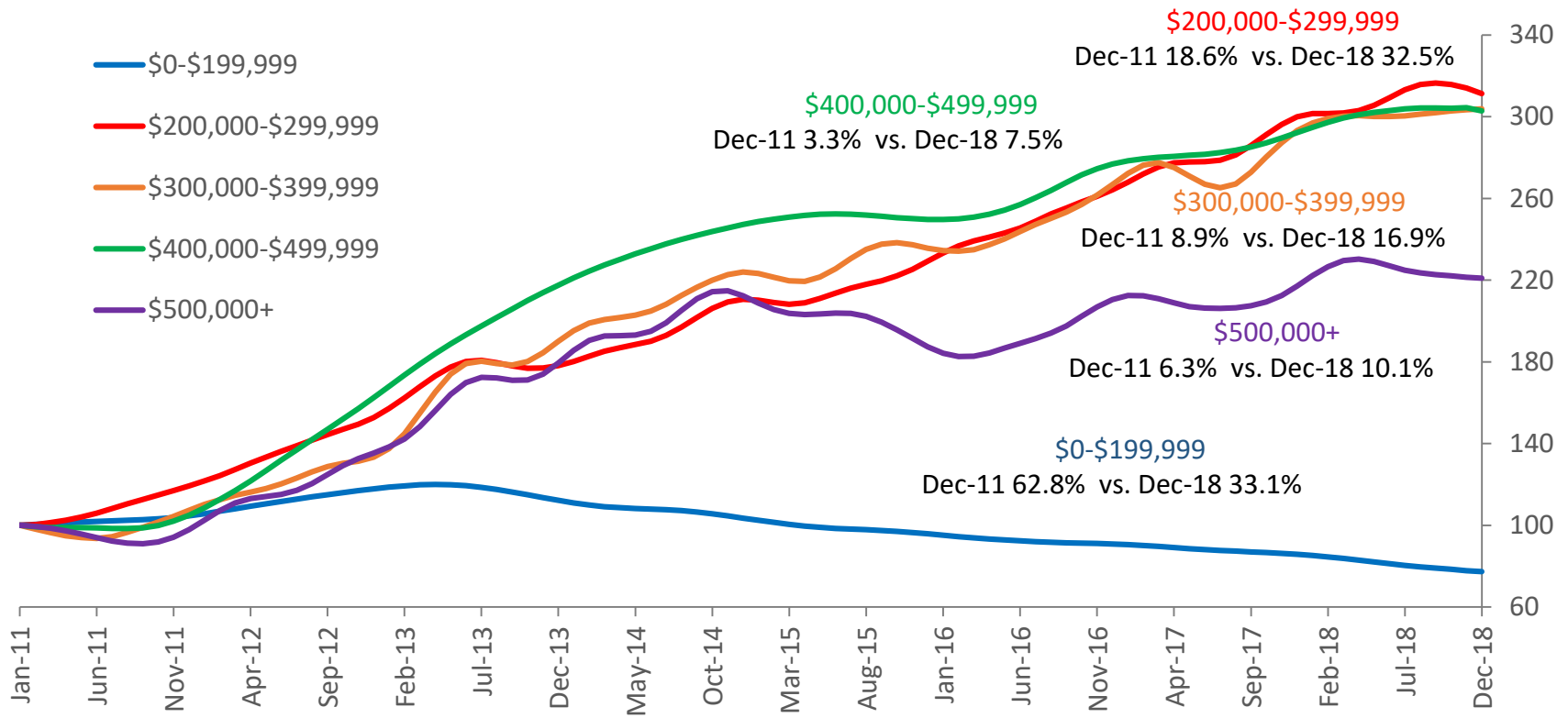
Dallas Housing Sales by Price Cohort (Index Jan2011=100)



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

in Houston...

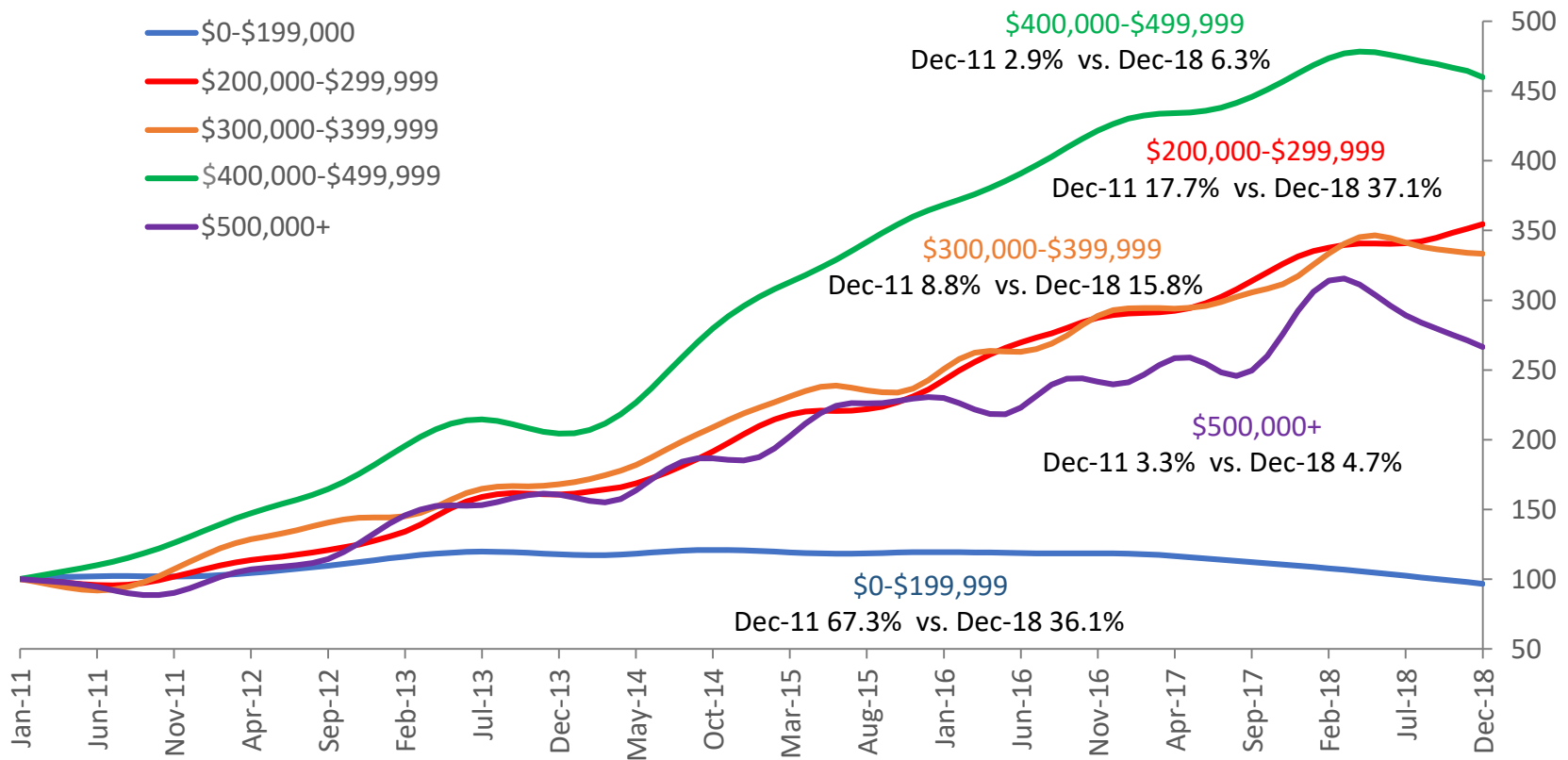
Houston Housing Sales by Price Cohort (Index Jan2000=100)



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

In San Antonio. Sales shifted to homes with a higher price

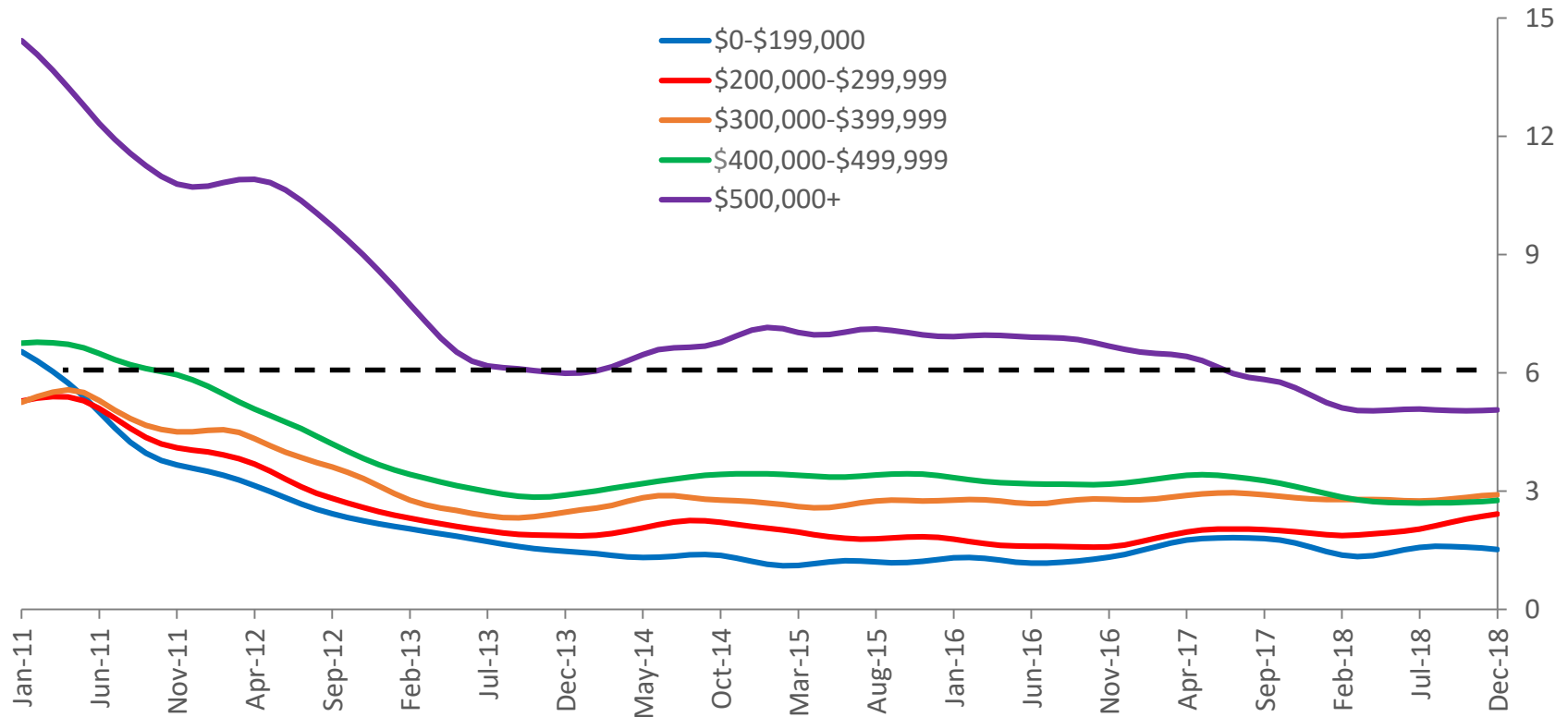
**San Antonio Housing Sales by Price Cohort
(Index Jan2011=100)**



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

Supply of homes with price below \$200,000 is very low in Austin . . .

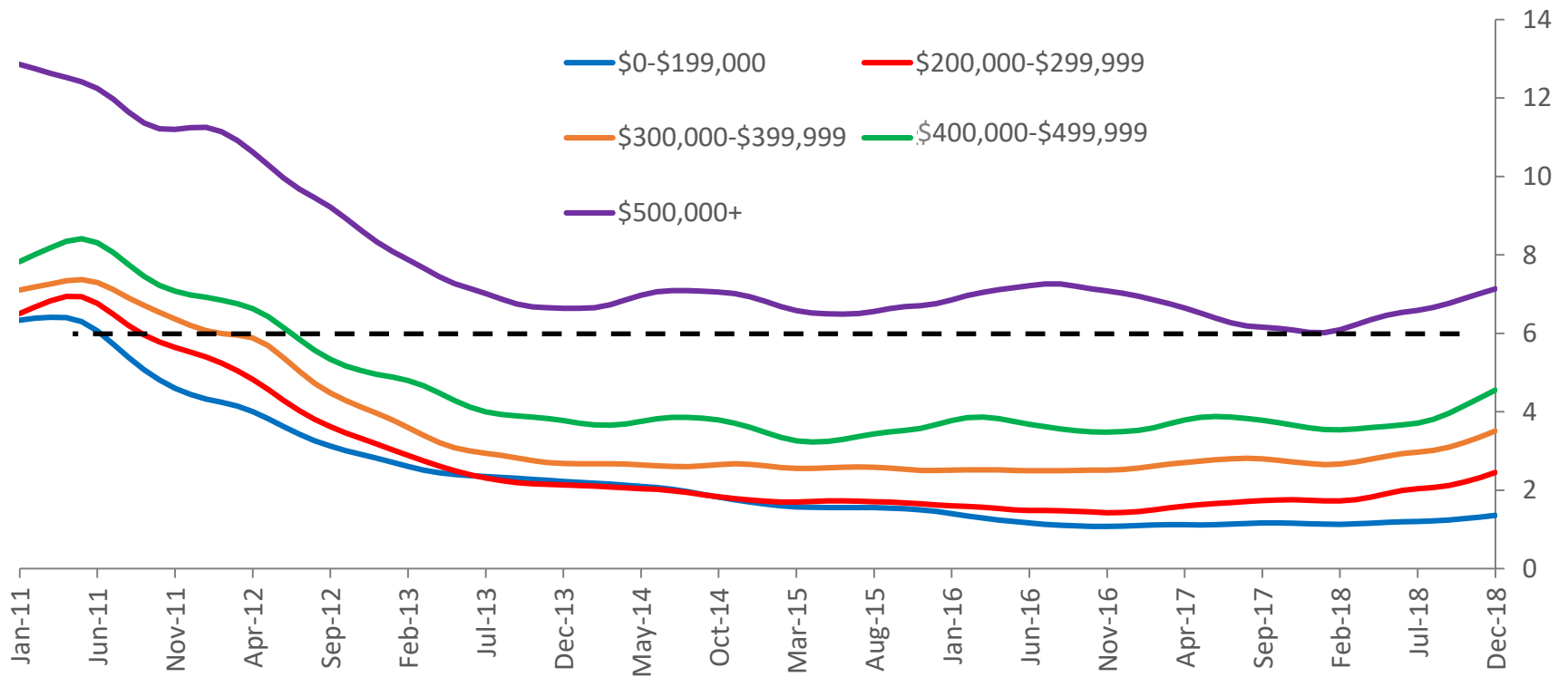
**Austin Months of Inventory by Price Cohort
(Months)**



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

in Dallas . . .

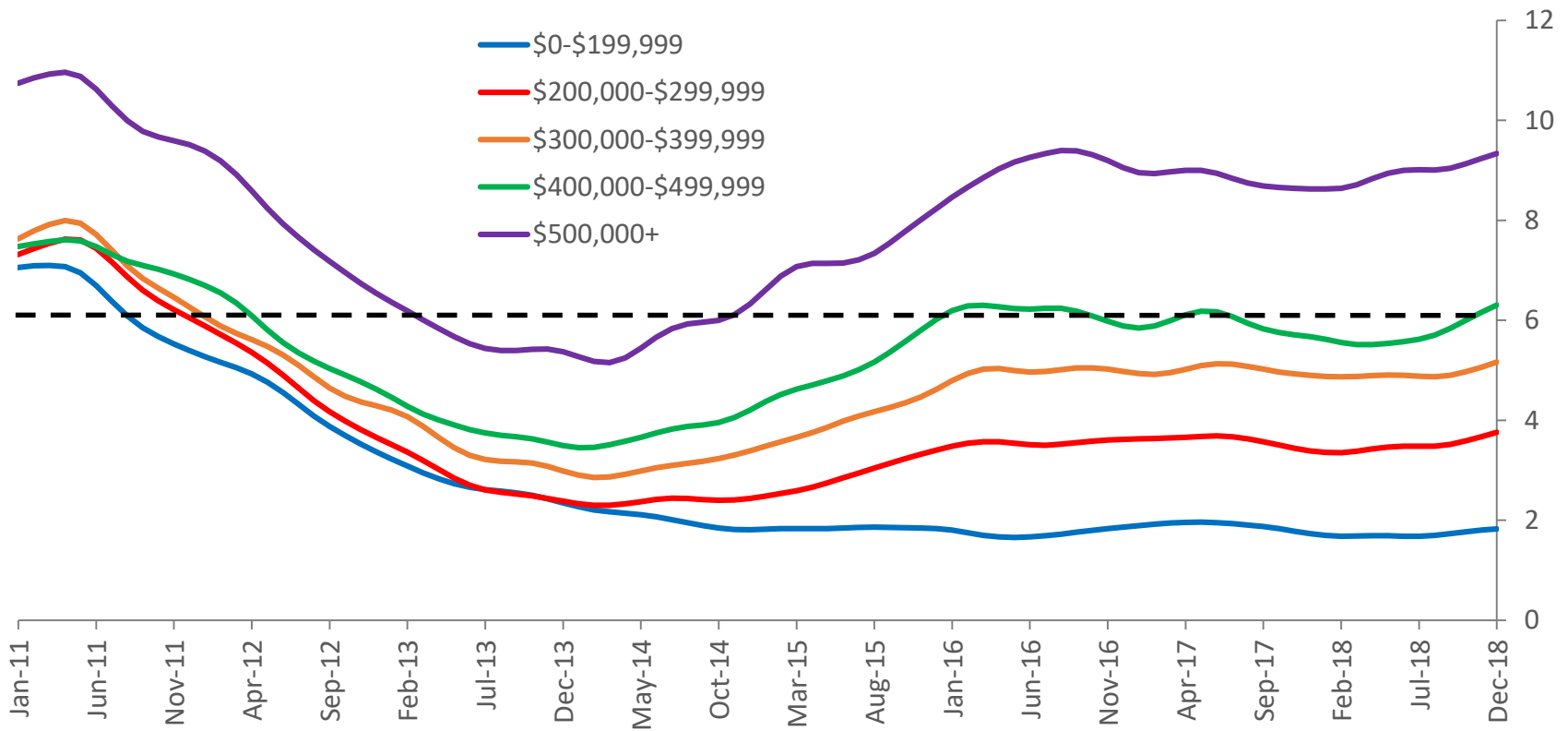
**Dallas Months of Inventory by Price Cohort
(Months)**



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

in Houston . . .

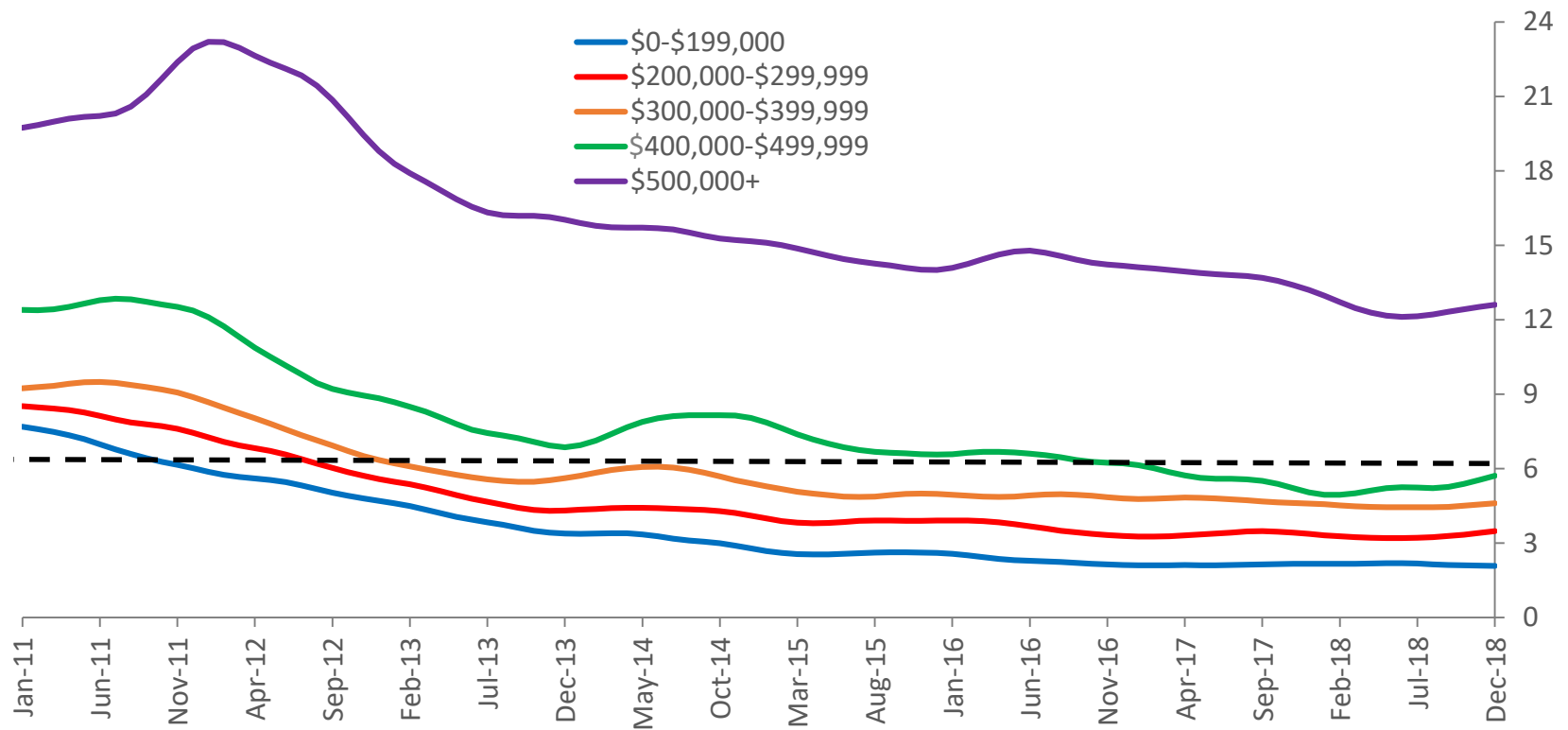
**Houston Months of Inventory by Price Cohort
(Months)**



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

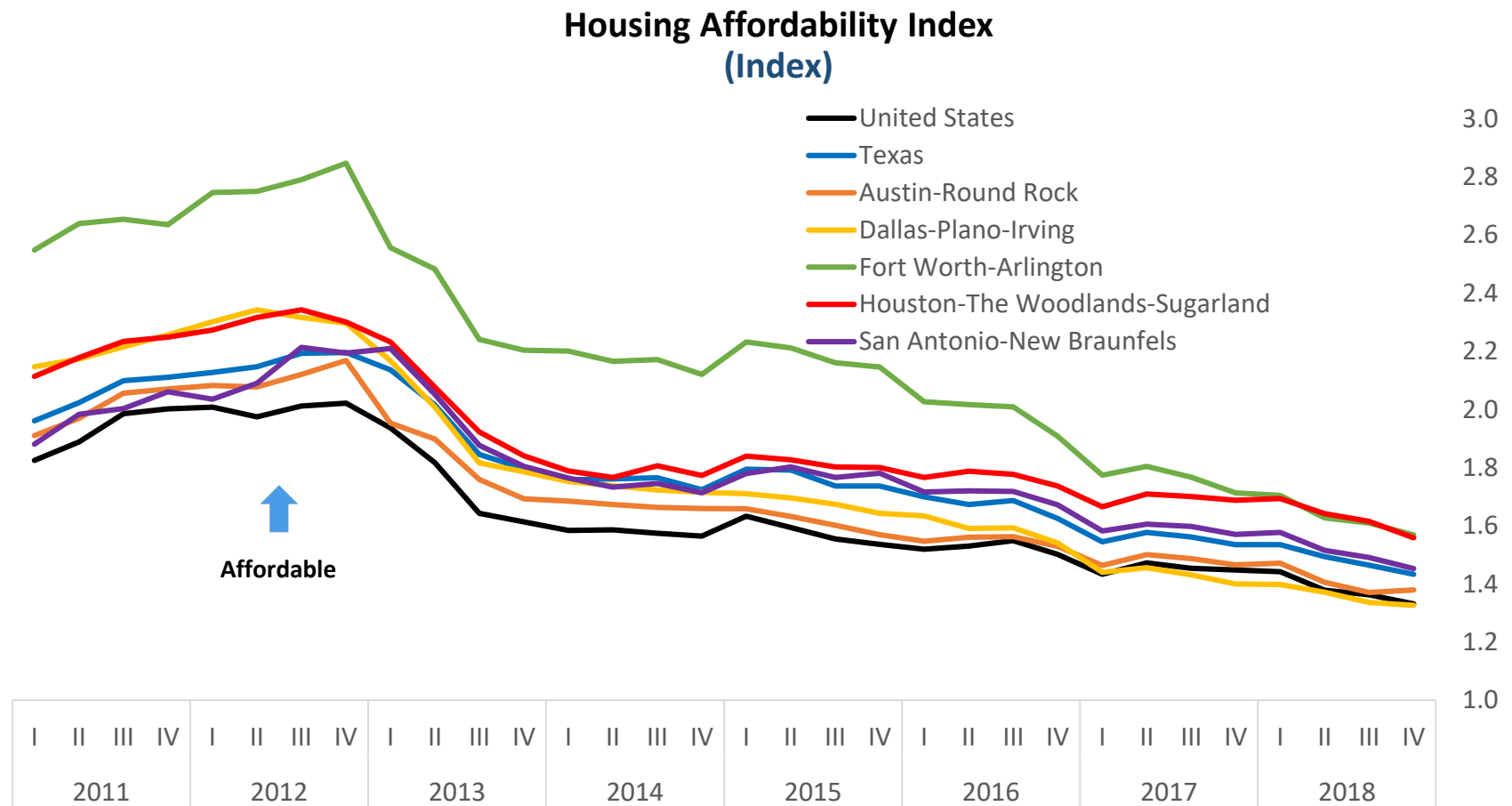
in San Antonio . . .

**San Antonio Months of Inventory by Price Cohort
(Months)**



Note: Trend-Cycle Component. Includes existing and new homes.
Source: Real Estate Center at Texas A&M University.

Past rapid price appreciation and present rising interest rates hindered affordability across state

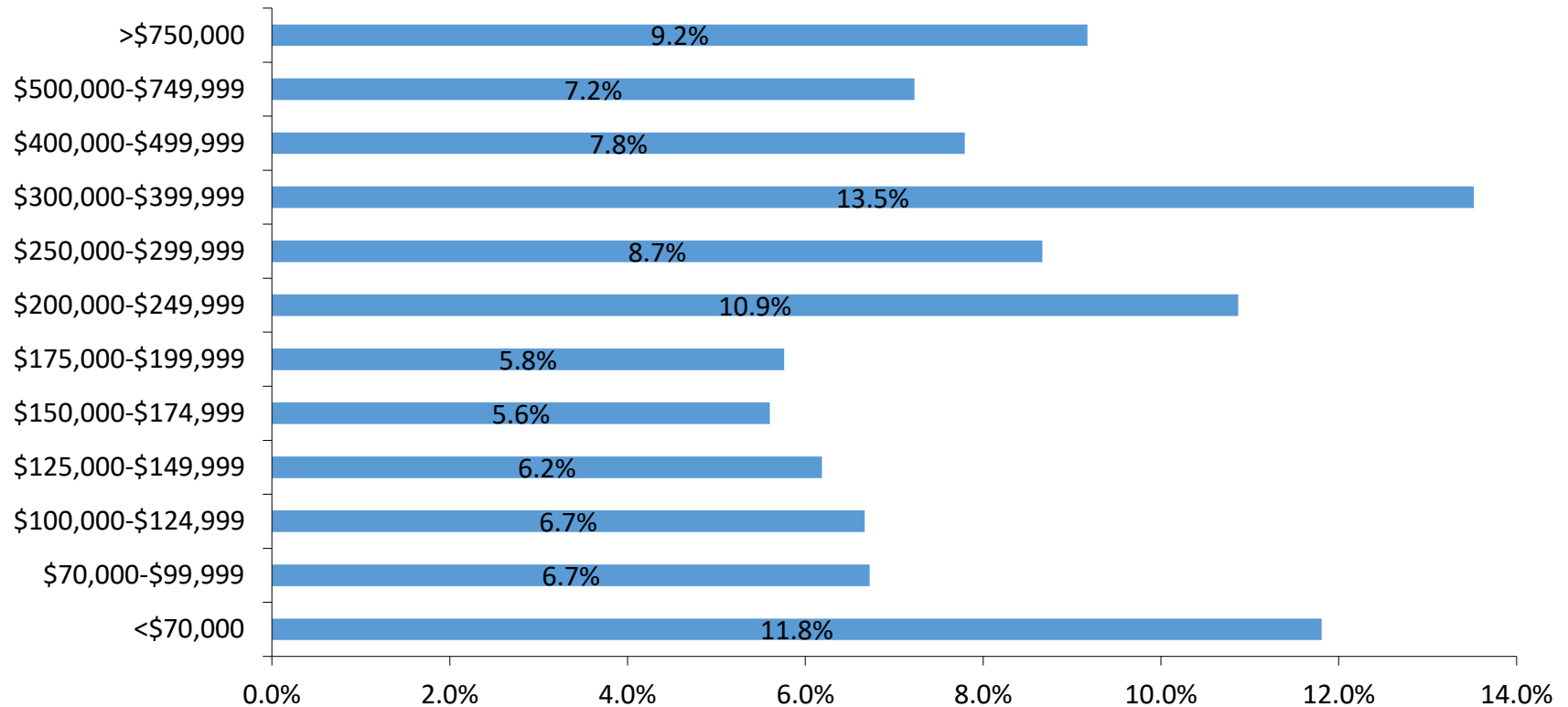


Note: Seasonal Adjusted.

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

More than half of Austin households can afford a home below \$250,000

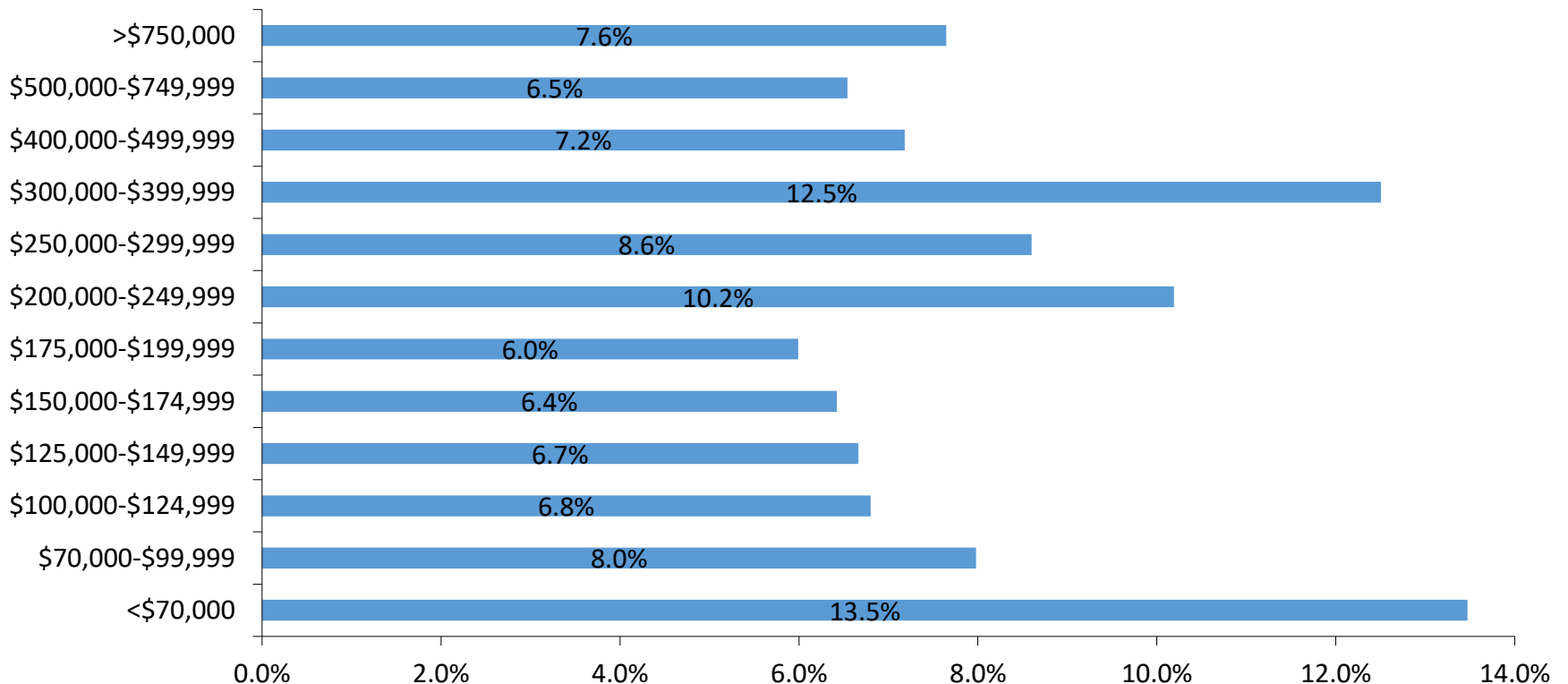
**Austin Households by Highest-Priced Affordable Home
(Percent)**



Sources: Source: 2017 American Community Survey, U.S. Census Bureau and calculations by the Real Estate Center at Texas A&M University.

Almost 60 percent of DFW households can afford a home below \$250,000

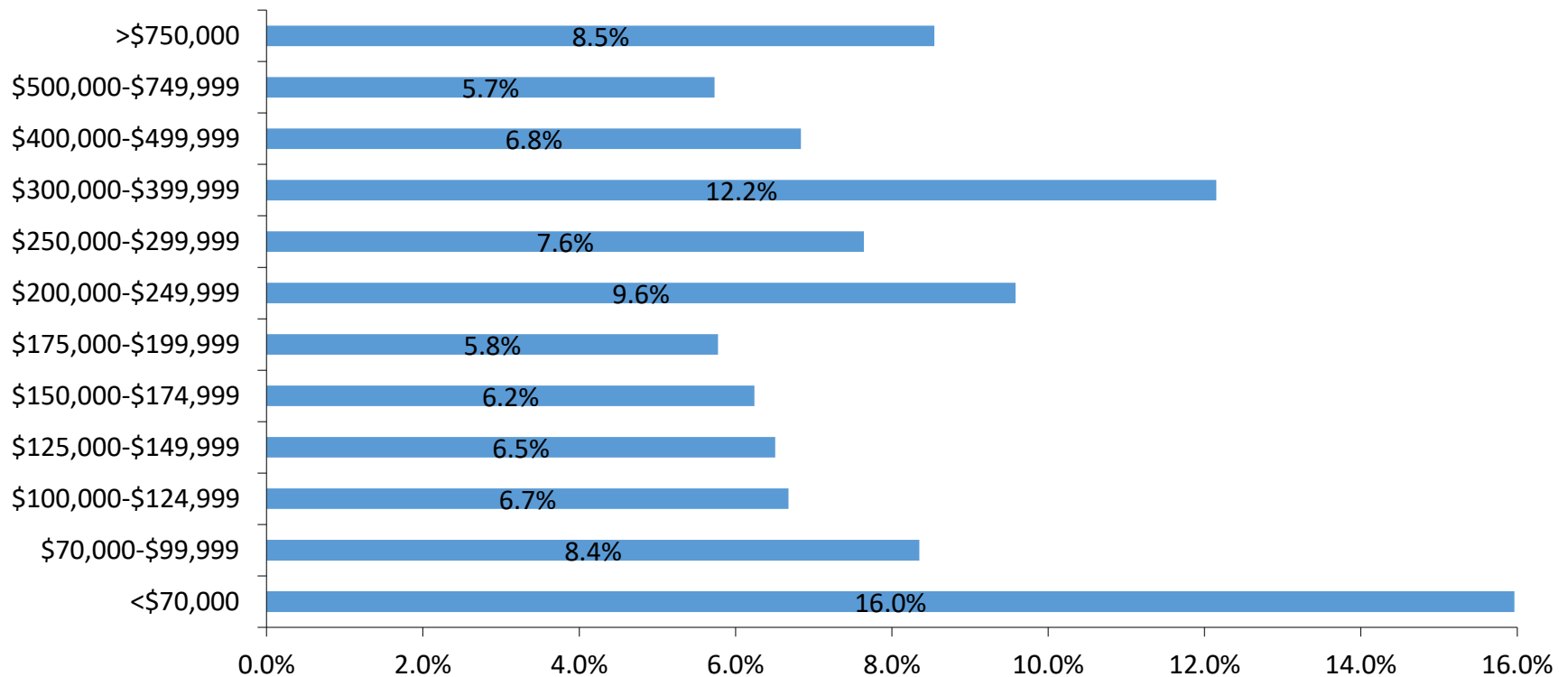
**DFW Households by Highest-Priced Affordable Home
(Percent)**



Sources: Source: 2017 American Community Survey, U.S. Census Bureau and calculations by the Real Estate Center at Texas A&M University.

Almost 60 percent of Houston households can afford a home below \$250,000

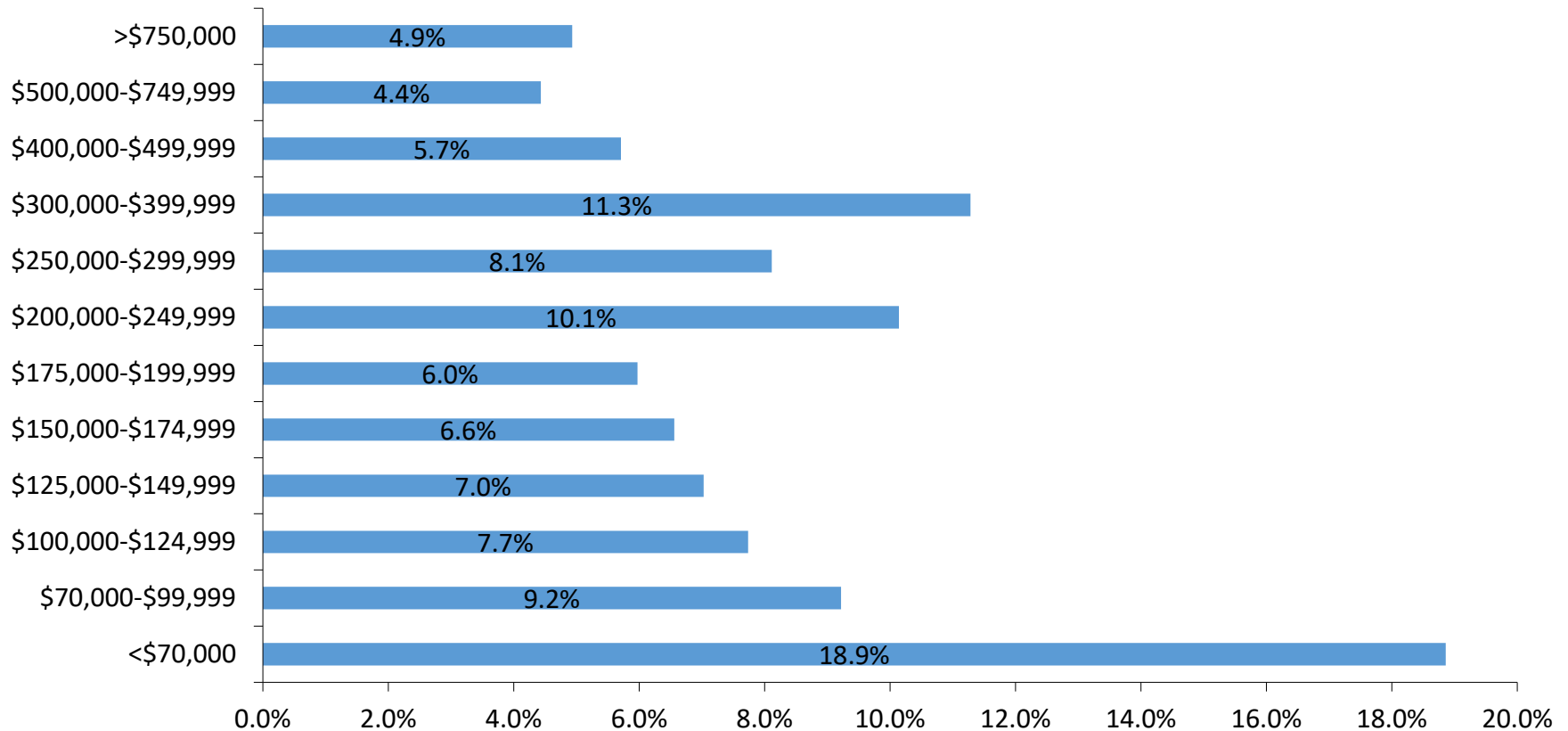
**Houston Households by Highest-Priced Affordable Home
(Percent)**



Sources: Source: 2017 American Community Survey, U.S. Census Bureau and calculations by the Real Estate Center at Texas A&M University.

Almost 60 percent of San Antonio households can afford a home below \$250,000

**San Antonio Households by Highest-Priced Affordable Home
(Percent)**



Sources: Source: 2017 American Community Survey, U.S. Census Bureau and calculations by the Real Estate Center at Texas A&M University.

Are home prices expected to continue to increase at a higher rate than household income?

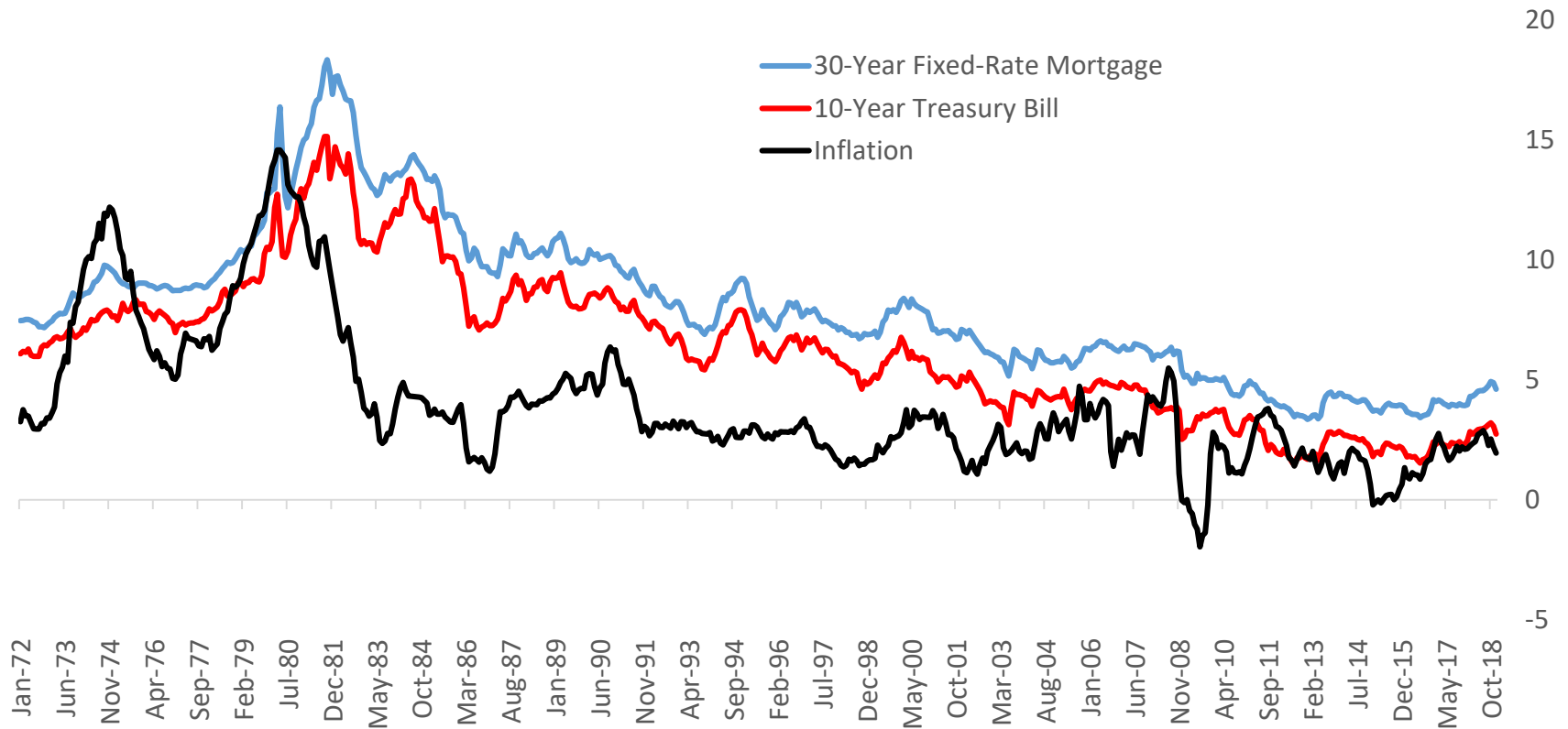
| Single Family Forecast | 2018 (%) | 2019 (%) | 2020(%) | 1991-2018(%) |
|----------------------------|----------|----------|---------|--------------|
| Texas | | | | |
| Sales | 1.8 | 0.9 | 3.4 | 4.6 |
| Price per square foot | 4.4 | 4.0 | 4.7 | 4.8 |
| Personal Income per Capita | | | | 3.8 |
| Austin | | | | |
| Sales | 2.3 | 2.8 | 3.0 | 6.1 |
| Price per square foot | 4.5 | 4.0 | 5.8 | 6.3 |
| Personal Income per Capita | | | | 4.2 |
| DFW | | | | |
| Sales | -2.2 | 0.3 | 2.4 | 5.0 |
| Price per square foot | 5.3 | 4.4 | 4.9 | 4.6 |
| Personal Income per Capita | | | | 3.6 |
| Houston | | | | |
| Sales | 3.5 | 1.1 | 4.3 | 3.9 |
| Price per square foot | 3.1 | 4.6 | 5.1 | 5.3 |
| Personal Income per Capita | | | | 3.7 |
| San Antonio | | | | |
| Sales | 2.3 | -1.0 | 6.7 | 6.8 |
| Price per square foot | 5.2 | 3.9 | 4.5 | 4.6 |
| Personal Income per Capita | | | | 3.1 |

Note: Estimated with October/December 2018 data. 2018 Housing Permits are forecasted.

Source: Real Estate Center at Texas A&M University

As inflation rises, so will nominal interest rates affecting housing affordability

**30-Year Mortgage Rate, 10-Year Bond Yield and Annual Inflation
(Percent)**



Note: Seasonally adjusted. CPI All Urban Consumers 1982-84=100.

Sources: Federal Home Loan Mortgage Corporation, Federal Reserve Board and Bureau of Labor Statistics

Is housing affordability going to improve or get worse?

- It depends on income growth and housing supply.
- Can Texas household income keep pace with housing prices?
- Can homebuilders build a home with a price below \$200,000 and make a profit?

What are the solutions?

- There are “no free lunches”.
- Everything has a cost.
- The best way is through education, training, etc. increasing skills that lead to higher income.
 - ✓ Medium to long-run solution.
- Nonhousing-related responses
 - Increasing the income of low-income households (e.g. Earned Income Tax Credit)
 - Subsidizing consumption of non-housing goods

What are the solutions?

- Housing-related responses
 - New creative development plans, techniques, designs, etc.
 - ✓ Lead to an increase in home building productivity
 - Policies that direct government funds to expenditures on housing.
 - Vouchers vs. production programs.
 - Best way to provide affordable units at a much lower cost
 - Relying on older, already existing housing units vs. new production programs.

Please visit our webpage

www.recenter.tamu.edu

