

Room to Grow: Housing for a New Economy

Federal Reserve Bank of Dallas & Real Estate Center at Texas A&M University
February 21, 2020

Texas' Housing Market

Dr. James P. Gaines

Chief Economist



REAL ESTATE CENTER
TEXAS A & M UNIVERSITY

MAYS BUSINESS SCHOOL

2010-2019

**A Great Decade
for Texas &
Texas Housing**

Eleven Expansions Since 1950

Average Duration: 61 months

• Nov 1949	July 1953	46 months
• Jun 1954	Aug 1957	39 months
• May 1958	Apr 1960	24 months
• Mar 1961	Dec 1969	106 months
• Dec 1970	Nov 1973	36 months
• Apr 1975	Jan 1980	58 months
• Aug 1980	Jul 1981	12 months
• Dec 1982	Jul 1990	92 months
• Apr 1991	Mar 2001	120 months
• Dec 2001	Dec 2007	73 months
• June 2009	present	128 months

New Record Every Month!!



U.S. Economy: 2019 Good Year; 2020 Good But Slower

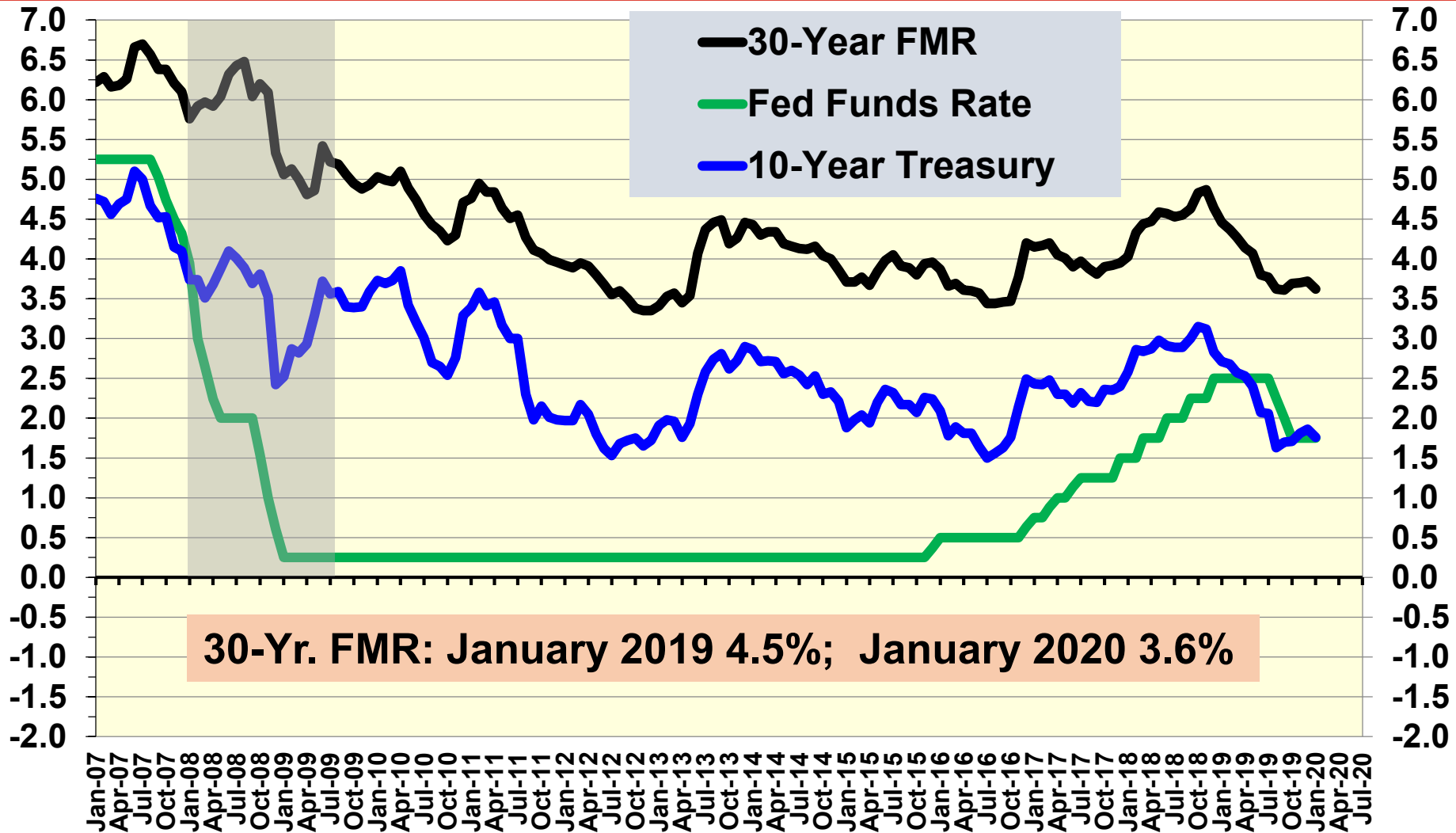
- **Real GDP** 2019 +2.3% 2020 1.9% - 2.1%
- **Spending** 2019 PCE +2.6% 2020 +2.2% - 2.4%*
- **Jobs** +2,330,000 +1.6% 2020 +2,270,000 +1.5%
- **Unemployment Rate** 3.7% 2020 3.5% - 3.7%
- **Housing Starts** +1.29 million 2020 +1.32–1.34 million*
- **Inflation** 2019 CPI +1.8% 2020 +2.0% - 2.2%
- **Industrial Production** 2019 +0.8% 2020 -0.5%

* Key Drivers for 2020

1Q2020 Clouds: Wuhan Coronavirus & Boeing 737 Max

Longer-term: corporate profits & debt; sovereign debt around the world

Fed Funds Rate, 10-Year Treasury, 30-Year FMR



30-Yr. FMR: January 2019 4.5%; January 2020 3.6%

Texas' Decade Growth

Year	Jobs, NSA (Dec-Dec)	Population (July-July)
2010	216,200	439,887
2011	236,200	403,548
2012	373,300	443,393
2013	300,800	399,844
2014	420,900	487,678
2015	151,800	509,672
2016	150,000	450,678
2017	253,900	385,225
2018	276,100	379,128
2019	344,200	367,215
2020-2024	1,291,800	2,472,415

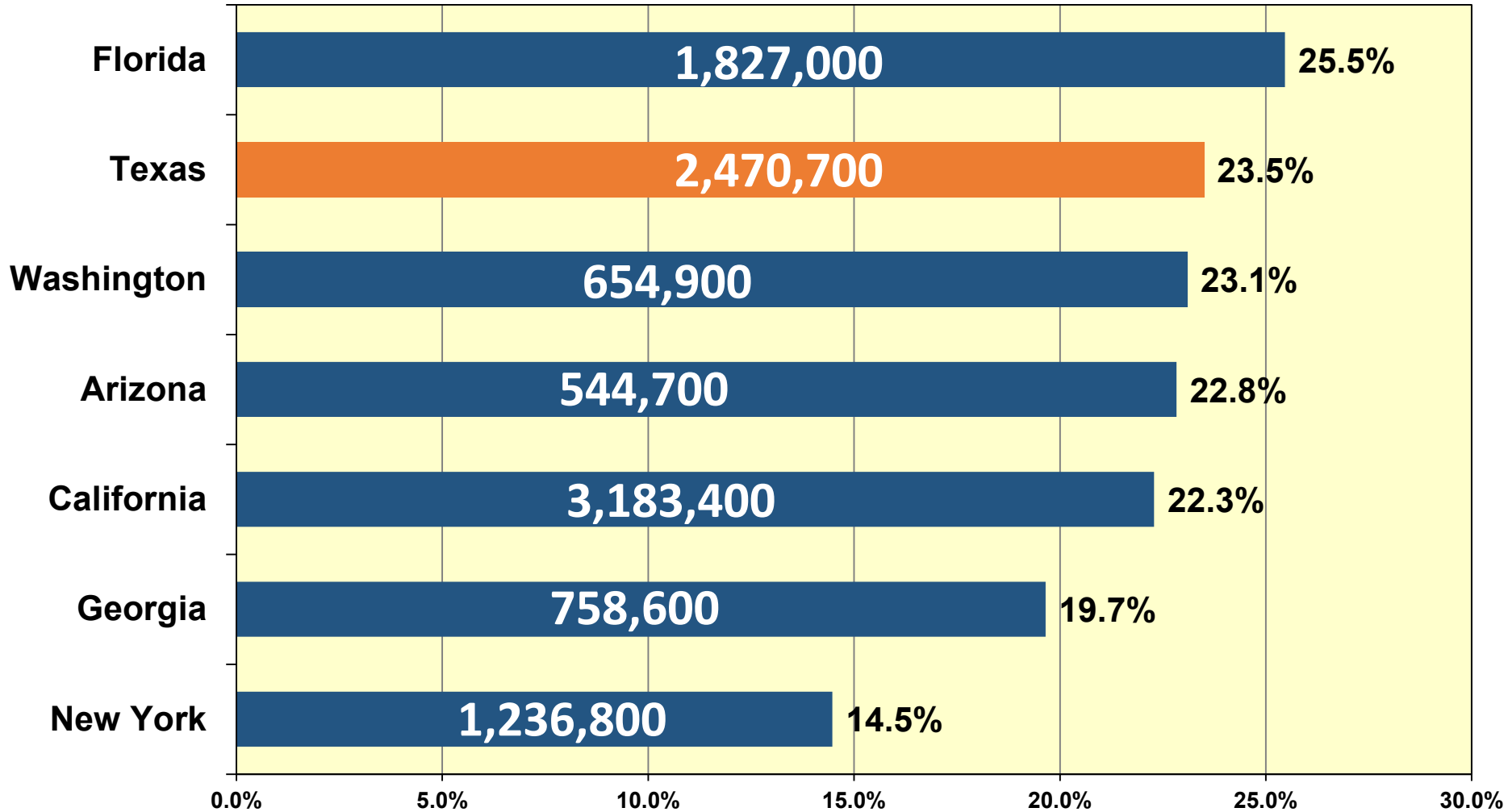
2010-2019
+4,193,797
people;

+2,470,700
jobs

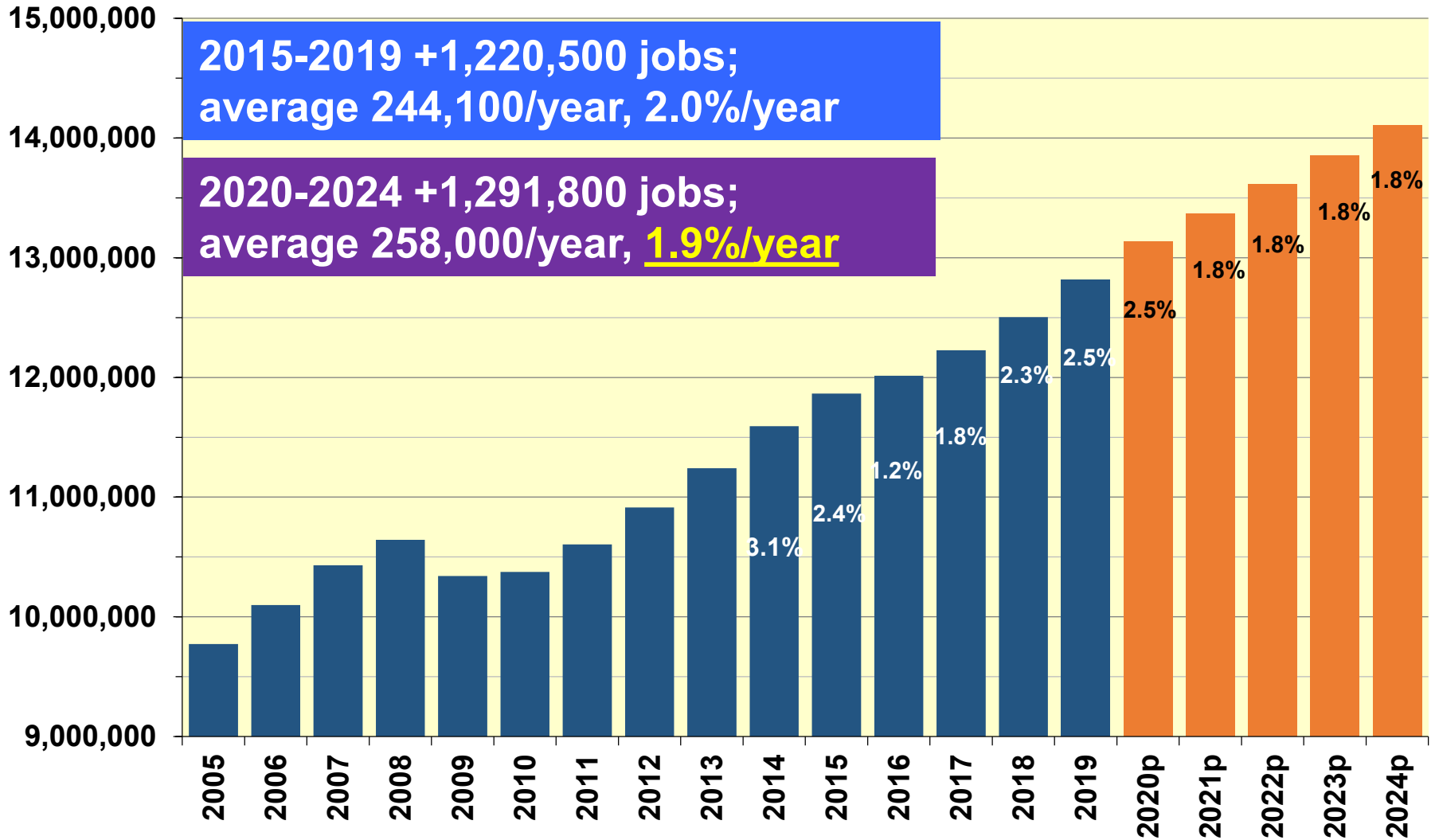
1.9%/year
job growth;
1.65%/year
population
growth

Sources: US Census
Bureau; BLS/Haver
Analytics; Real Estate
Center at Texas A&M
University

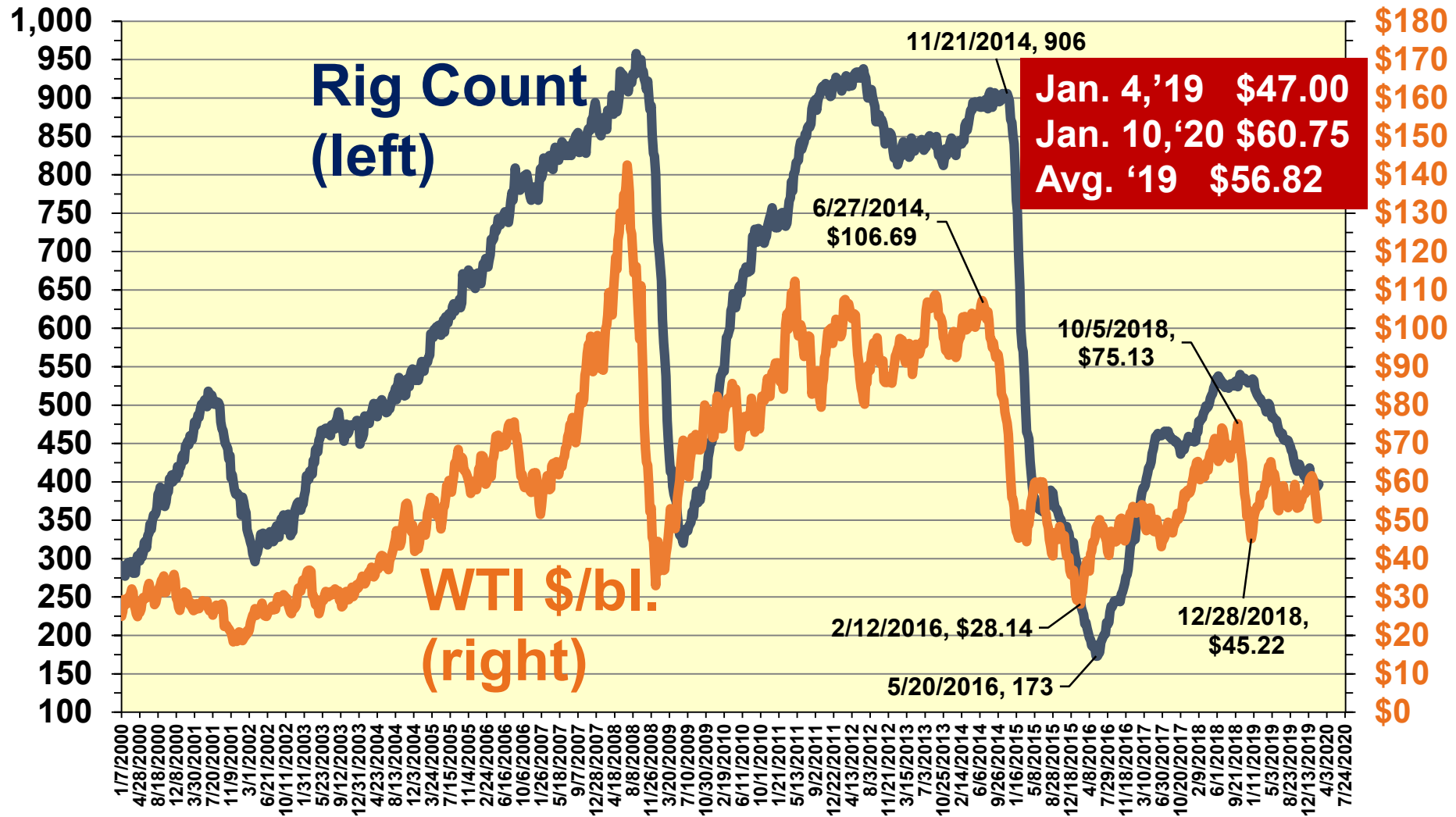
2010-2019 Employment Growth (Jobs & Percent Increase)



Texas Annual Jobs



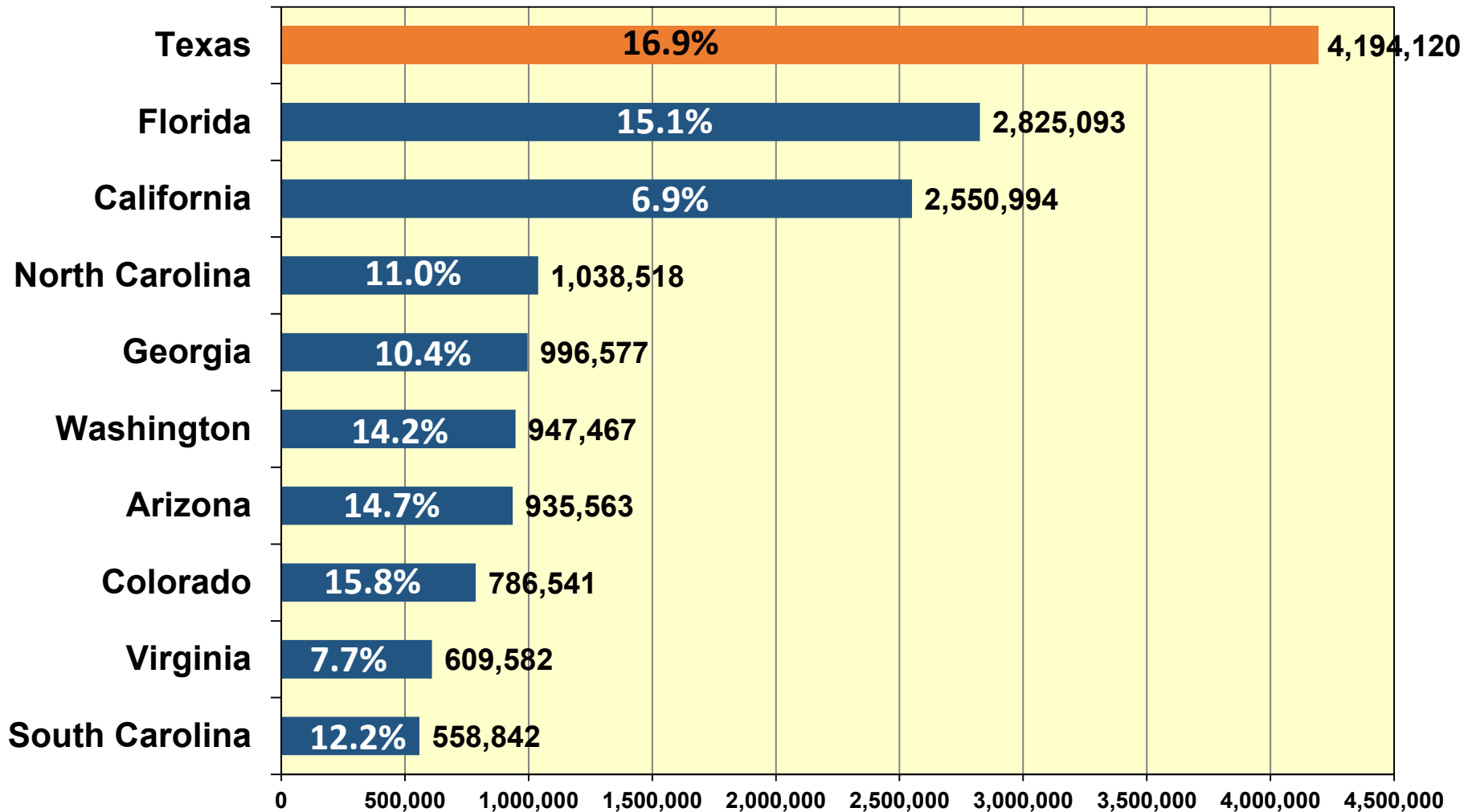
Weekly Active Texas Rig Count & Price of WTI



Texas Demographics

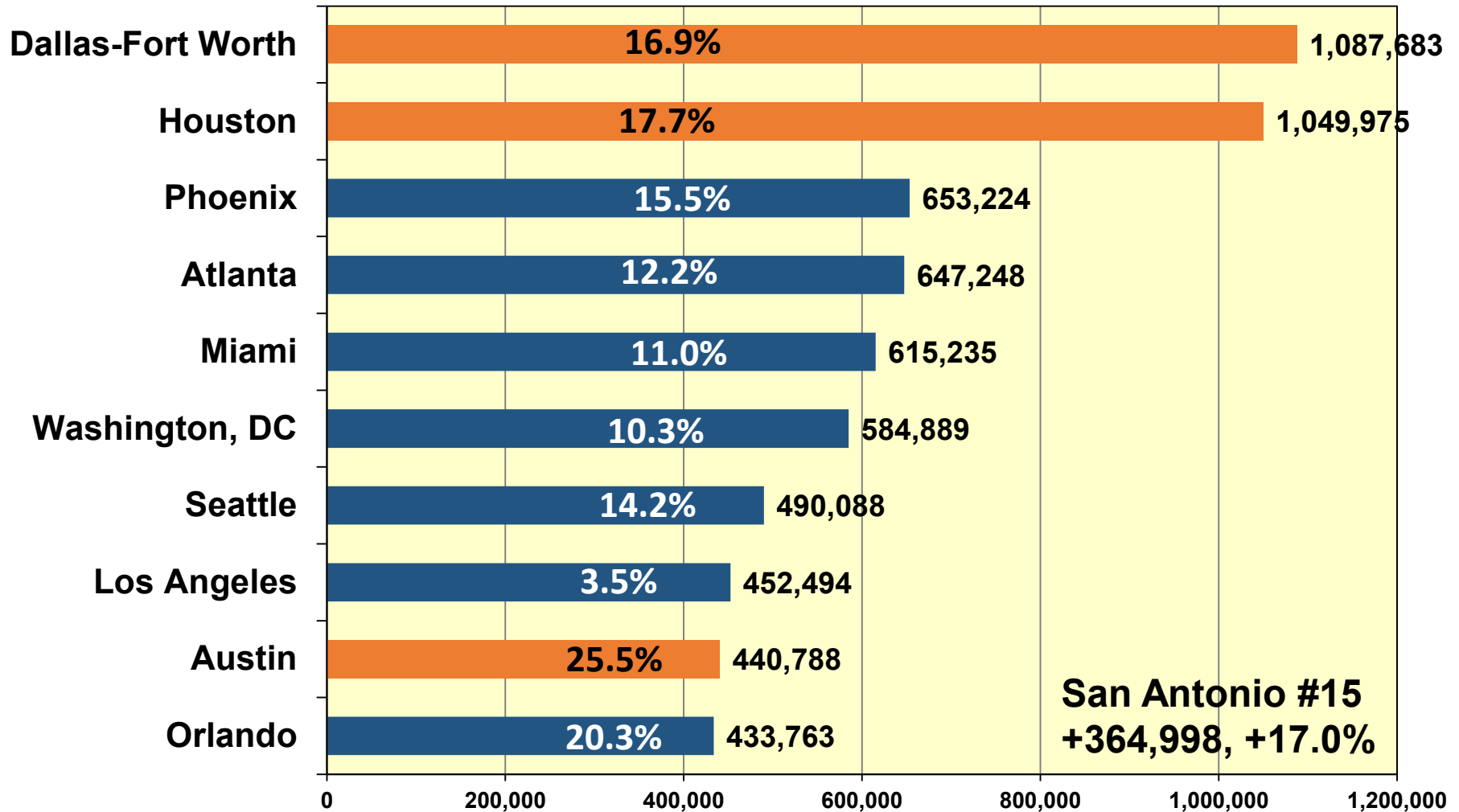
2010-2019 Population Growth

Top 10 States by Population Increase

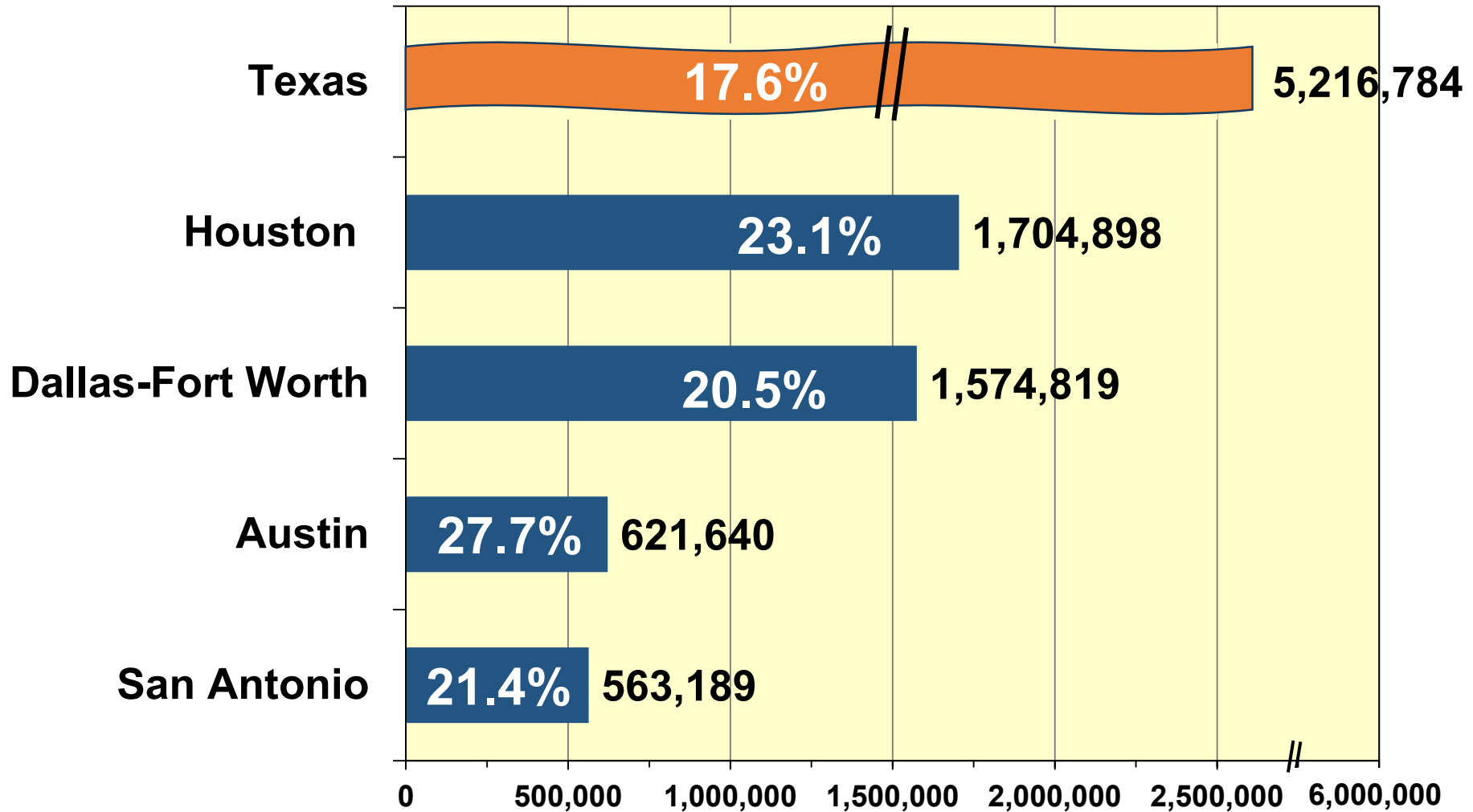


2010-2018 Population Growth

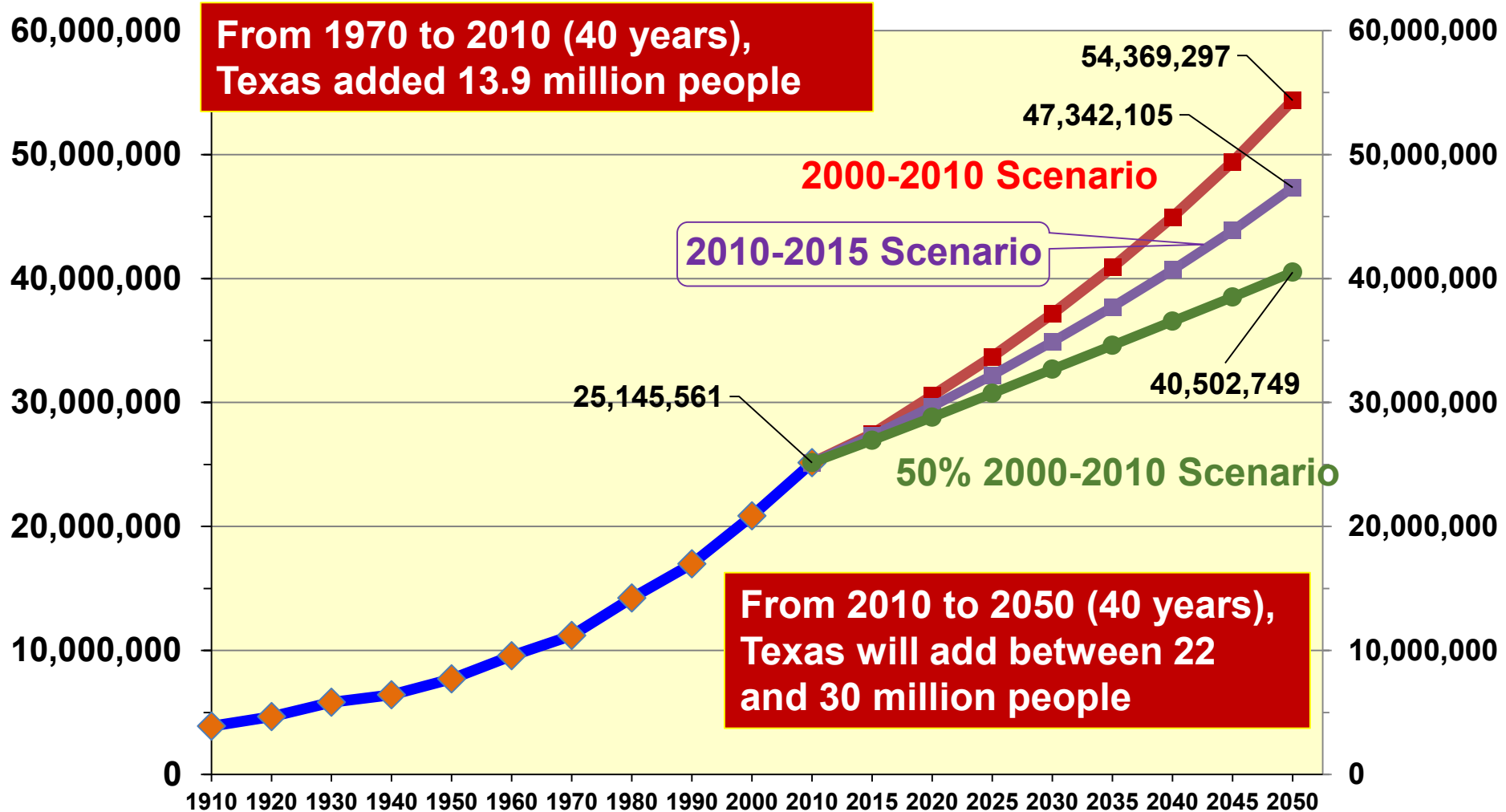
Top 10 MSAs by Number of People



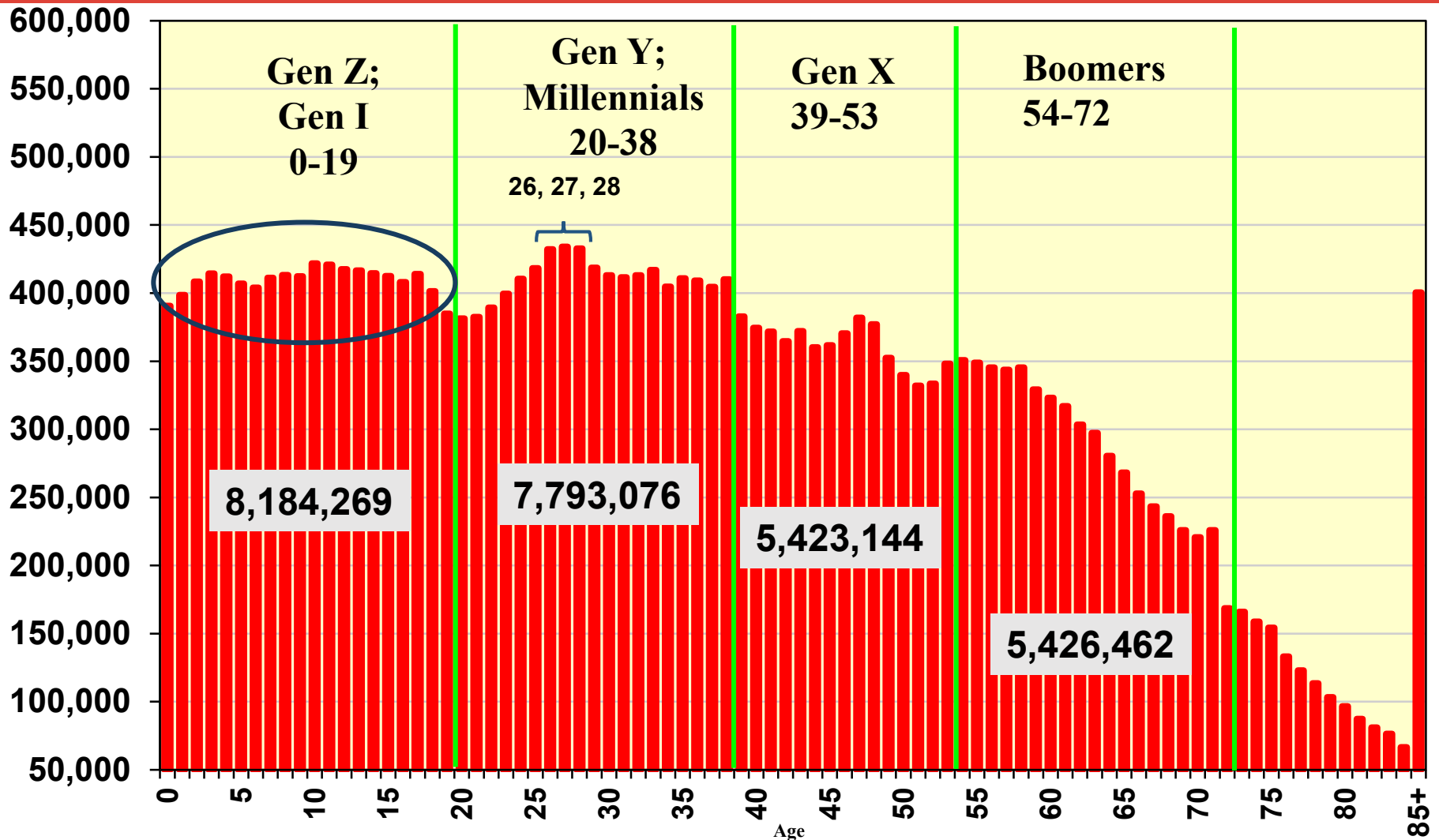
2020-2030 Projected Population Growth: Texas & Major MSAs



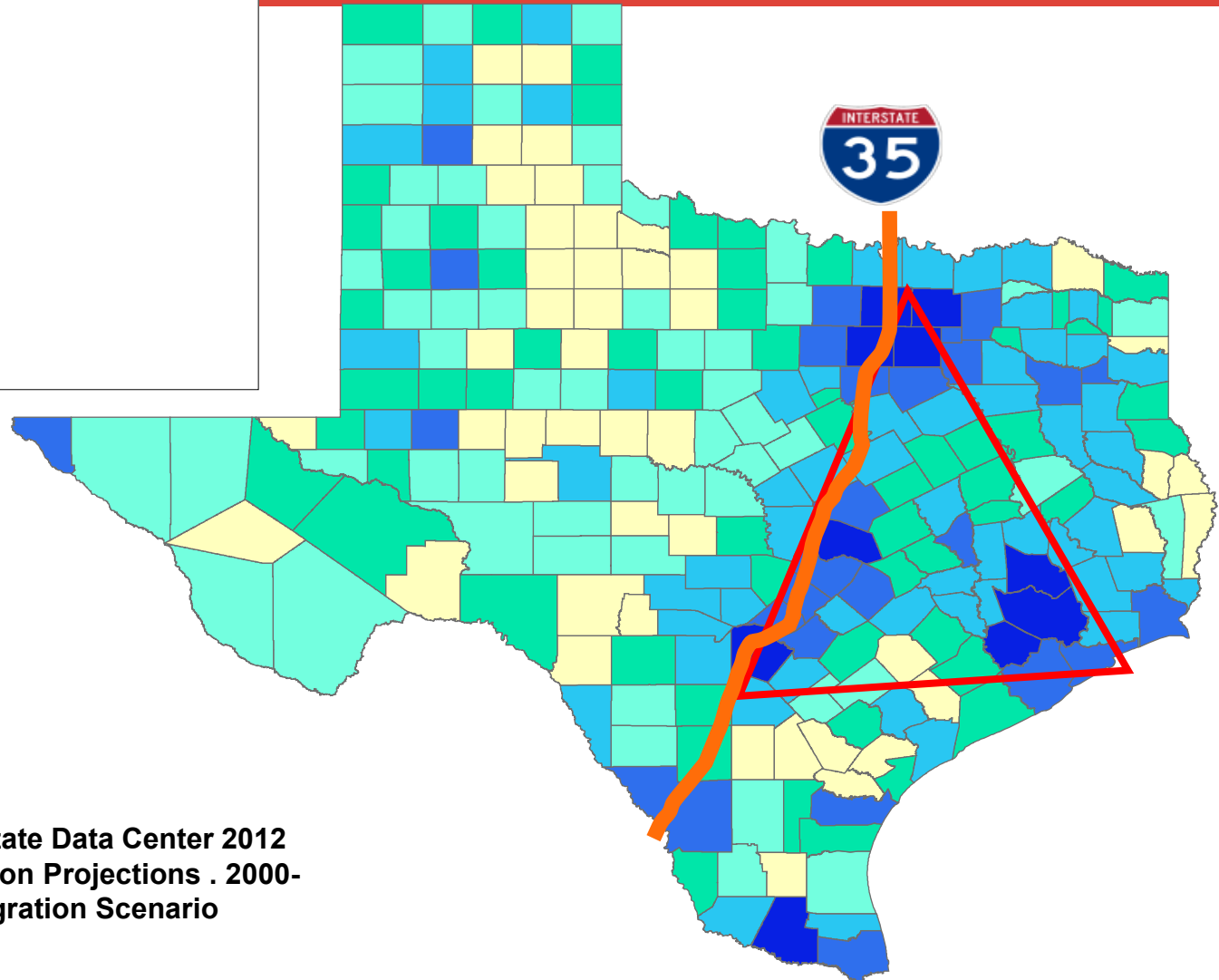
Alternative Texas Population Projections 2010-2050



Single-Year Age Distribution of 2018 Texas Population



Projected Population Change, Texas Counties, 2010-2050

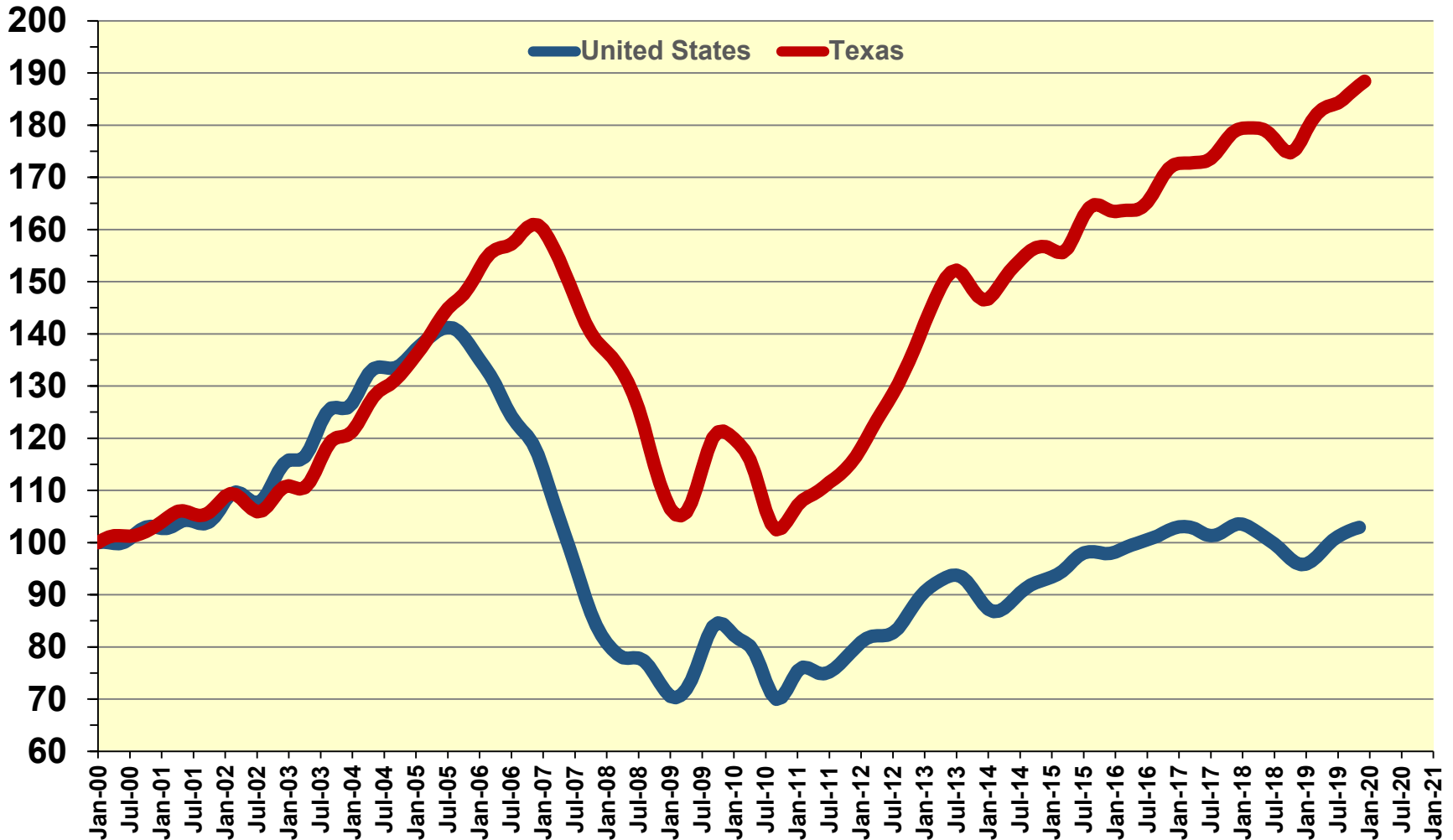


Source: Texas State Data Center 2012
Population Projections . 2000-
2010 Migration Scenario

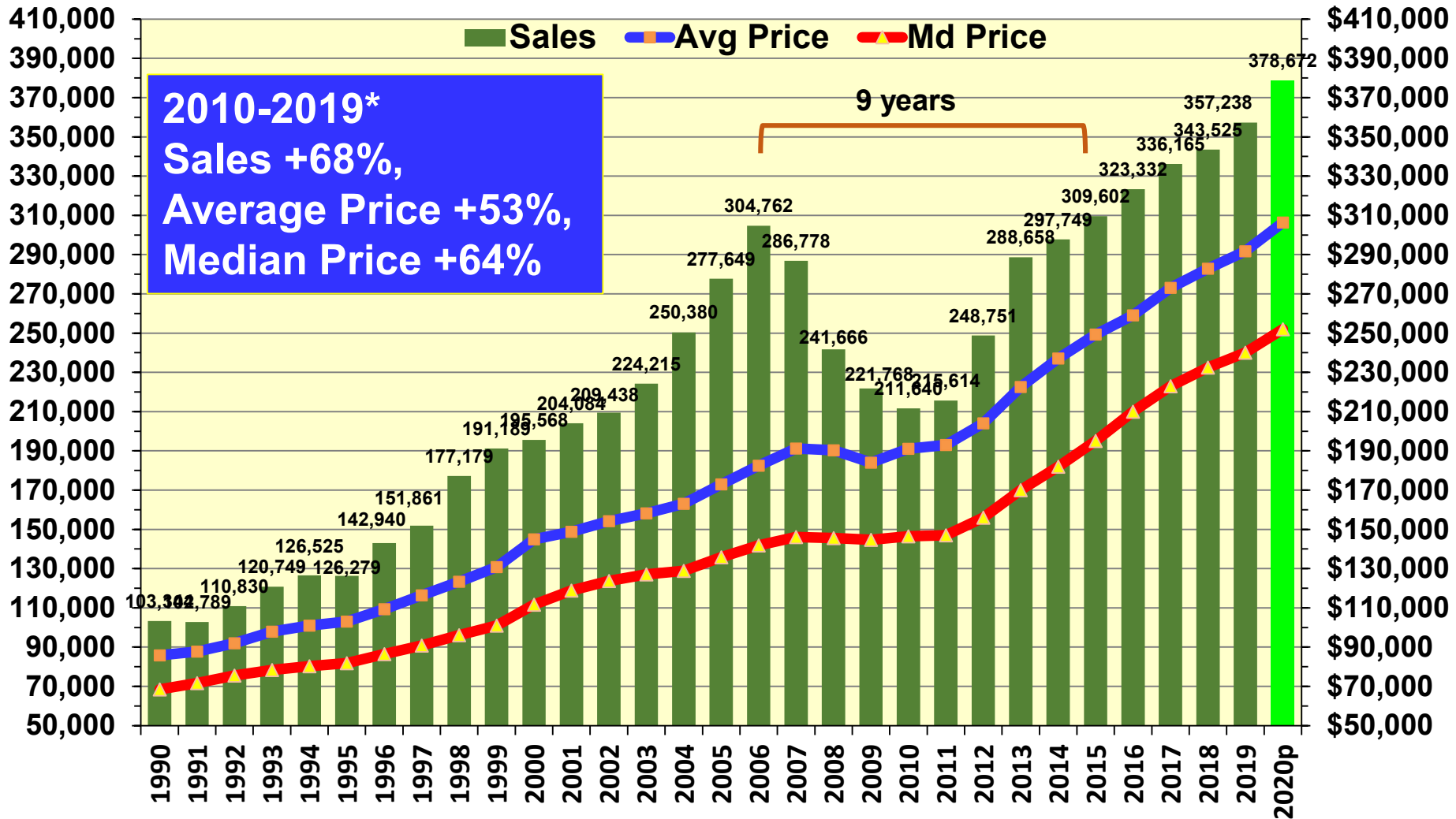
Texas Housing Market

Total Housing Sales

(Index Jan 2000=100)



Annual Texas Home Sales & Prices – An Outstanding Decade

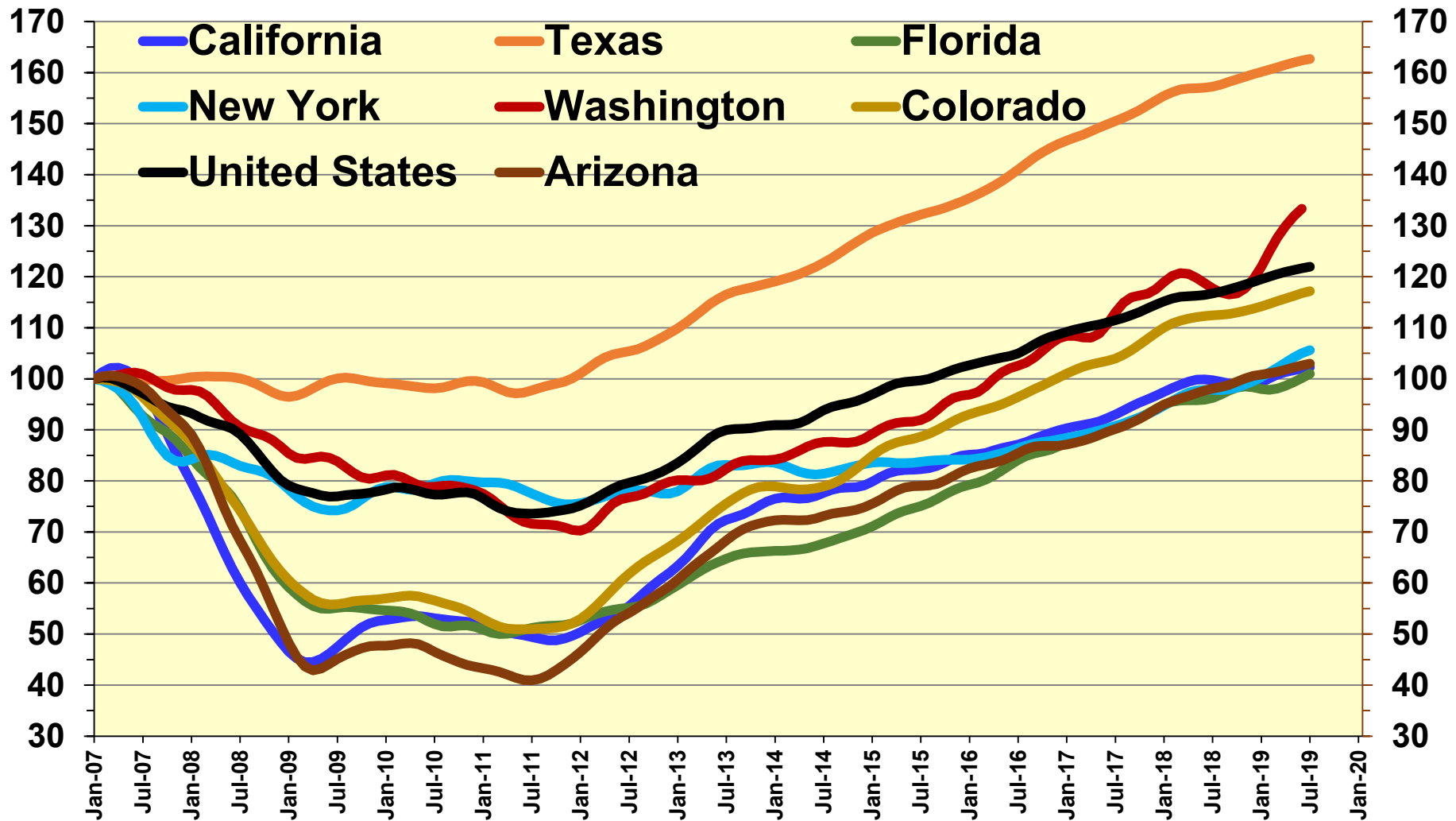


Texas Total Housing Market 2019 Summary: Another Record Year

- **357,238 Sales** +4.0% **2020 +6%**
- **Total Dollar Volume** \$104 Billion +7.1%
- **Average Price** \$291,833 +3.2% **2020 +5%**
- **Median Price** \$240,000 +3.2%
- **Average Price per Square Foot** \$132 +3.9%
- **New Listings** 504,408 +3.5% **2020 +4%**
- **Months Inventory** 3.1 **2020 3.2 – 3.5**

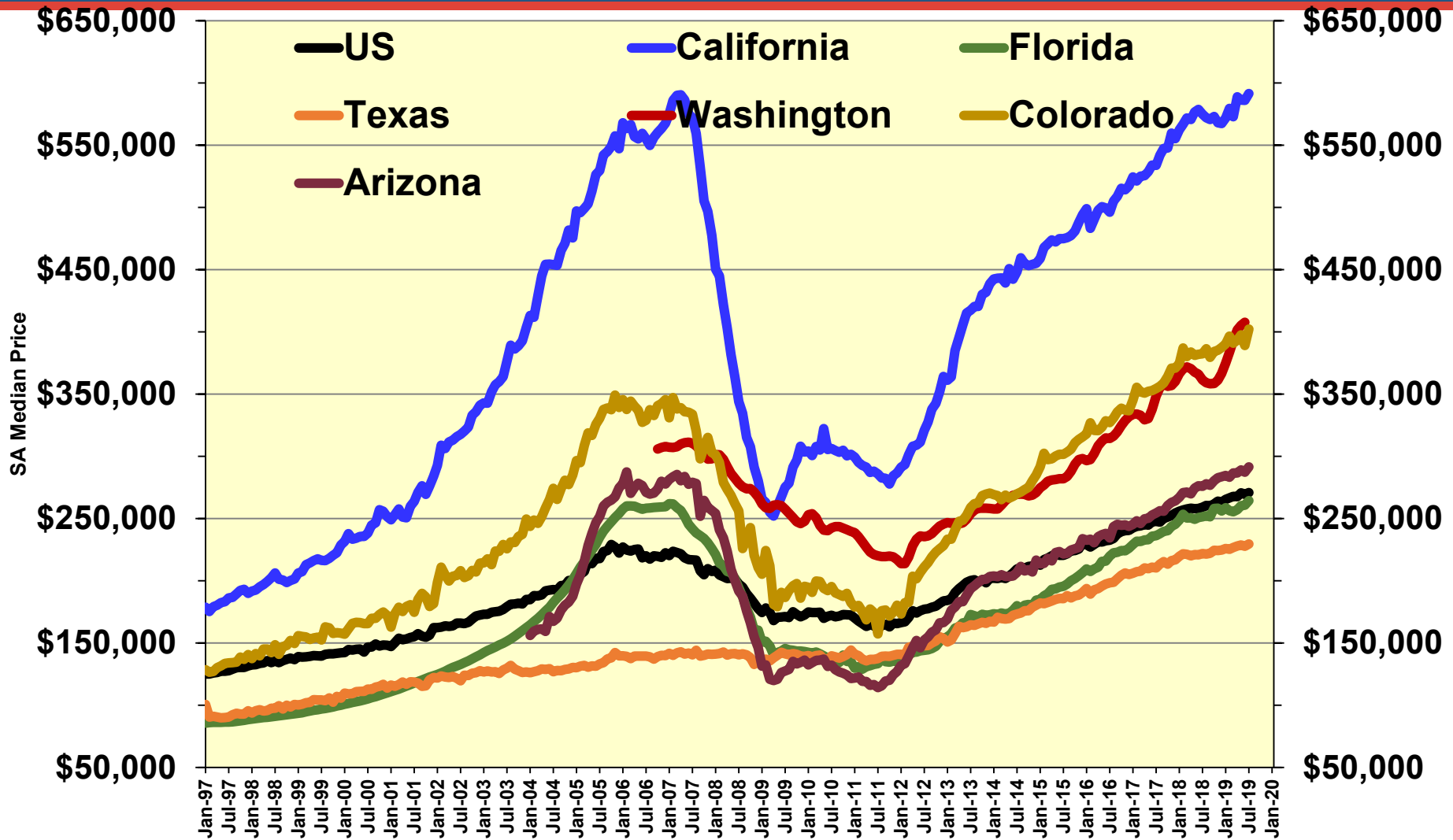
Median Home Prices

Indexed Jan. 2007=100



Source: NAR; State Associations of Realtors®; Washington RE Center;
Real Estate Center at Texas A&M University

Median Home Price in Selected States

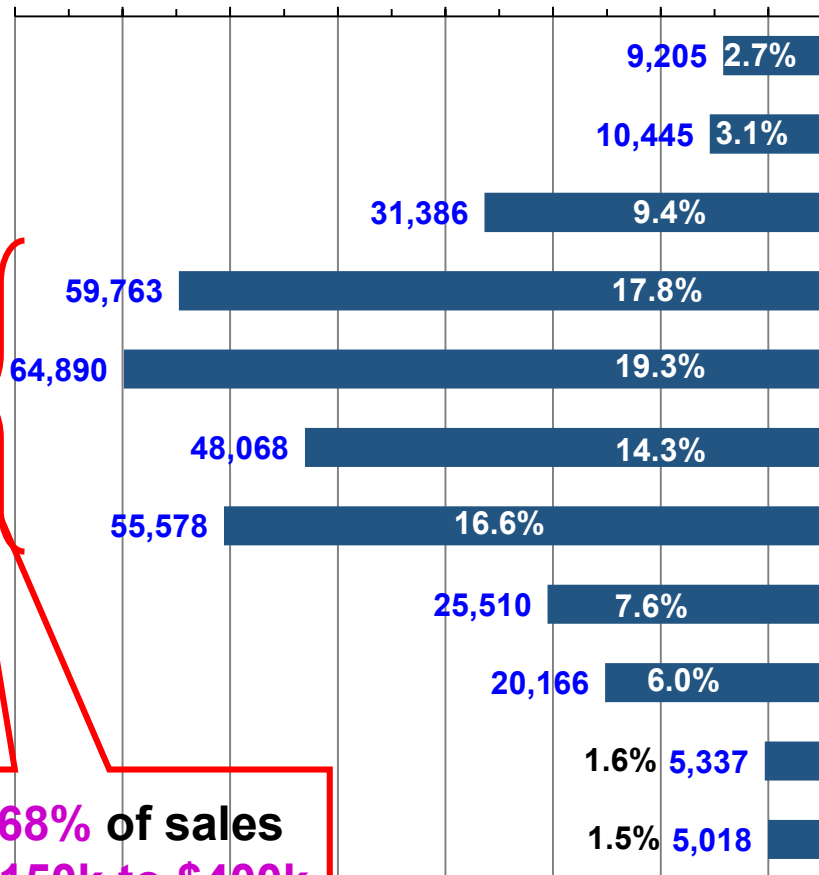


Source: NAR; State Associations of Realtors®; Washington RE Center; Real Estate Center at Texas A&M University

Texas 2019 SF Sales and Current Months Inventory by Price

2019 SF Sales (335,366)

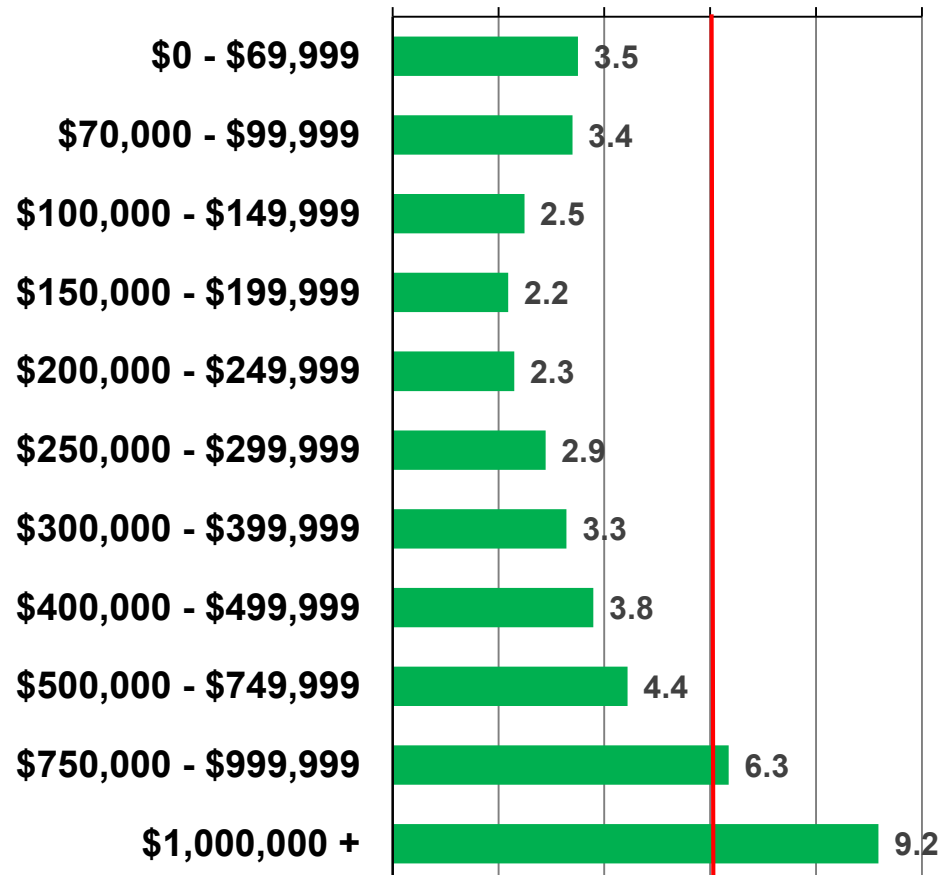
75,000 65,000 55,000 45,000 35,000 25,000 15,000 5,000



**68% of sales
\$150k to \$400k**

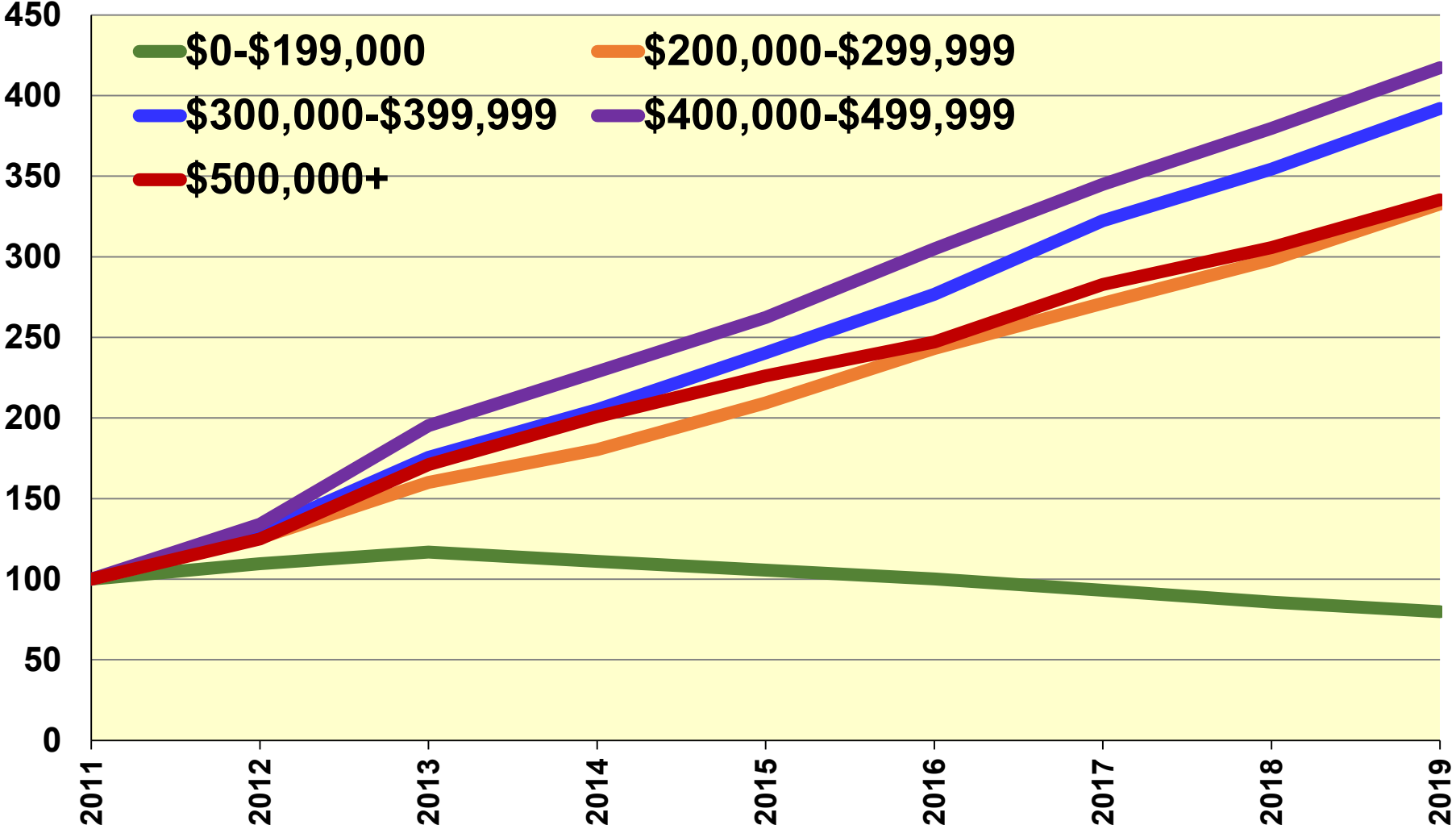
Current MOI

0.0 2.0 4.0 6.0 8.0 10.0

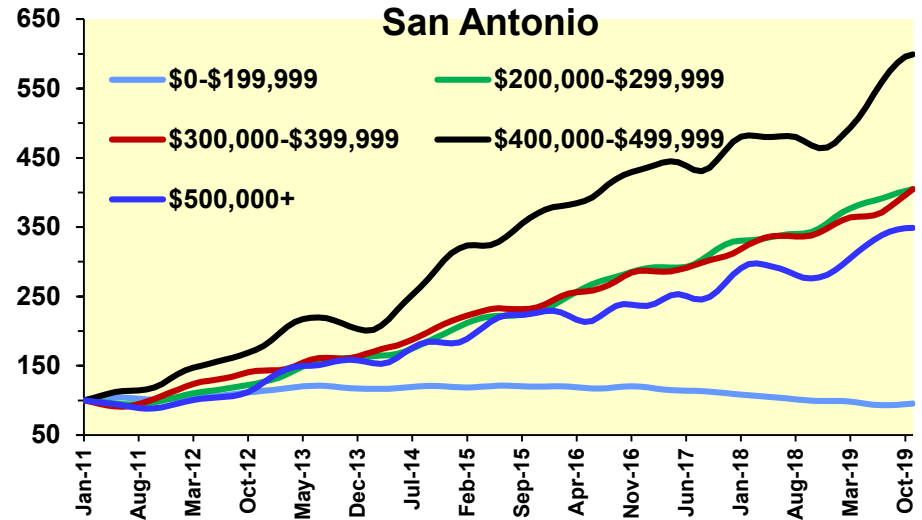
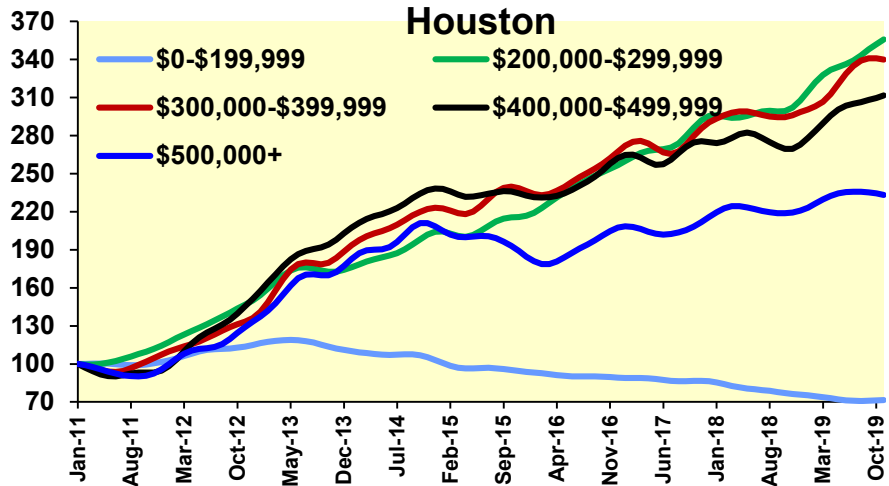
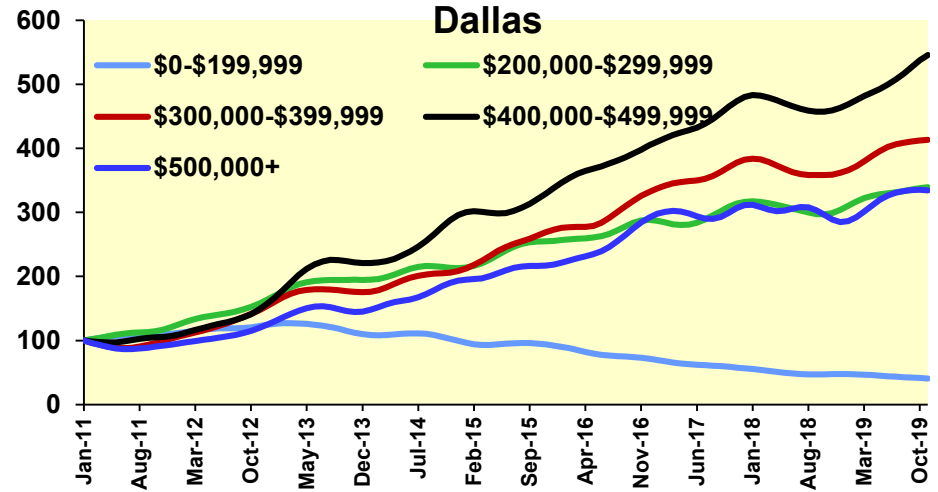
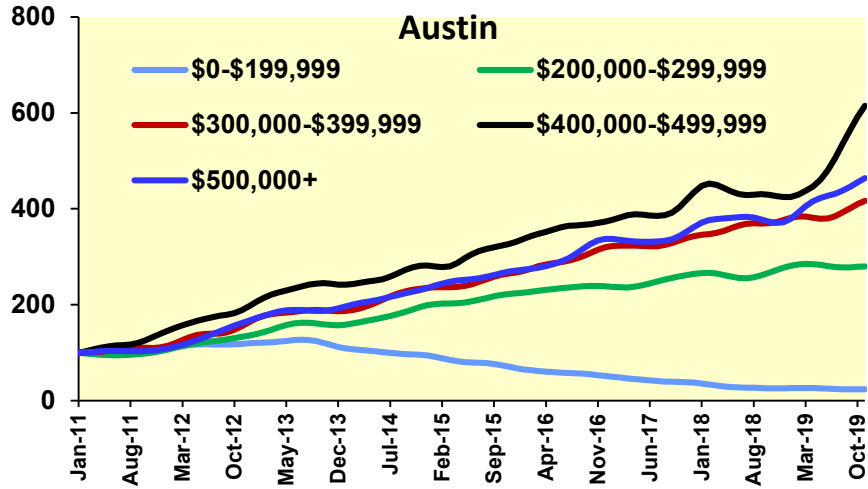


Total Housing Sales by Price

(Index 2000=100)

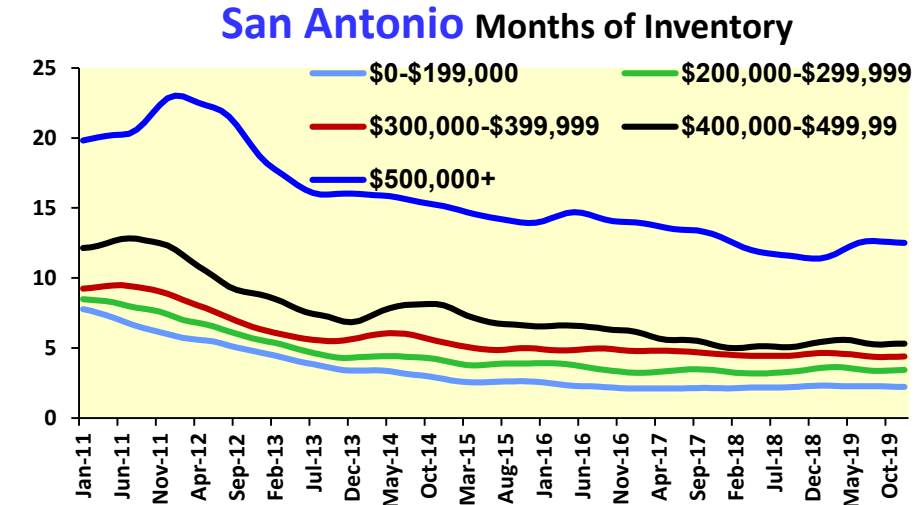
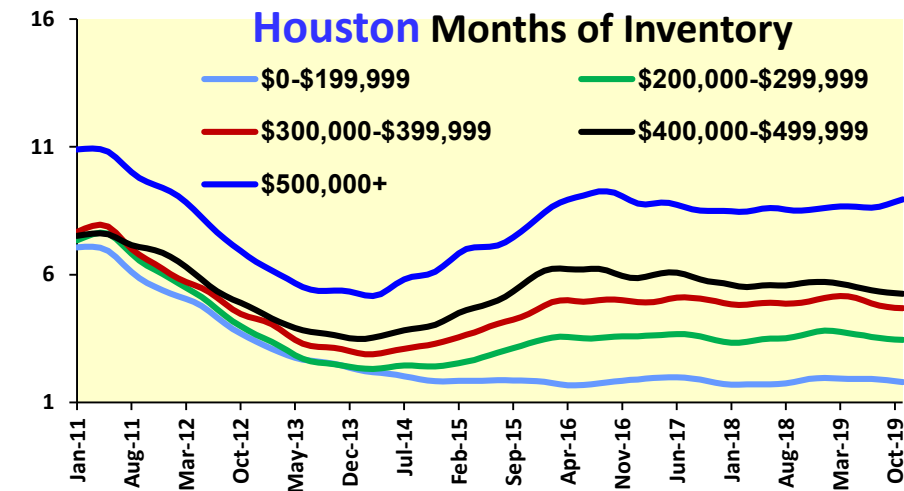
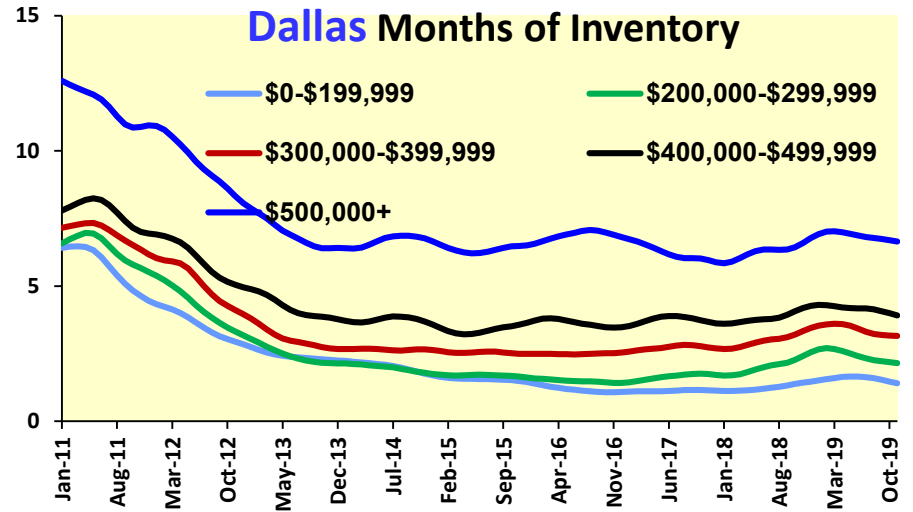
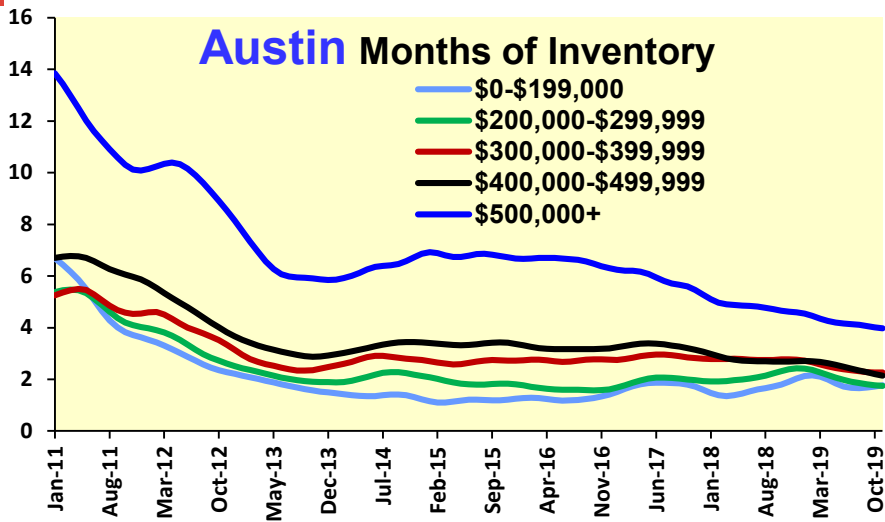


Housing Sales Have Fallen for Price Cohorts Below \$200,000



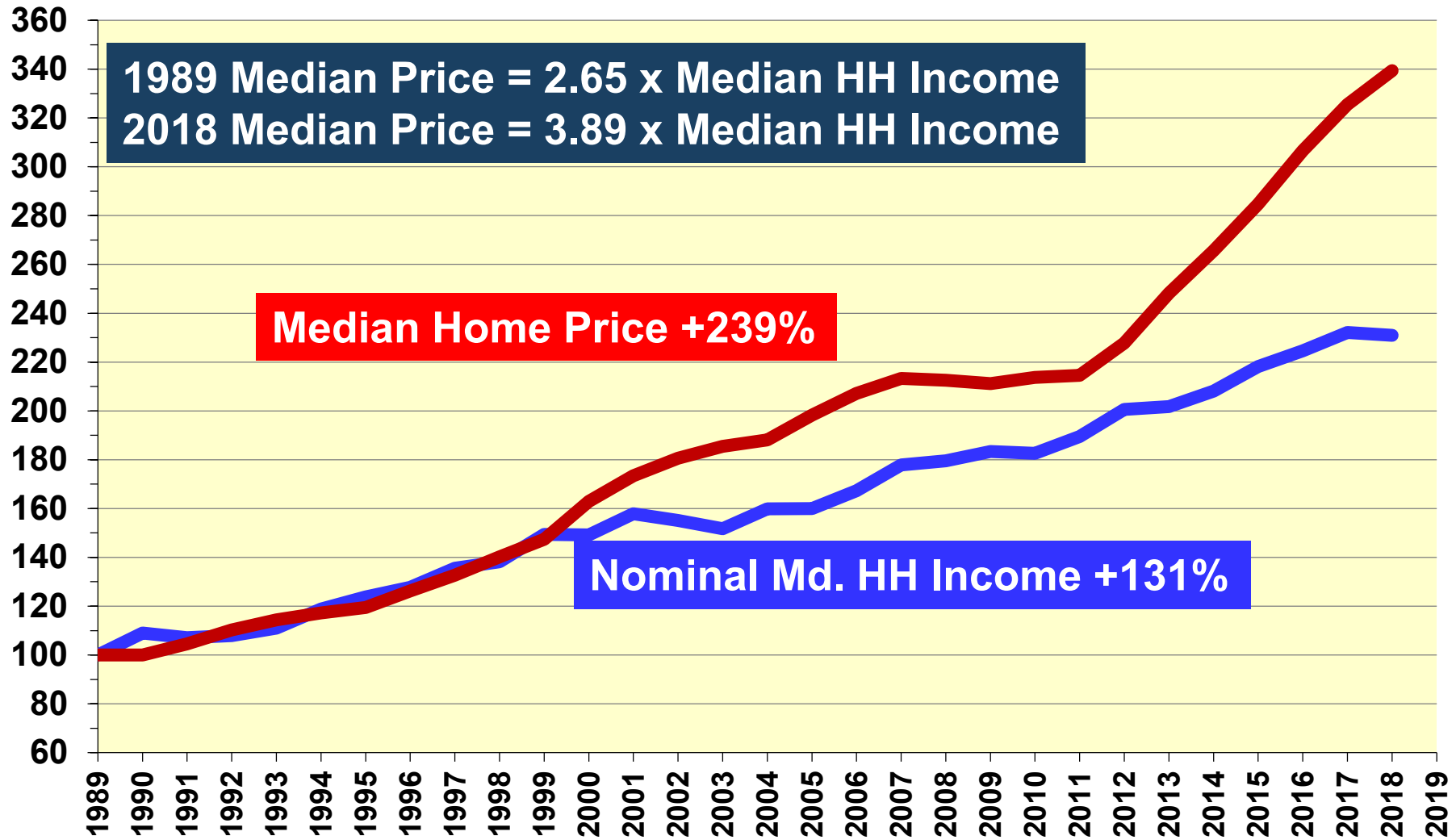
Note: Trend-Cycle Component. Index January 2011=100

The Lack of Homes Available at Lower Price Ranges



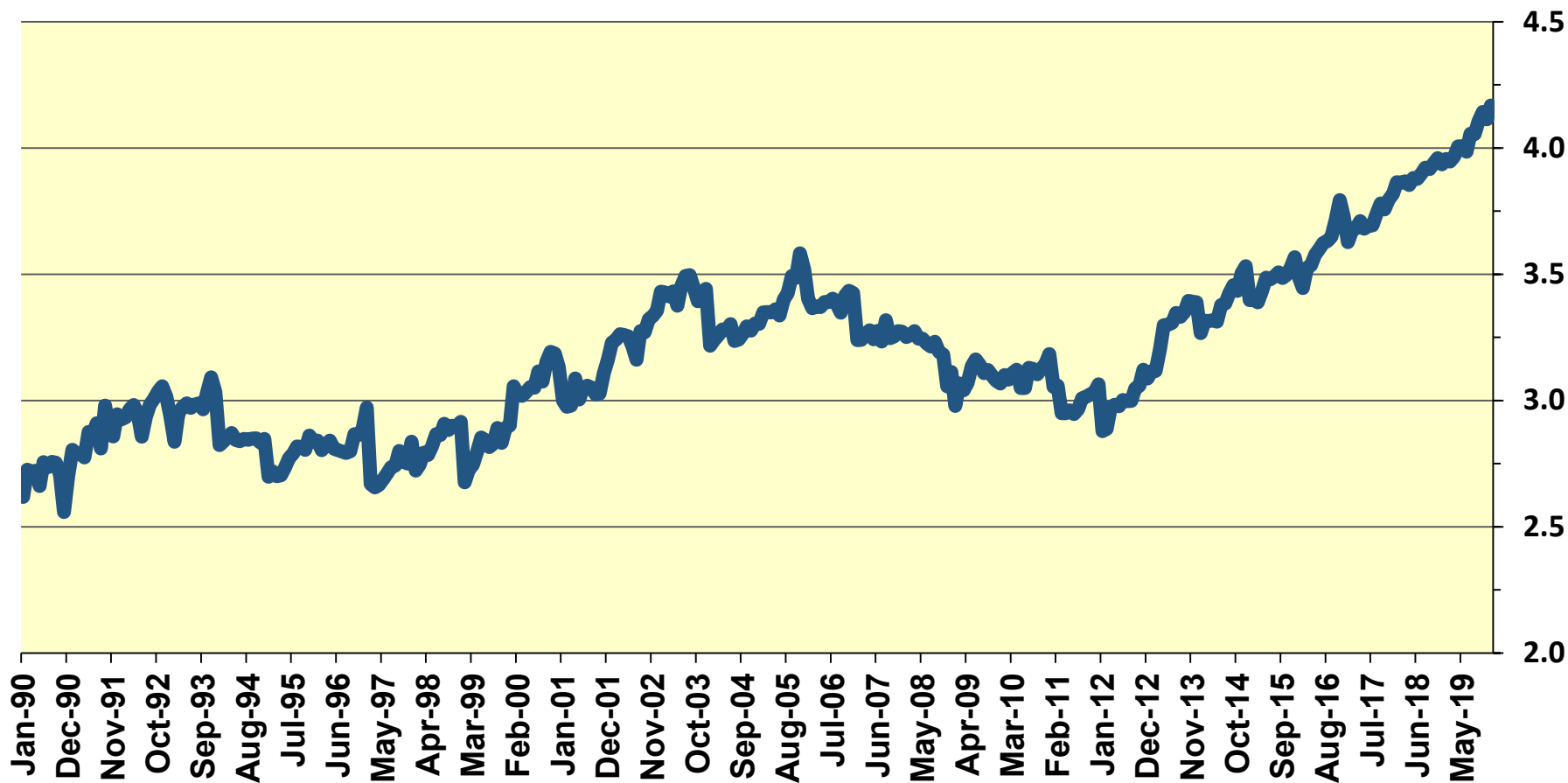
Note: Trend-Cycle Component.

Texas Median HH Income & Median Home Price Indexed to 1989



Median House Price Currently is Four Times Median Household Income

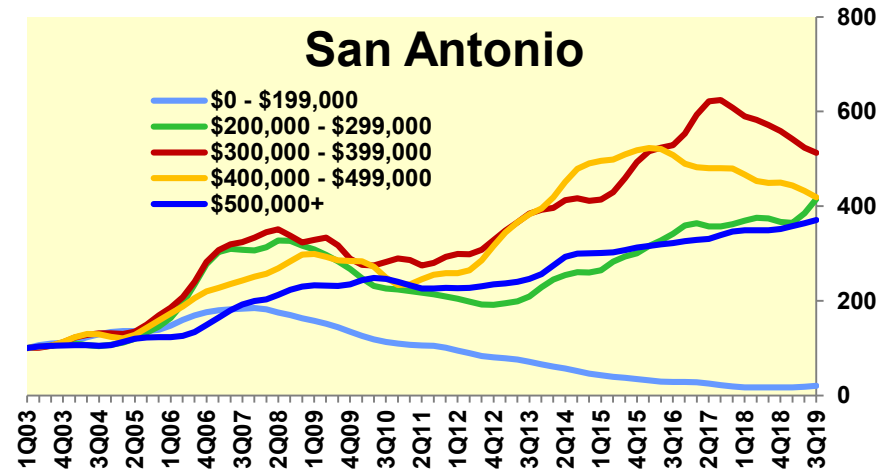
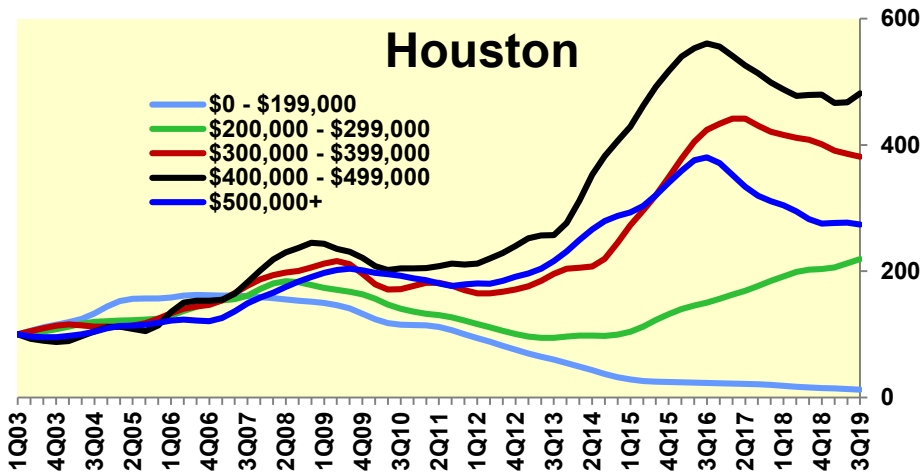
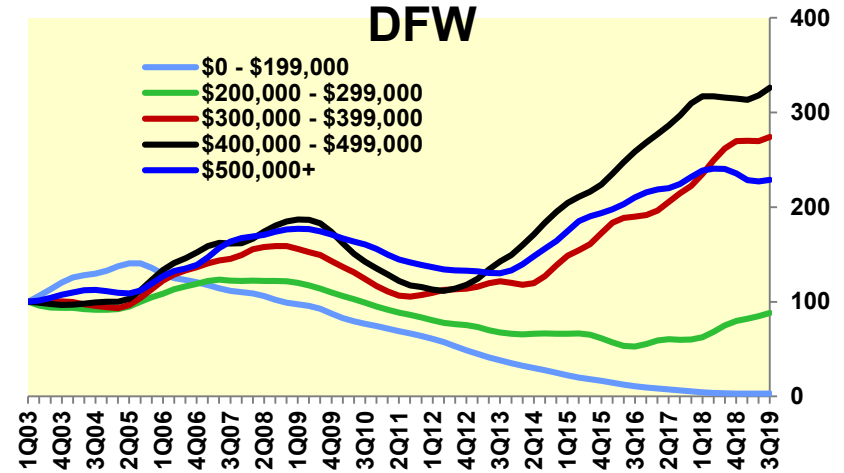
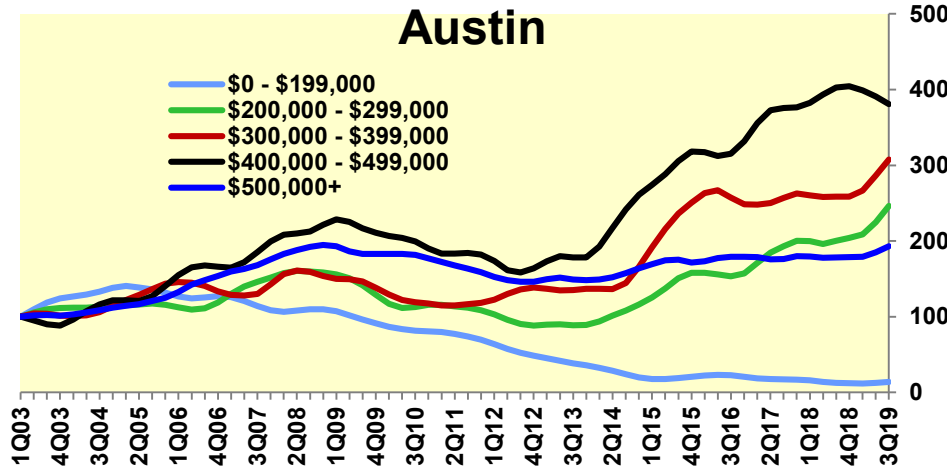
Texas Ratio of Median Home Price to Median Household Income, SA



Note: Seasonally Adjusted. 2018 Median household income is used to estimate the 2019 ratio

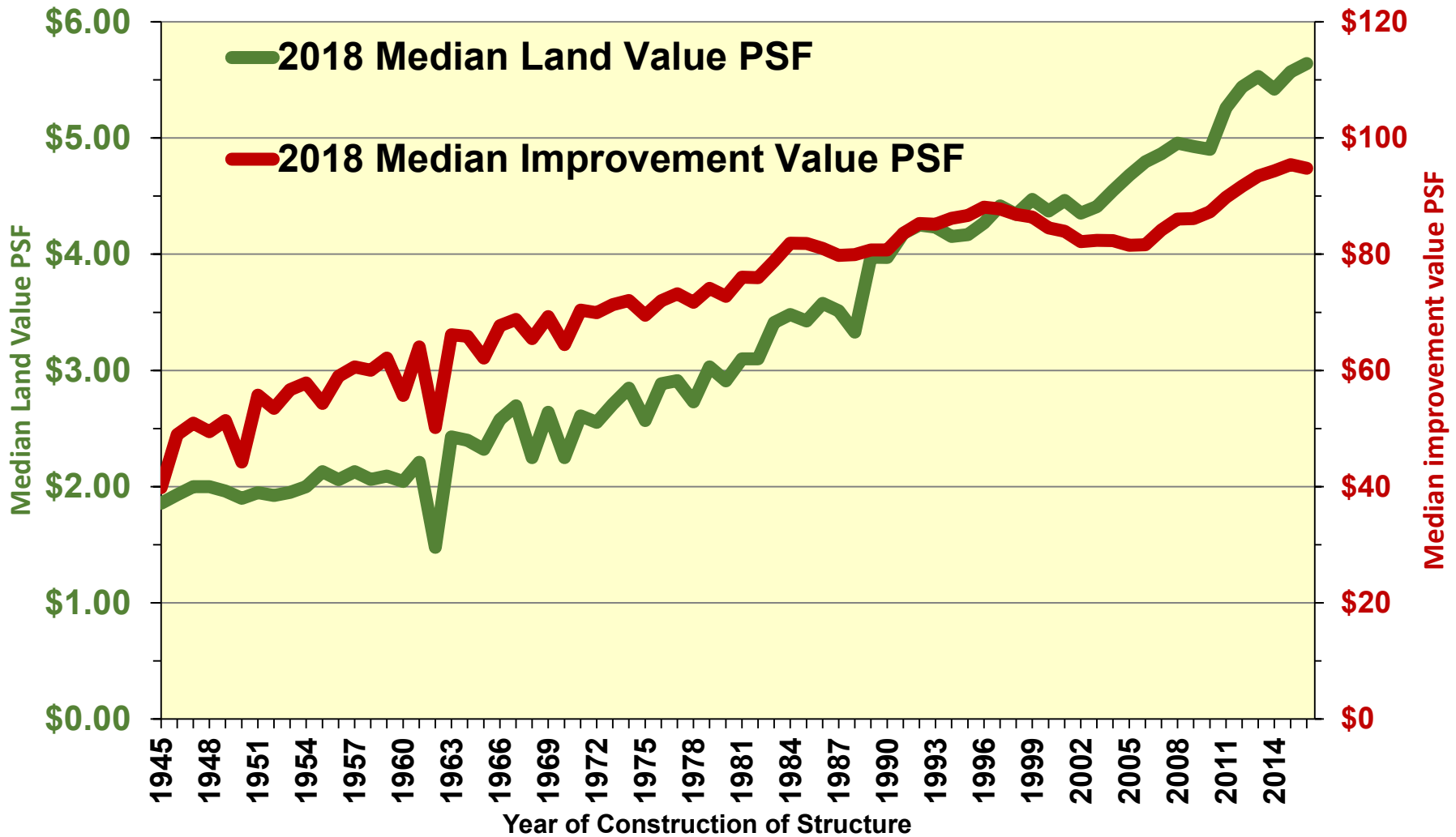


Supply of Vacant Developed Lots for Homes Below \$200,000 Has Not Recovered

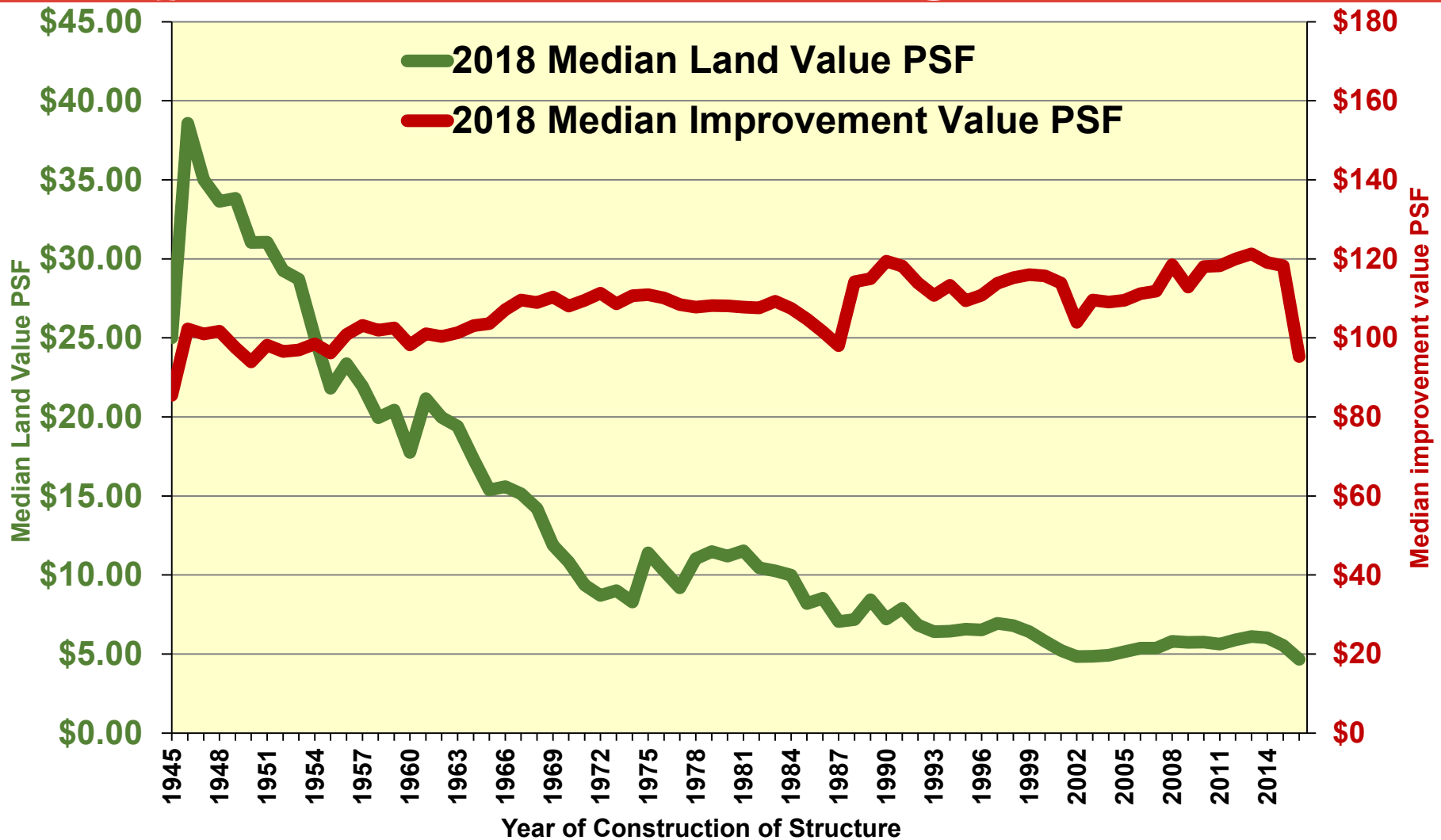


Note: Trend-Cycle Component.

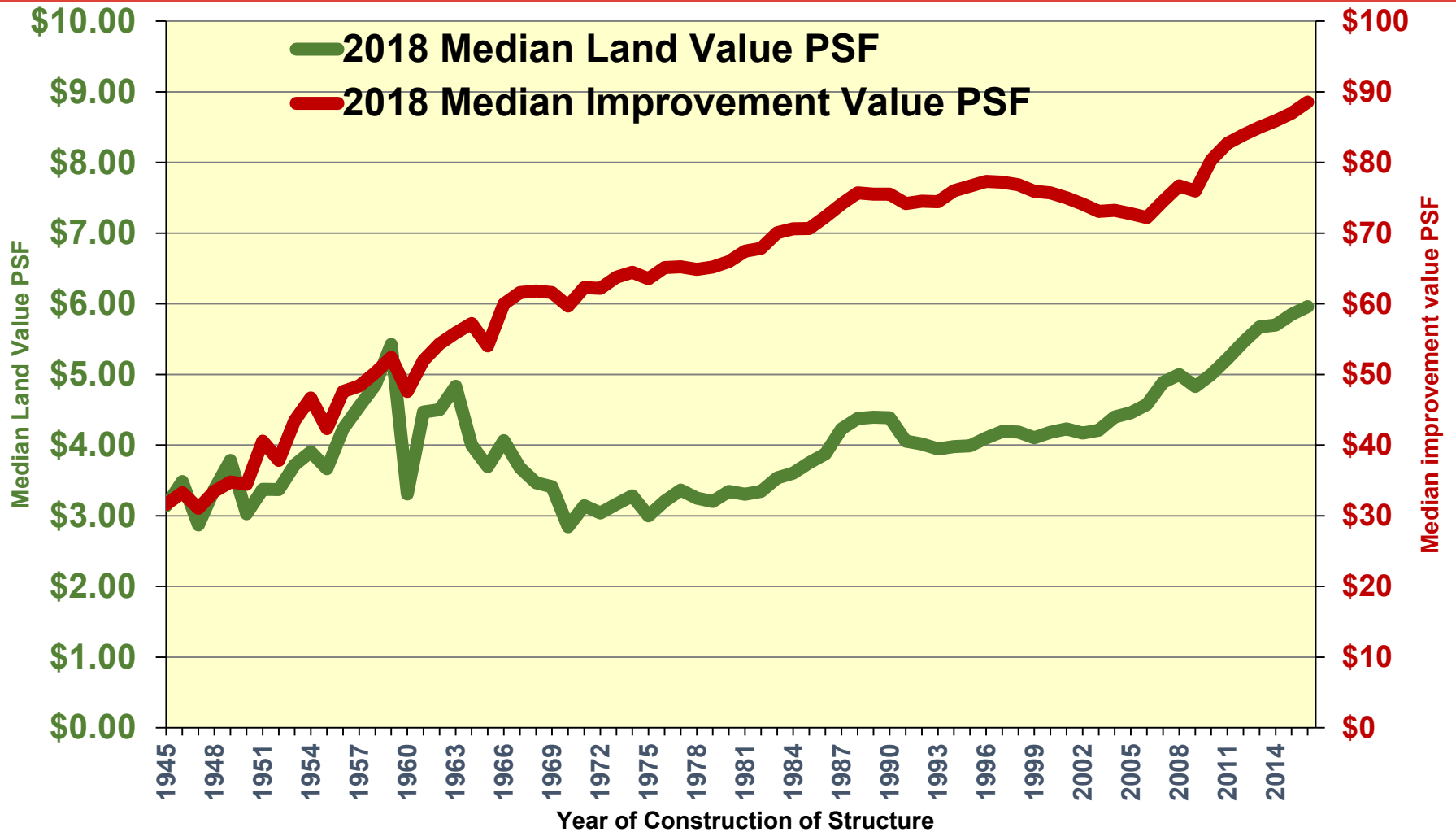
2018 Median Land Value PSF vs. Median Improvement Value PFS by Age of Structure



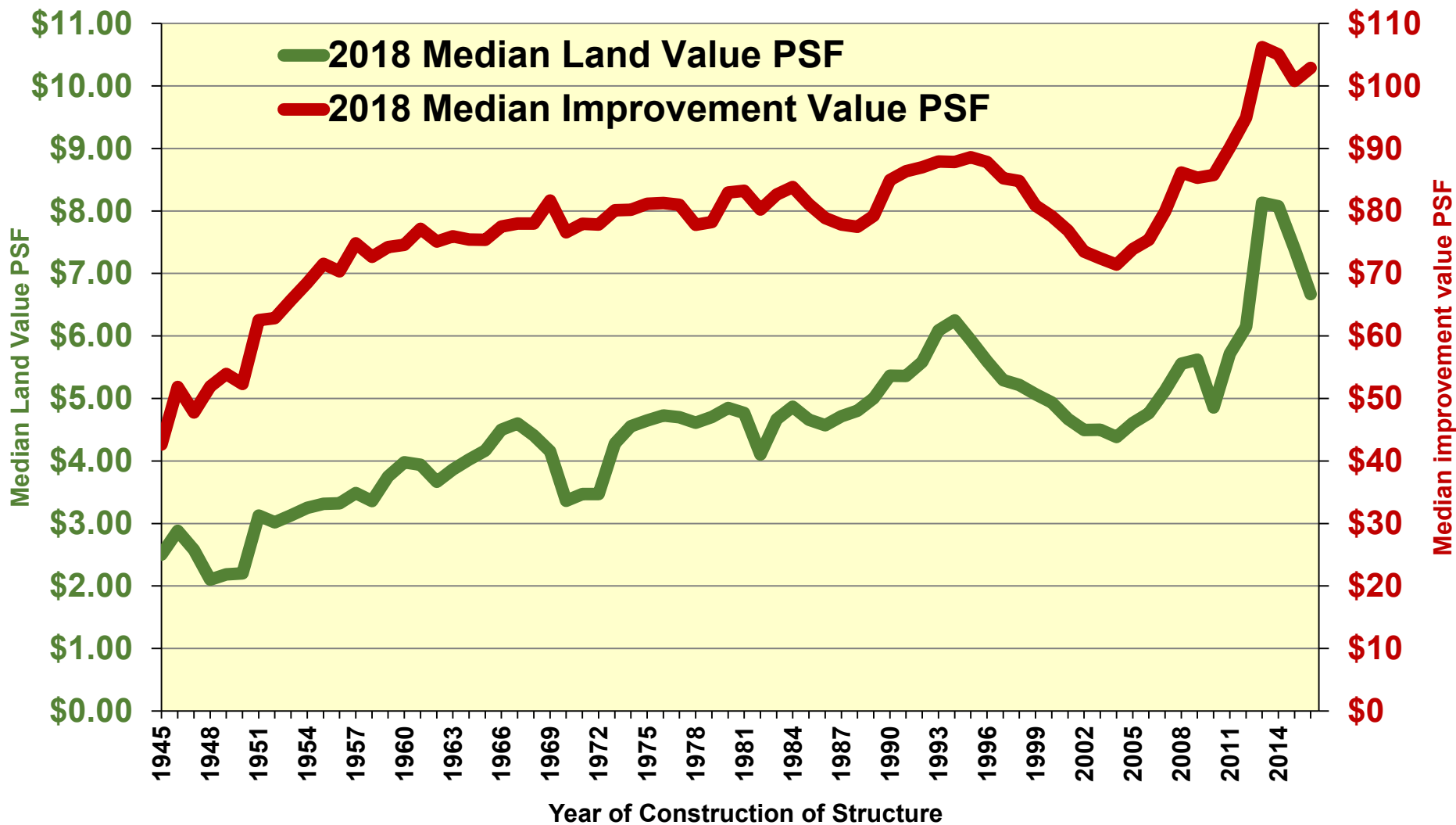
Travis 2018 County Median Land Value PSF vs. Median Improvement Value PFS by Age of Structure



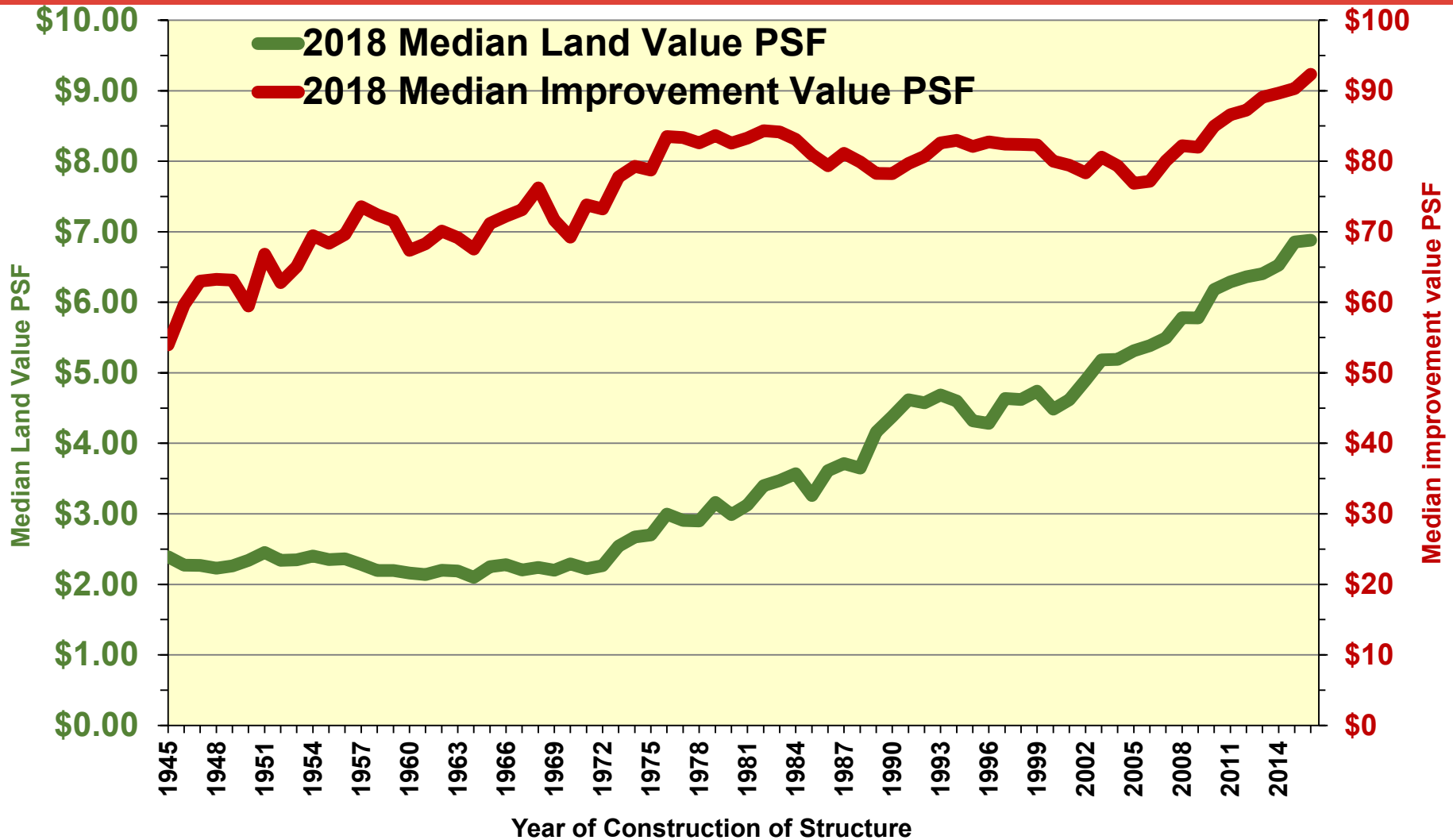
Harris 2018 County Median Land Value PSF vs. Median Improvement Value PFS by Age of Structure



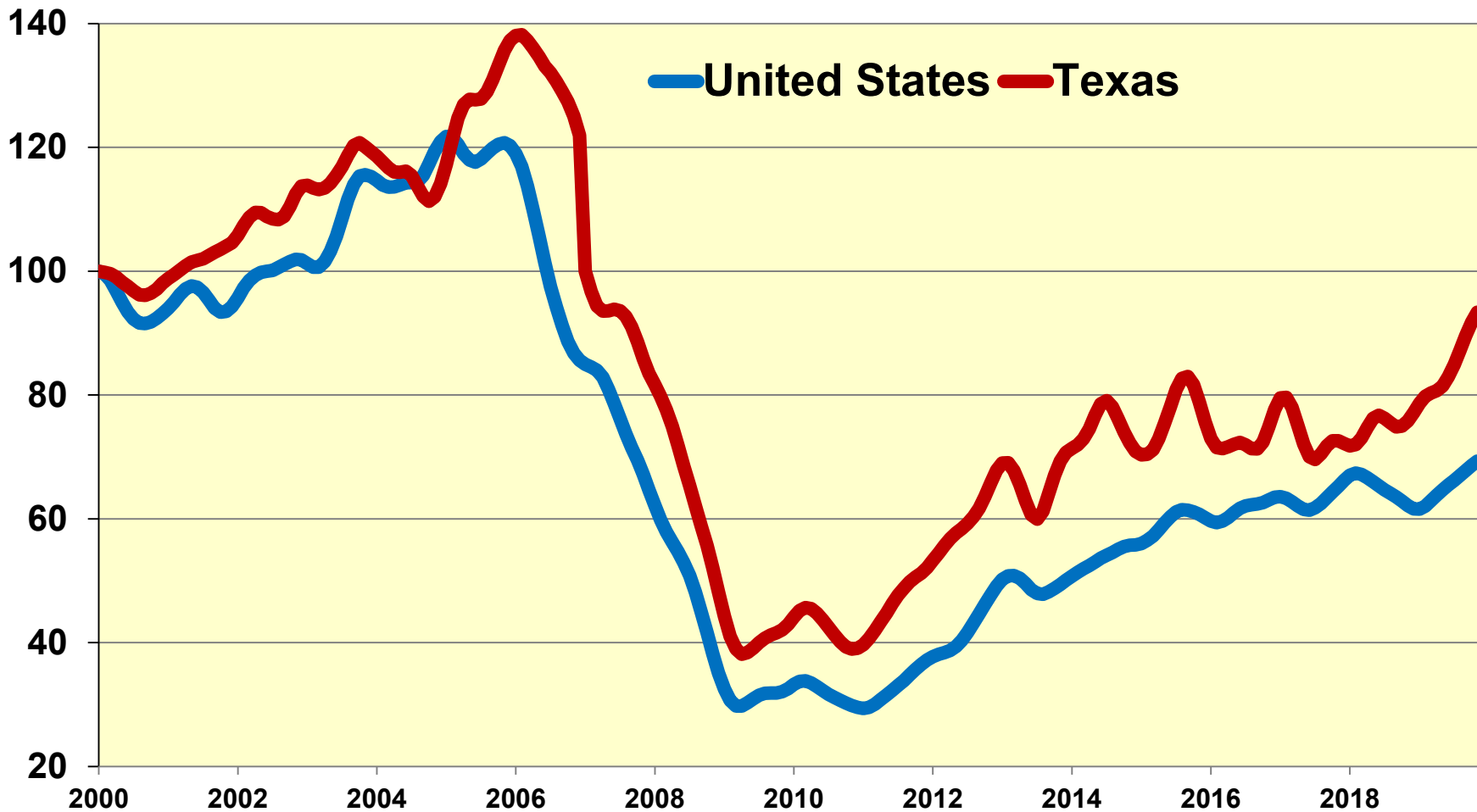
Dallas 2018 County Median Land Value PSF vs. Median Improvement Value PFS by Age of Structure



Bexar County 2018 Median Land Value PSF vs. Median Improvement Value PFS by Age of Structure



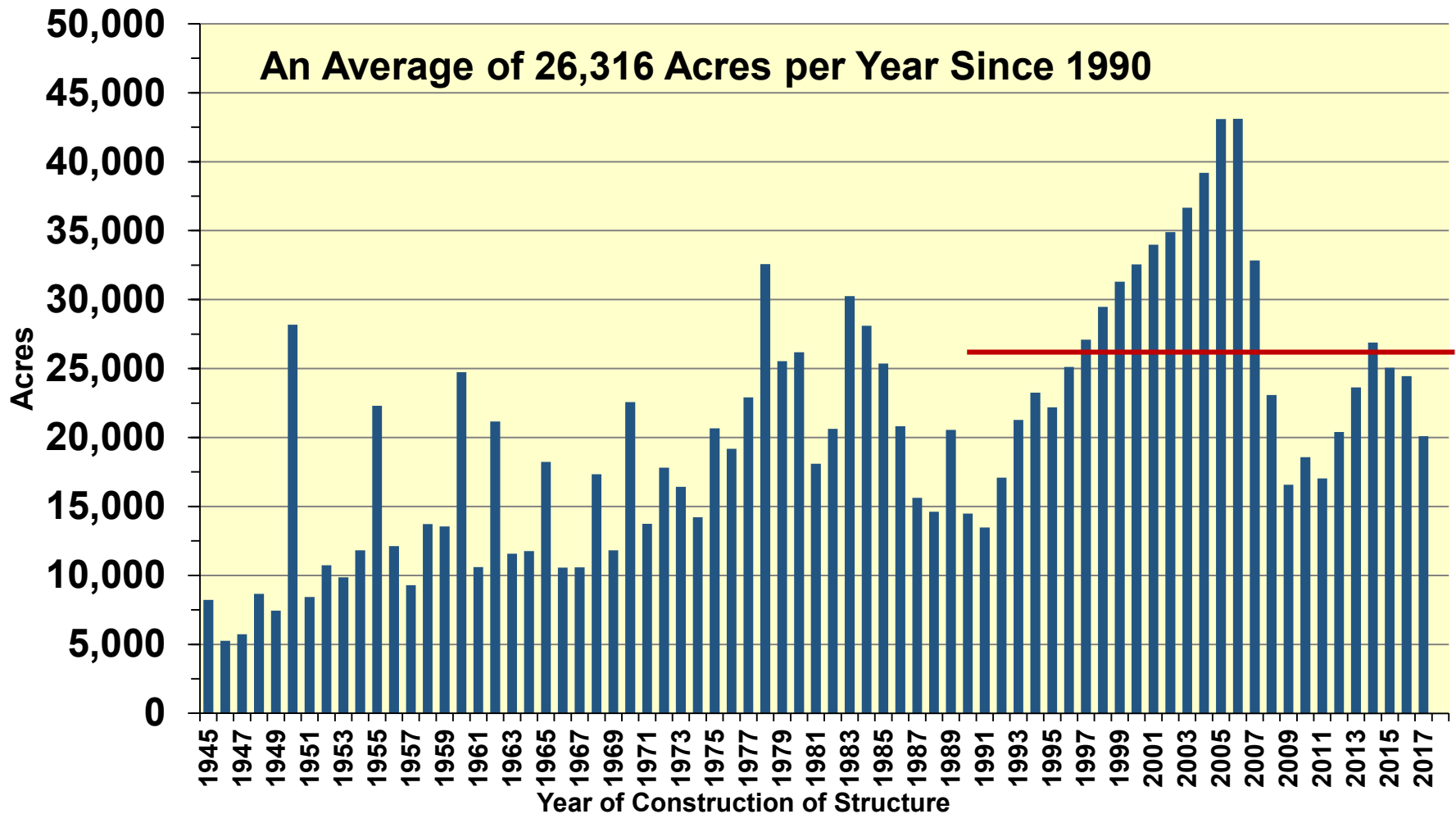
Residential Construction Has Not Recovered: Housing Starts Per Capita



Trend-Cycle Component.

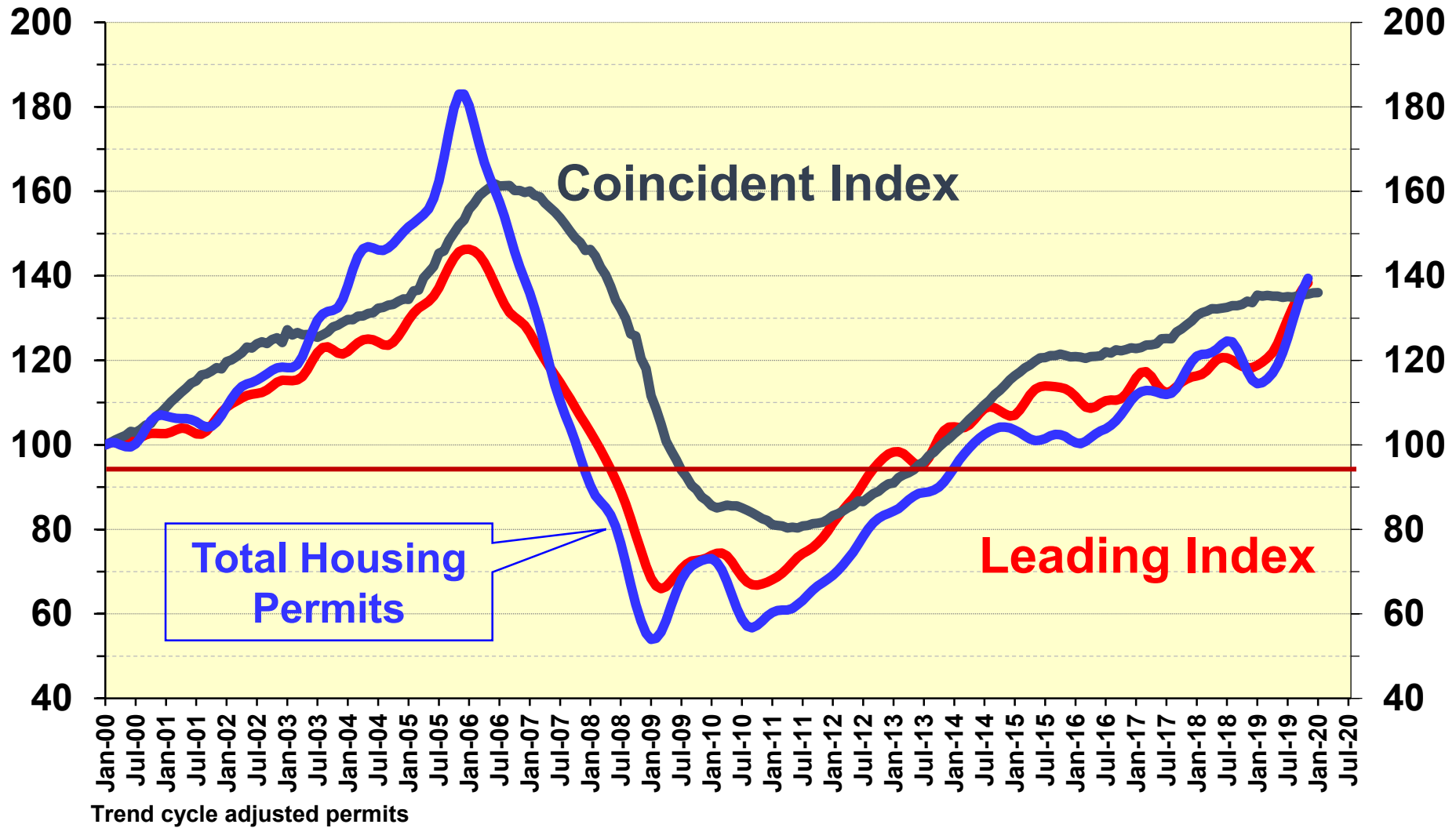


Texas Aggregate Lot Acreage by Age of SF Structure



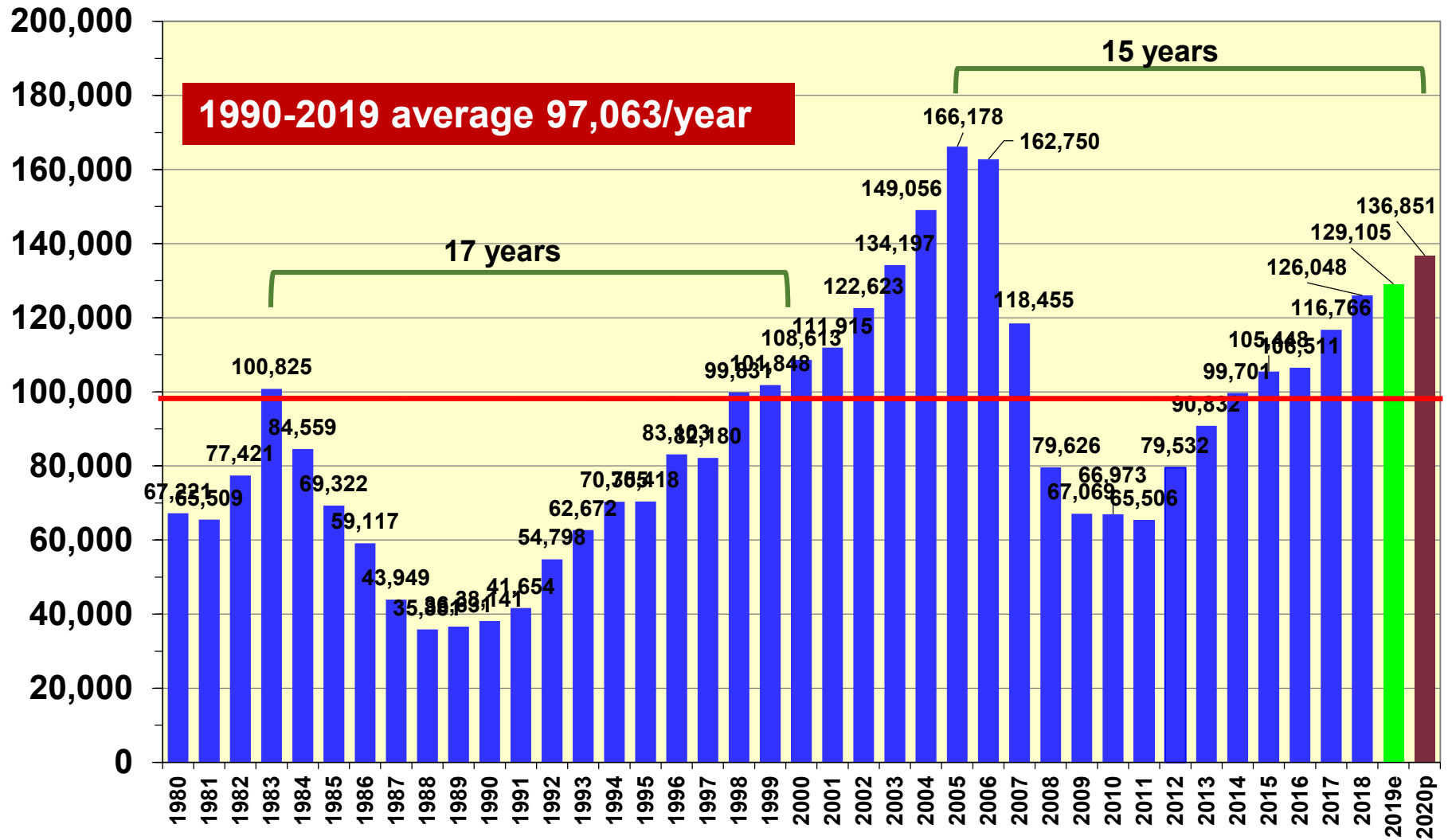
Texas Residential Construction Leading and Coincident Indexes

Jan 2000=100



Trend cycle adjusted permits

Texas SF Building Permits: Not Nearly Enough



Room to Grow: Housing for a New Economy

Federal Reserve Bank of Dallas & Real Estate Center at Texas A&M University
February 21, 2020

Texas' Housing Market

Dr. James P. Gaines

Chief Economist



REAL ESTATE CENTER
TEXAS A & M UNIVERSITY

MAYS BUSINESS SCHOOL