

Housing Affordability in Texas: Toward a New Normal?

AUBER Conference



TEXAS A&M UNIVERSITY
Texas Real Estate
Research Center

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Overview

- Setting the Stage: Unpacking Housing Affordability
- The Past: The Texas Housing Market Prior to the COVID-19 Pandemic
- The Present: The Texas Housing Market During the COVID-19 Pandemic
- The Future: The Texas Housing Market After the COVID-19 Pandemic

Setting the Stage: Unpacking Housing Affordability

Housing affordability is the most pressing issue presently facing cities and communities across Texas.

Even with low interest rates, mortgage payments are increasingly unaffordable

 Austin Monitor

Addressing affordability no easy task in Austin

 DS News

Home Price Gains Continue to Raise Affordability Concerns

 Dallas Morning News

D-FW apartment leasing hits all-time high as rents soar

 Bloomberg.com

Tenants Struggle With Red-Hot US Rental Market

 Dallas Morning News

With no slowdown in sight, Dallas home prices go up 23.7%

 The New York Times

Stock, Bond and Real Estate Prices Are All Uncomfortably High

What is Housing Affordability?

Housing affordability refers to the relationship between home price or rent and household (or family) income.

Two types: owner- and renter-occupied housing affordability



Why Income?

- 86% of homebuyers in Texas used mortgage financing to purchase a home in 2020.
- **Income, wealth, and the credit score** primarily determine a mortgage applicant's creditworthiness (i.e., whether the lender will extend mortgage financing to that applicant).
 - Income & wealth tend to be highly correlated.
- Landlords also use income to vet potential renters. Moreover, federal, state, and local government set income thresholds for subsidized rental housing.

Types of Owner-Occupied Housing Affordability

- **Two main types of housing affordability for owner-occupied households:**
 - **Purchase affordability: the ability of households (either current homeowners or renters) to purchase a home.**
 - **Repayment affordability: the ability of existing homeowners to make timely monthly mortgage payments.**

Fundamentals of Purchase Affordability

- Determining the home price affordable to a household is largely a function of mortgage financing terms (i.e., **the mortgage interest rate, loan-to-value and debt-to-income ratios, and credit score**) as well as the additional costs of homeownership (**property taxes and insurance**).
- First-time and low-income homebuyers generally present higher loan-to-value and debt-to-income ratios.

Fundamentals of Housing Affordability

Demand-Side Factors

- Demographics (population growth, household composition, etc.)
- Conditions in the labor market (income & wages, unemployment, taxation, etc.)
- Changes in the cost of borrowing mortgage credit (changes in the mortgage interest rate)
- Consumer tastes & preferences (housing preferences)

Supply-Side Factors

- Availability of developable land
- Regulations/zoning (planning)
- Construction costs (labor & materials)
- Availability of mortgage credit (banking regulations, housing legislation, etc.)

Other Housing Issues

- **Housing quality**
- **Access to mortgage credit**
- **Availability of housing units**
- **Homelessness**
- **Locational attributes**

How Much Home Can a Homebuyer Afford?

- **Common way to measure purchase affordability is the home price to income multiplier.**
 - **i.e., a multiplier of 3.0 indicates a household can afford a home price of 3 times its income.**
- **The home price-to-income multiplier generally hovers around 3.0 for conventional loans, but tends to be slightly higher for federally-backed loans.**

How Much Home Can a Homebuyer Afford?

Household Income	Home Price to Income Multiplier of 3.0	Home Price to Income Multiplier of 3.5	Home Price to Income Multiplier of 4.0	Home Price to Income Multiplier of 4.5
\$30,000	\$90,000	\$105,000	\$120,000	\$135,000
\$35,000	\$105,000	\$122,500	\$140,000	\$157,500
\$40,000	\$120,000	\$140,000	\$160,000	\$180,000
\$45,000	\$135,000	\$157,500	\$180,000	\$202,500
\$50,000	\$150,000	\$175,000	\$200,000	\$225,000
\$55,000	\$165,000	\$192,500	\$220,000	\$247,500
\$60,000	\$180,000	\$210,000	\$240,000	\$270,000

Source: Texas Real Estate Research Center

The Past: The Texas Housing Market Prior to the COVID-19 Pandemic

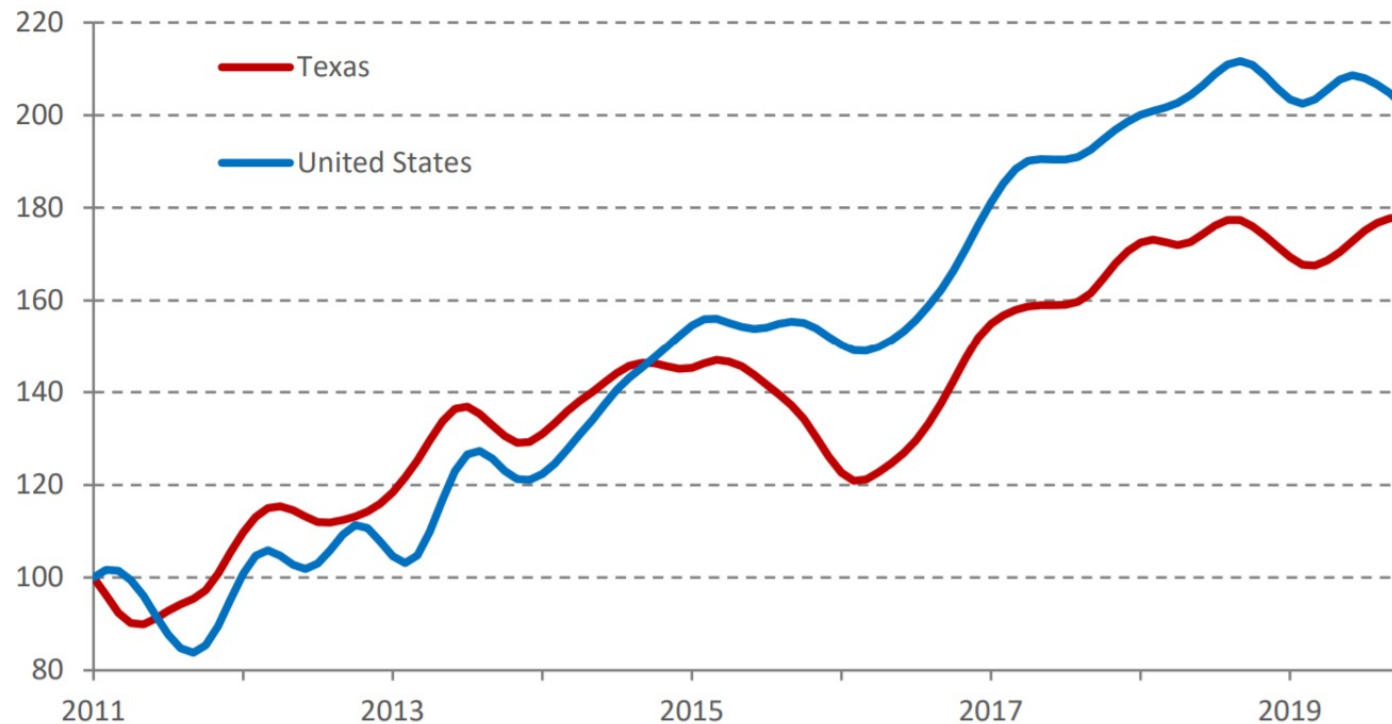
Falling Unemployment



Source: FRED, U.S. Bureau of Labor Statistics

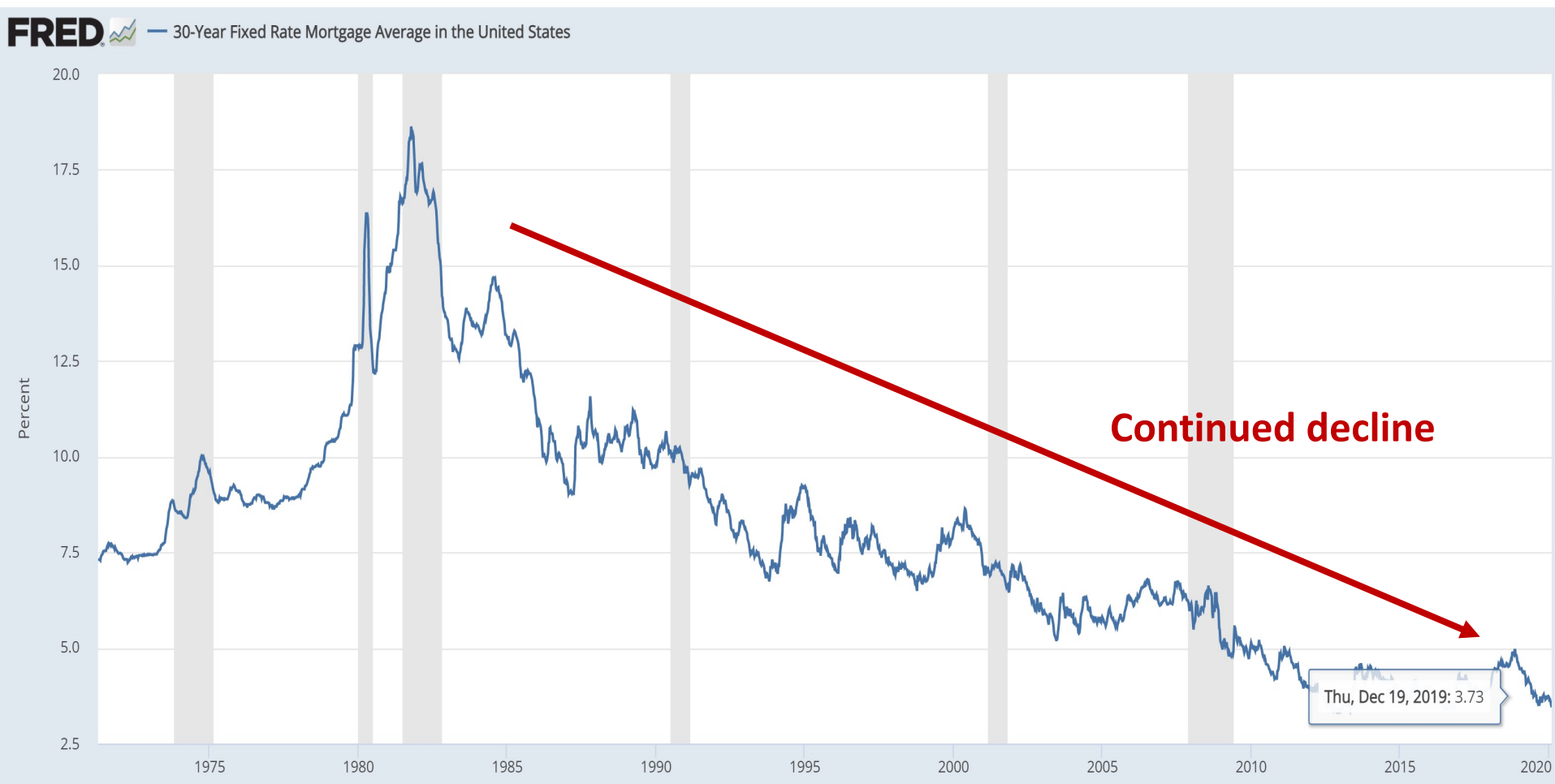
Increasingly Optimistic Outlook on Economy

Consumer Confidence Index
(Index Jan 2011 = 100)



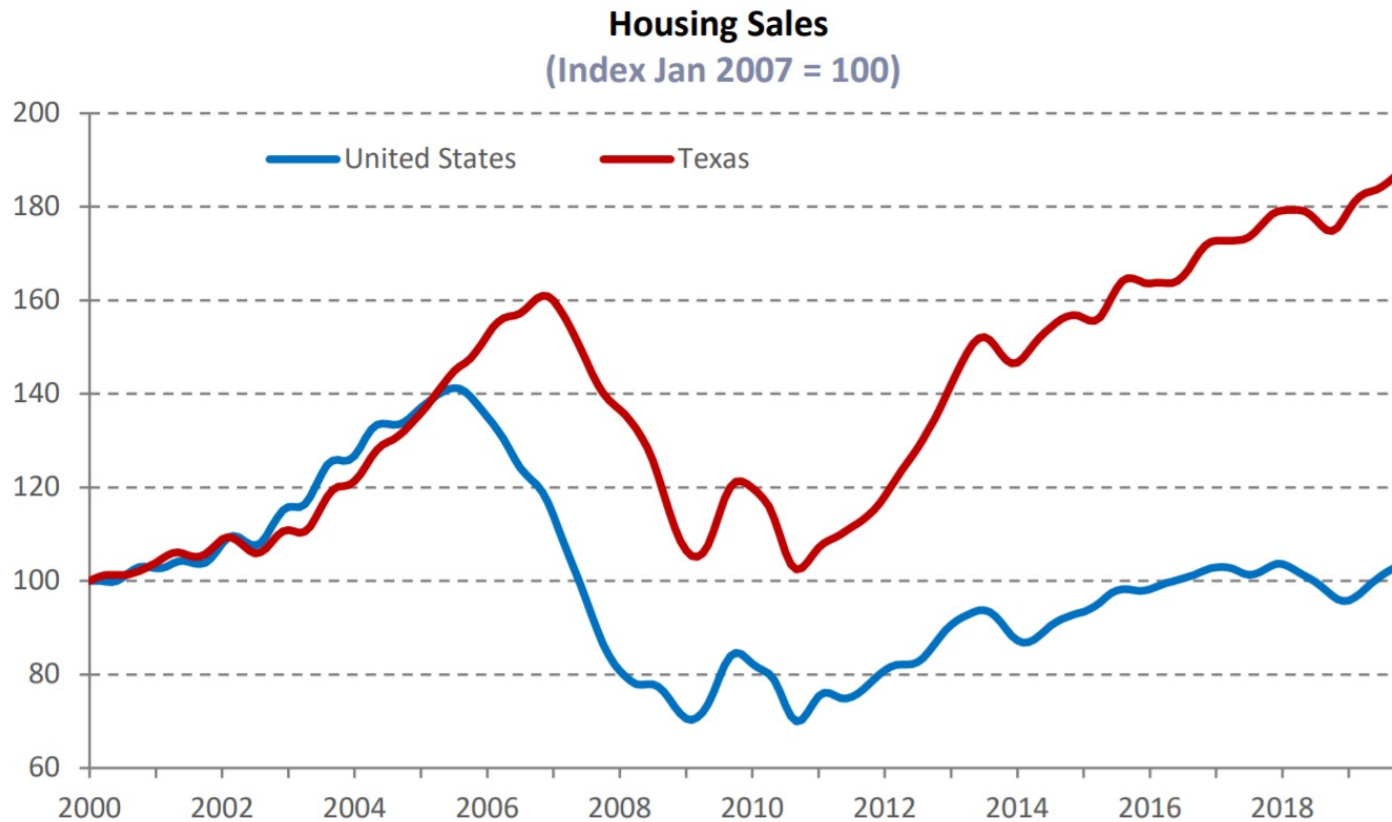
Note: Trend-cycle Component.
Source: Conference Board

Falling Mortgage Interest Rate



Source: FRED, Freddie Mac

Increase in Housing Sales

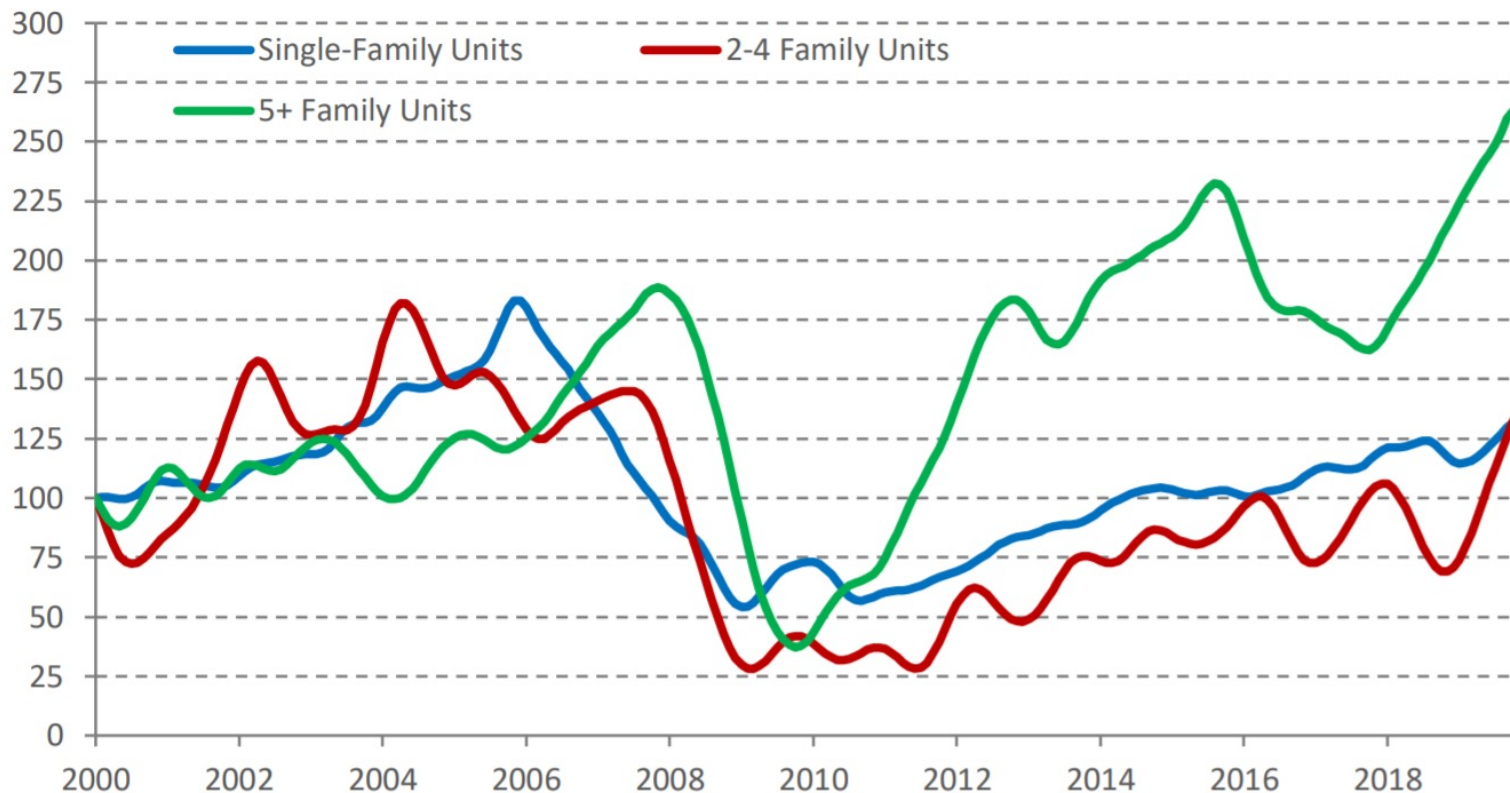


Note: Trend-cycle component. Sales for the United States include all existing homes and new single-family homes; new non-single-family homes are not included. Texas includes all existing and new homes. For more information, see [Housing Sales](#).

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

New Multifamily Supply Outpaces 1-4 Units

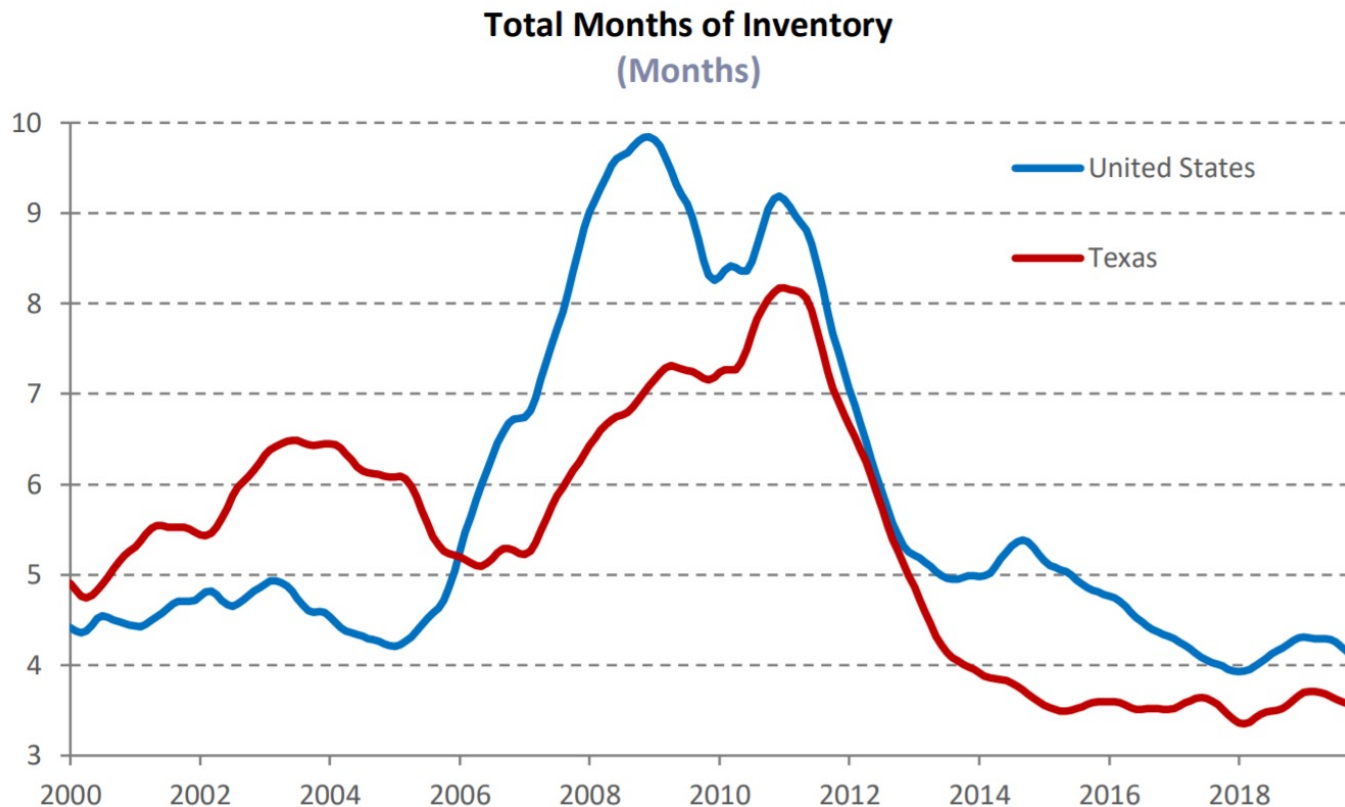
Texas Housing Construction Permits
(Index Jan 2000 = 100)



Note: Trend-Cycle Component.

Sources: U.S. Census Bureau and Real Estate Center at Texas A&M University

Decline in Overall Supply



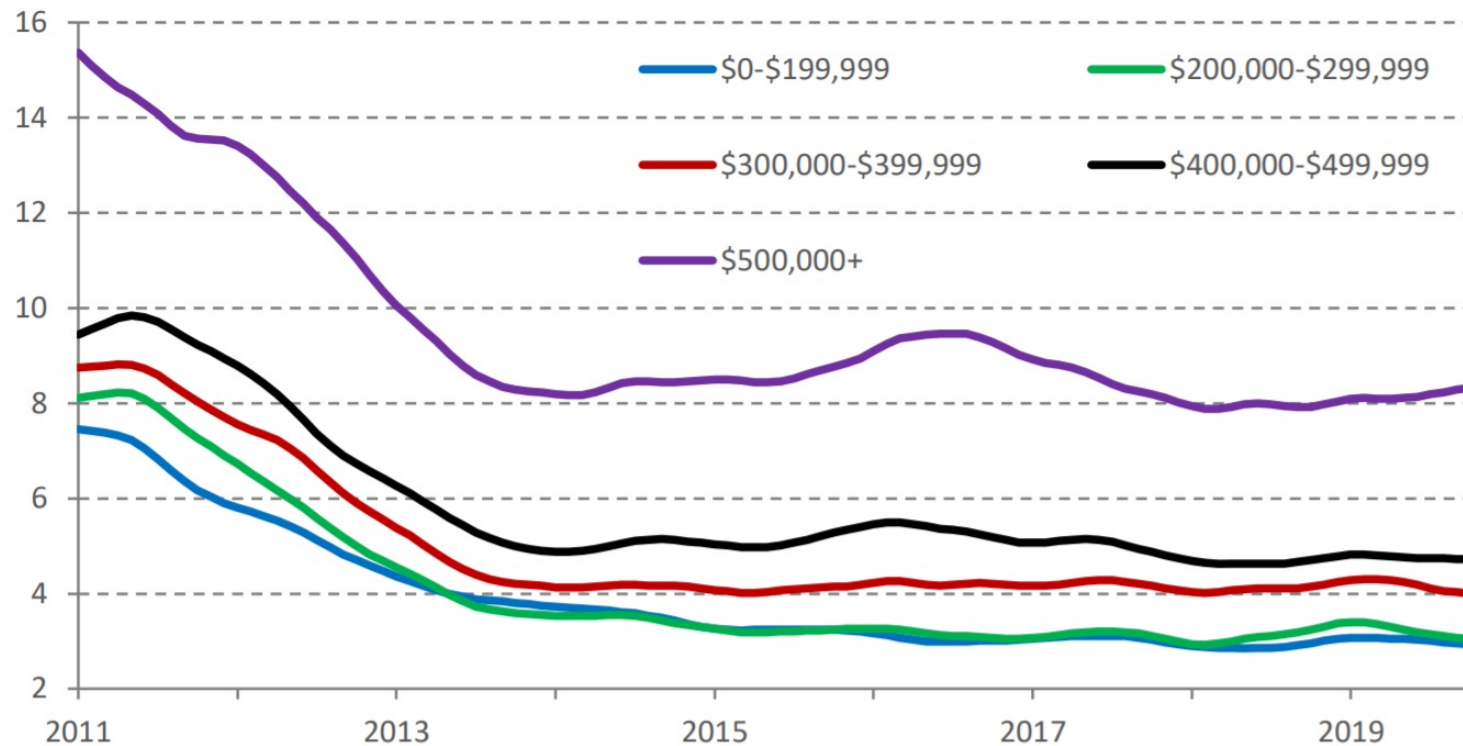
Note: Trend-Cycle Component. Months of inventory for the United States is estimated using weights for all existing homes and new single-family homes; new nonsingle-family homes are not included. Texas includes all existing and new homes.

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

Declining Supply of Homes Affordable at the Lowest-Price Cohorts

Texas Months of Inventory by Price Cohort
(Months)

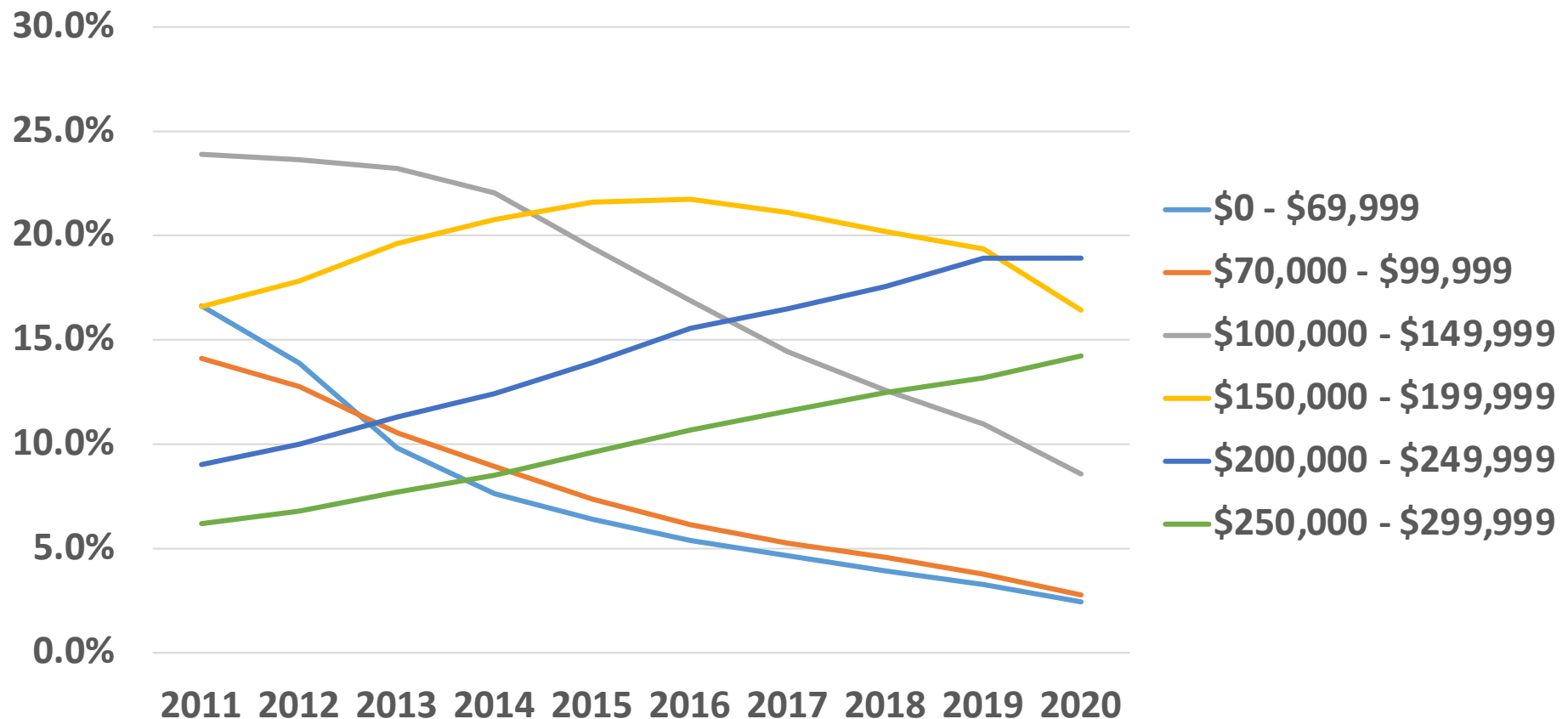


Note: Trend-Cycle Component.

Source: Real Estate Center at Texas A&M University

Declining Supply of Homes Affordable at the Lowest-Price Cohorts

Decline in the Proportion of Lower-Priced Homes (2011-2019)



Source: Texas Real Estate Research Center

Purchase Affordability in Texas: 2-Person Household (2011)

Income Cohort	Income Range		Home Price Range	Demand for Homes	Supply of Homes	Oversupply or Undersupply (-) of Homes
Extremely Low-Income	0-30%	\$0 - \$14,300	\$0 - \$42,900	21.5%	10.2%	-11.3%
Very Low-Income	31-50%	\$14,301 - \$23,800	\$42,901 - \$71,400	15.9%	7.1%	-8.8%
Low-Income	51-80%	\$23,801 - \$38,100	\$71,401 - \$114,300	20.2%	20.3%	0.1%
Workforce	81-120%	\$38,101 - \$57,120	\$114,301 - \$171,360	17.5%	24.2%	6.6%
Market-Rate	121%+	\$71,401+	\$171,361+	24.9%	38.3%	13.4%

Source: Texas Real Estate Research Center



Purchase Affordability in Texas: 2-Person Household (2019)

Income Cohort	Income Range		Home Price Range	Demand for Homes	Supply of Homes	Oversupply or Undersupply (-) of Homes
Extremely Low-Income	0-30%	\$0 - \$17,100	\$0 - \$51,300	19.3%	2.4%	-16.9%
Very Low-Income	31-50%	\$17,101 - \$28,500	\$51,301 - \$85,500	14.8%	2.8%	-11.9%
Low-Income	51-80%	\$28,501 - \$45,550	\$85,501 - \$136,650	19.4%	9.8%	-9.6%
Workforce	81-120%	\$45,551 - \$68,400	\$136,651 - \$205,200	18.4%	24.3%	5.9%
Market-Rate	121%+	\$68,401+	\$205,201+	28.2%	60.7%	32.5%

Source: Texas Real Estate Research Center



Purchase Affordability in Texas: 4-Person Household (2011)

Income Cohort	Income Range		Home Price Range	Demand for Homes	Supply of Homes	Oversupply or Undersupply (-) of Homes
Extremely Low-Income	0-30%	\$0 - \$17,850	\$0 - \$53,550	27.5%	12.7%	-14.8%
Very Low-Income	31-50%	\$17,851 - \$29,750	\$53,551 - \$89,250	18.8%	13.0%	-5.9%
Low-Income	51-80%	\$29,751 - \$47,600	\$89,251 - \$142,800	21.6%	25.5%	3.9%
Workforce	81-120%	\$47,601 - \$71,400	\$142,801 - \$214,200	16.1%	22.6%	6.5%
Market-Rate	121%+	\$71,401+	\$214,201+	15.9%	26.2%	10.3%

Source: Texas Real Estate Research Center



Purchase Affordability in Texas: 4-Person Household (2019)

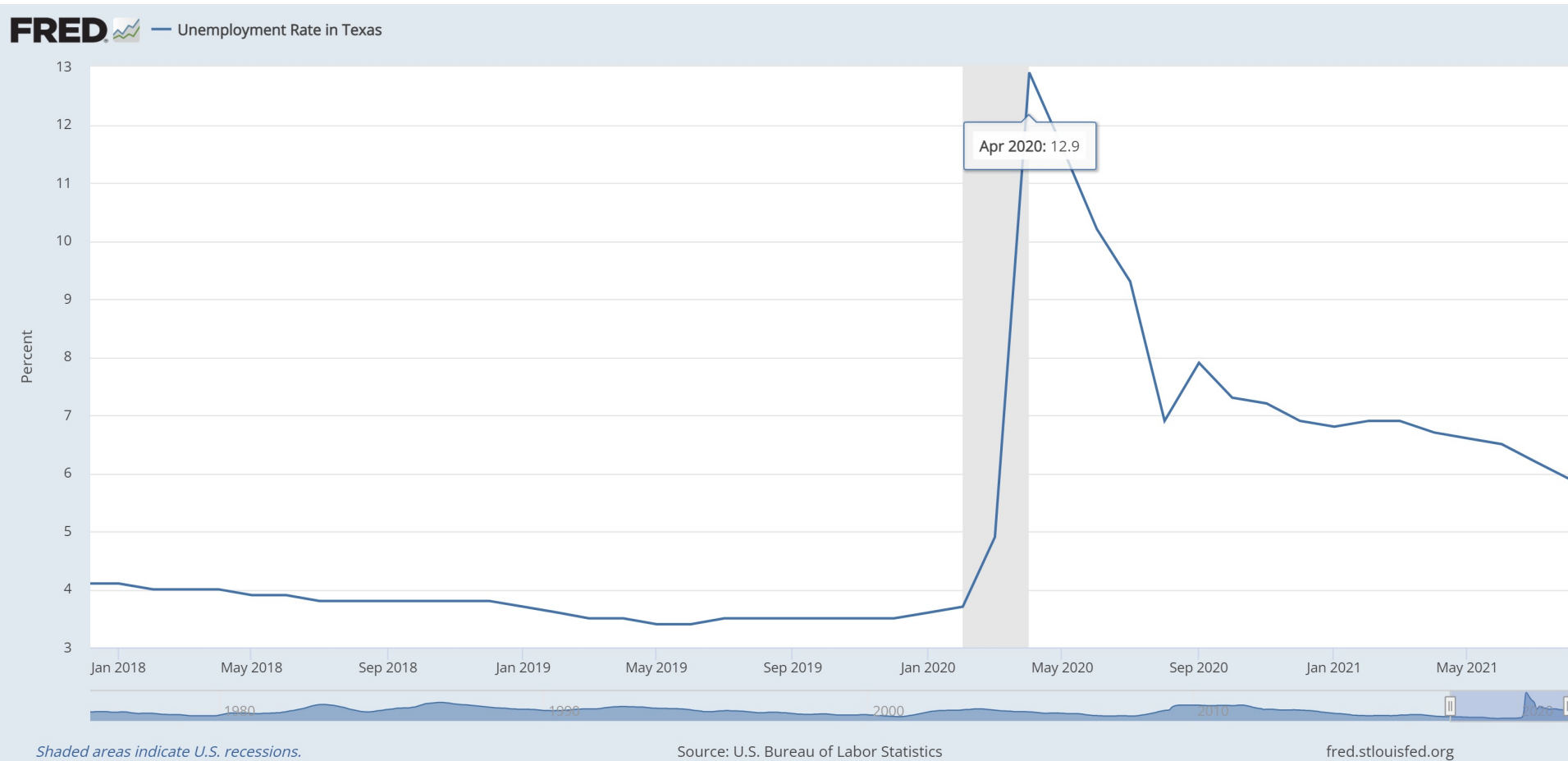
Income Cohort	Income Range		Home Price Range	Demand for Homes	Supply of Homes	Oversupply or Undersupply (-) of Homes
Extremely Low-Income	0-30%	\$0 - \$21,350	\$0 - \$64,050	24.8%	3.0%	-21.8%
Very Low-Income	31-50%	\$21,351 - \$35,600	\$64,051 - \$106,800	18.2%	5.5%	-12.7%
Low-Income	51-80%	\$35,601 - \$56,950	\$106,801 - \$170,850	20.3%	17.5%	-2.8%
Workforce	81-120%	\$56,951 - \$85,440	\$170,851 - \$256,320	17.7%	31.9%	14.2%
Market-Rate	121%+	\$85,441+	\$256,321+	19.0%	42.1%	23.1%

Source: Texas Real Estate Research Center



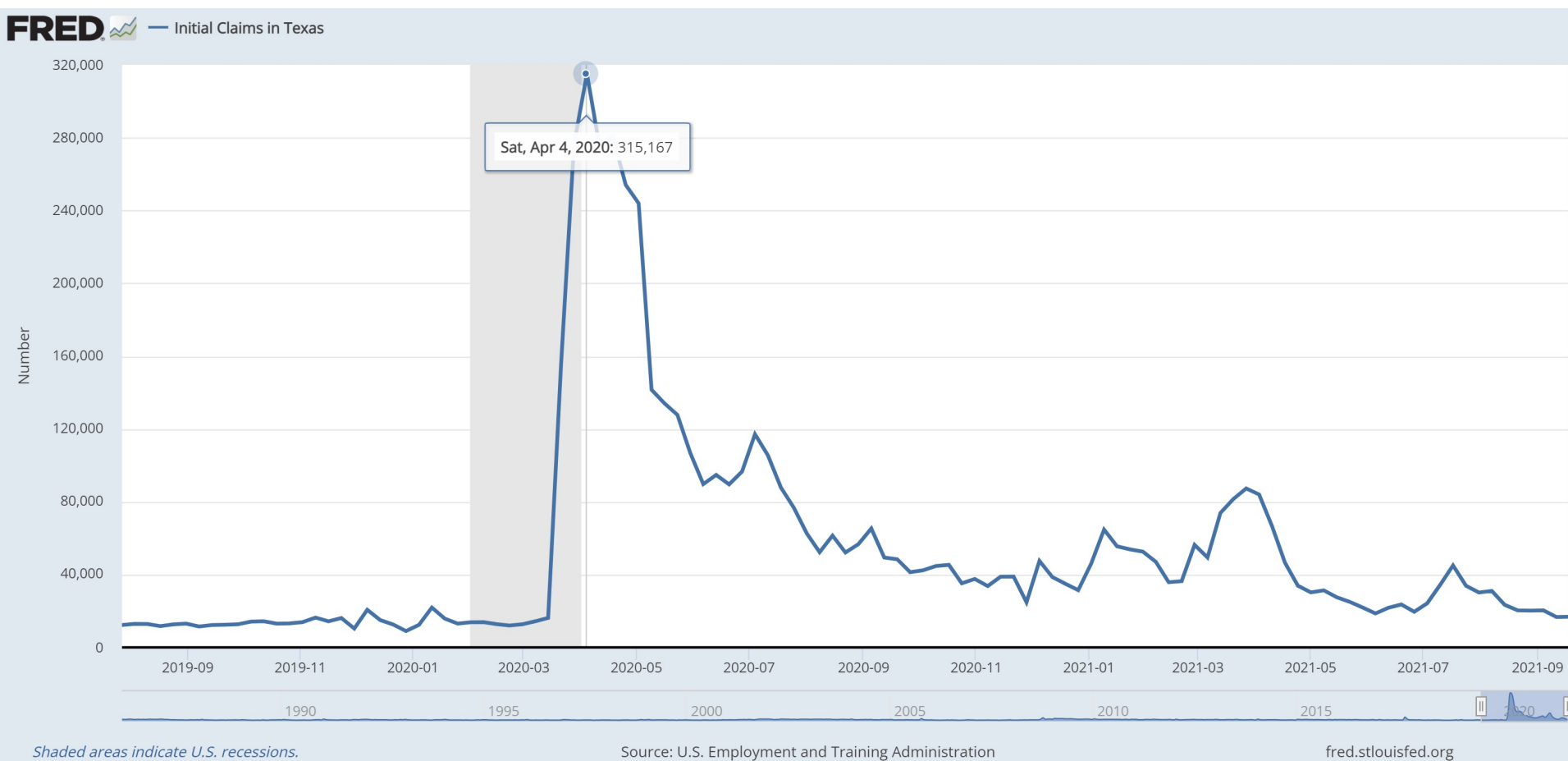
The Present: The Texas Housing Market During the COVID-19 Pandemic

Spike in Unemployment



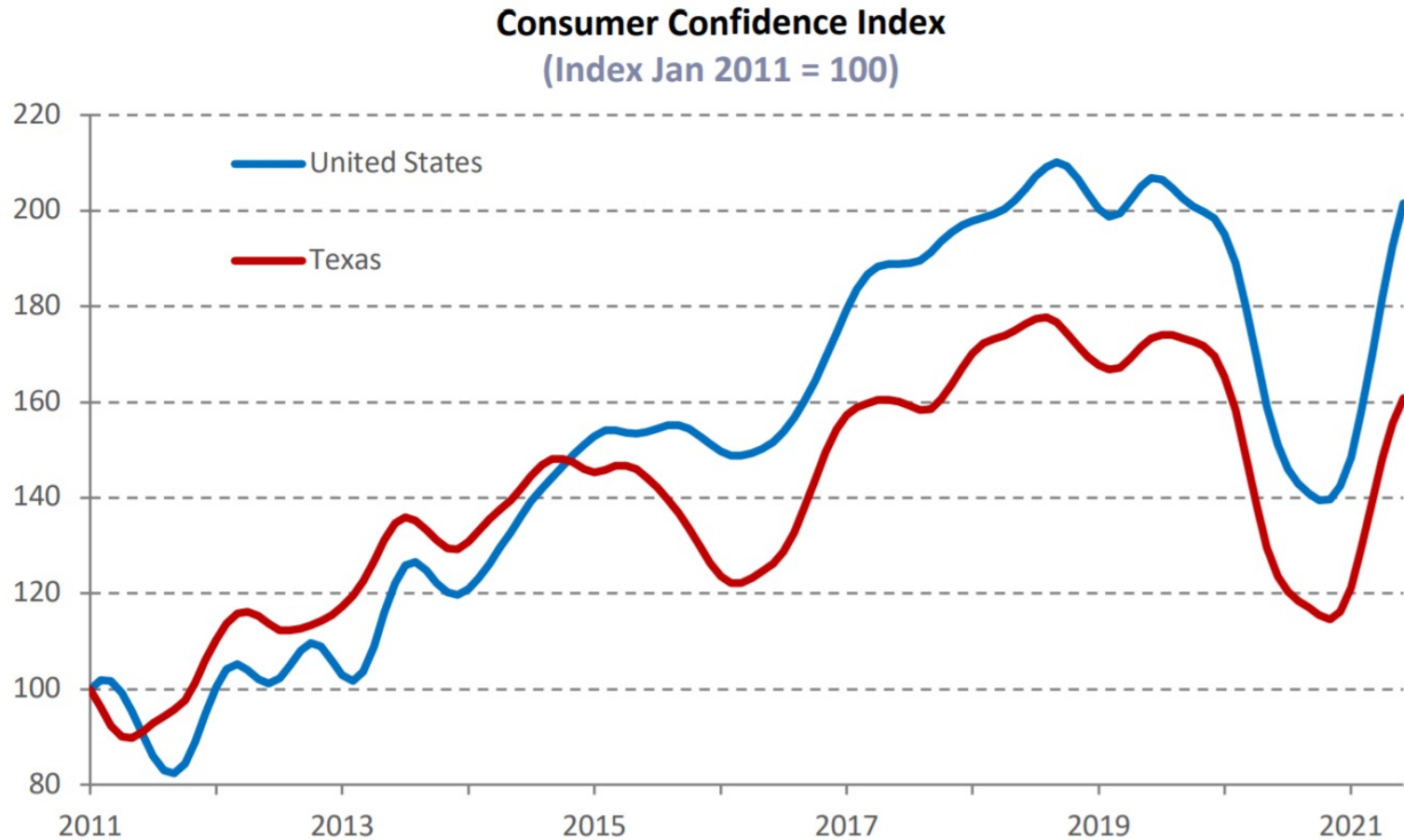
Source: FRED, U.S. Bureau of Labor Statistics

Initial Unemployment Claims in Texas



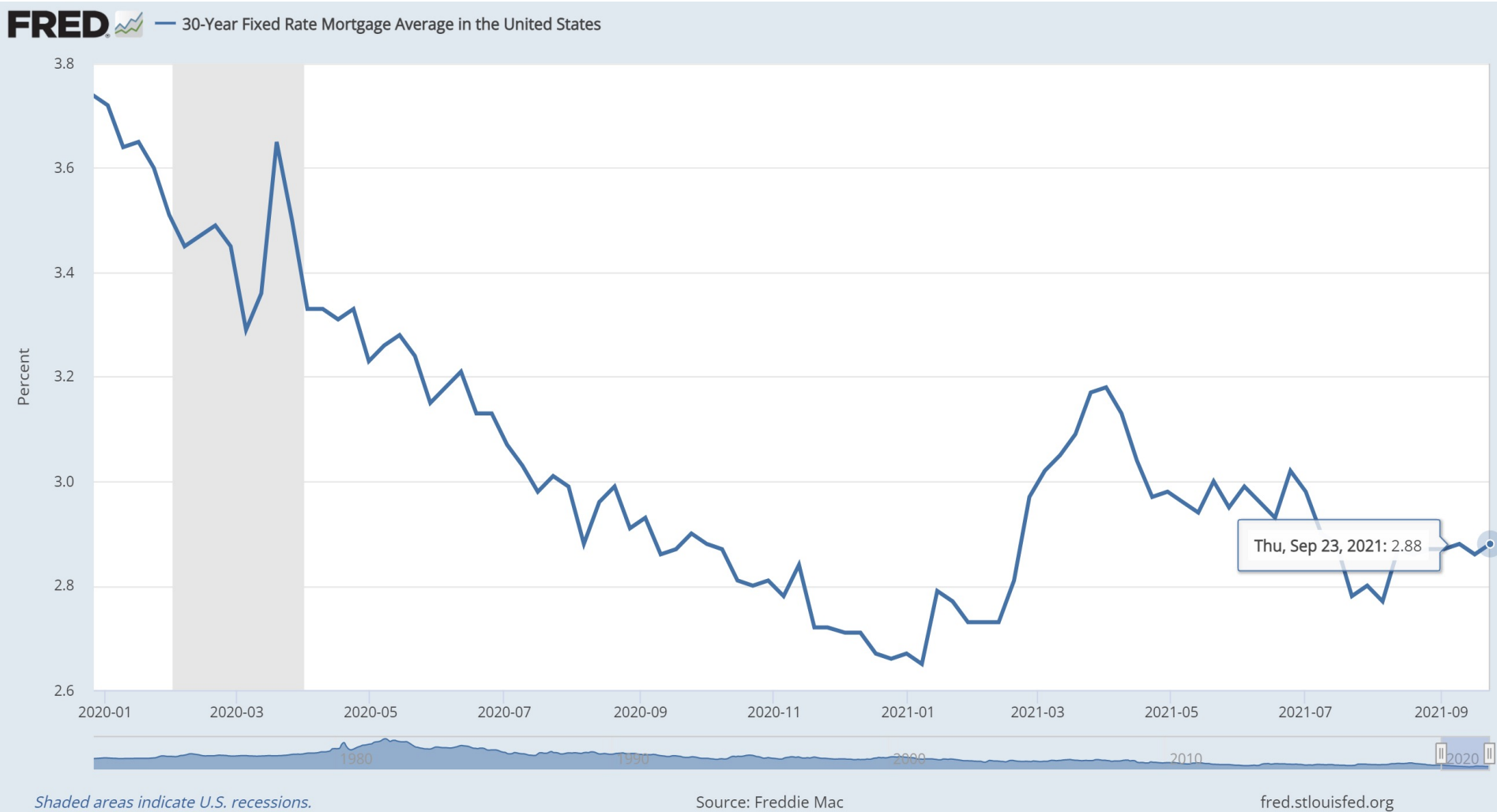
Source: FRED, U.S. Employment and Training Administration

Outlook on Economy Nearly Returned to Pre-Pandemic Levels



Note: Trend-cycle component.
Source: Conference Board

Sustained Decline in Mortgage Interest Rate

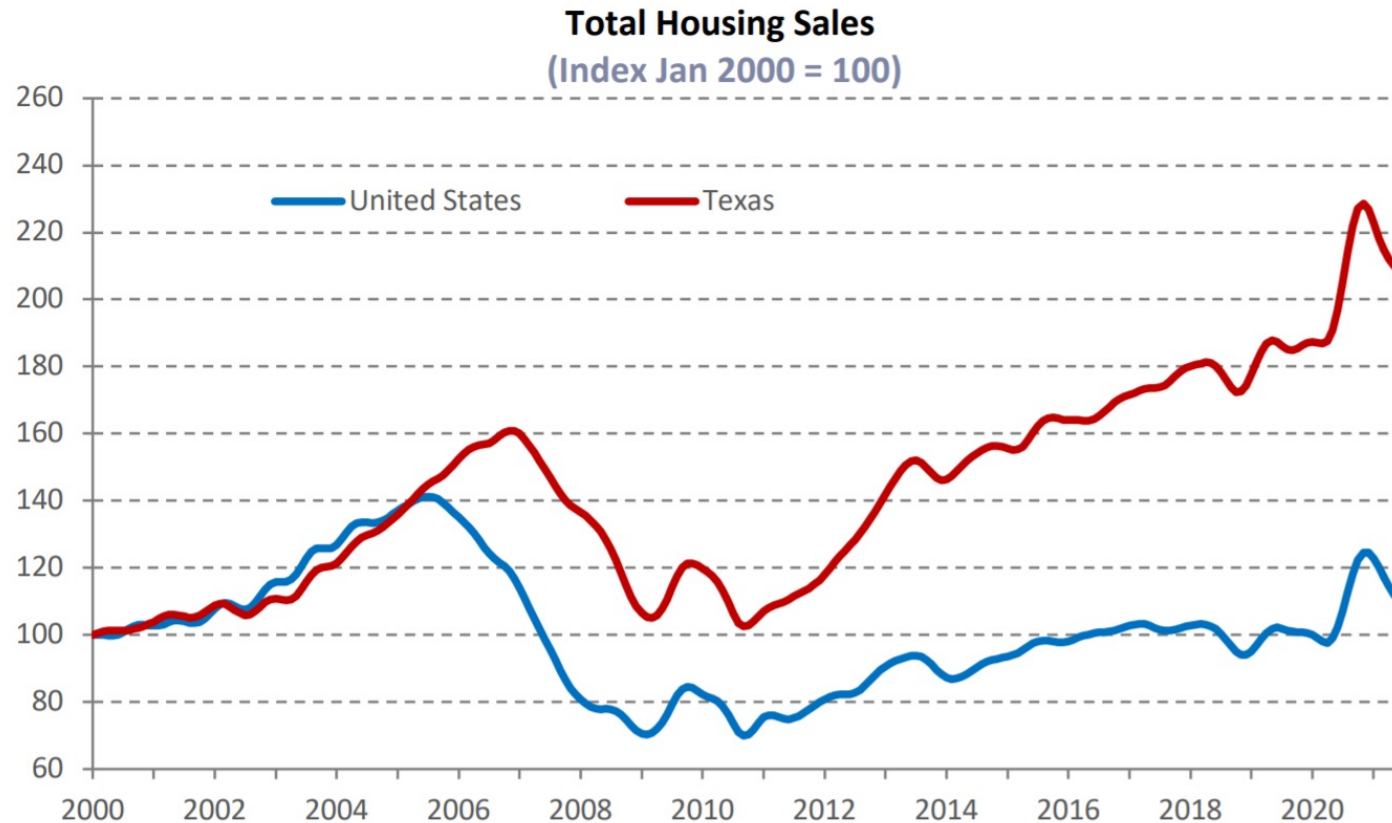


Source: FRED, Freddie Mac



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Increase in Housing Sales

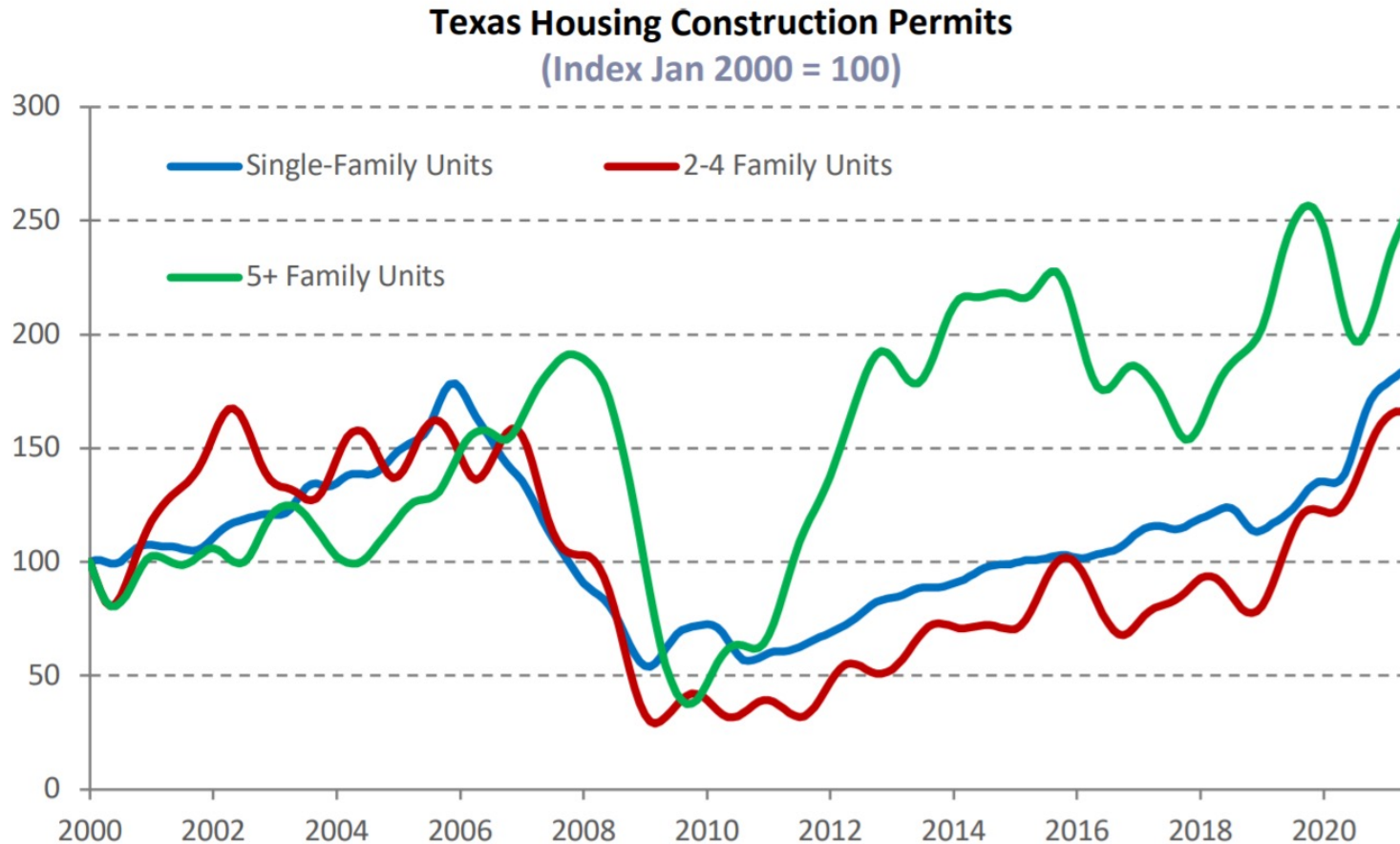


Note: Trend-cycle component. Sales for the United States include all existing homes and new single-family homes sold through an MLS; new non-single-family homes are not included. Texas includes all existing and new homes.

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

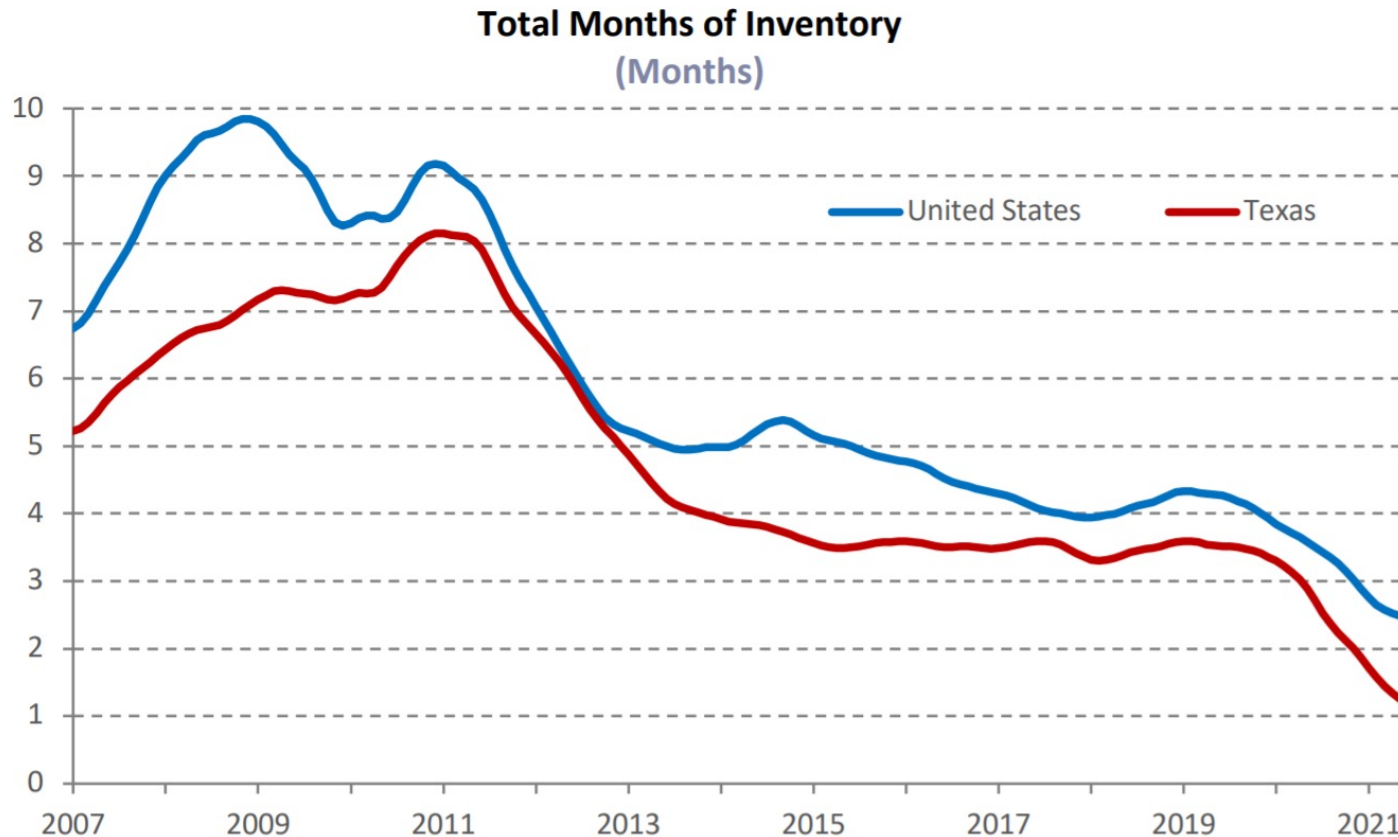
Uptick in Expected New Supply...



Note: Trend-cycle component.

Sources: U.S. Census Bureau and Texas Real Estate Research Center at Texas A&M University

...Not Enough to Meet Demand!

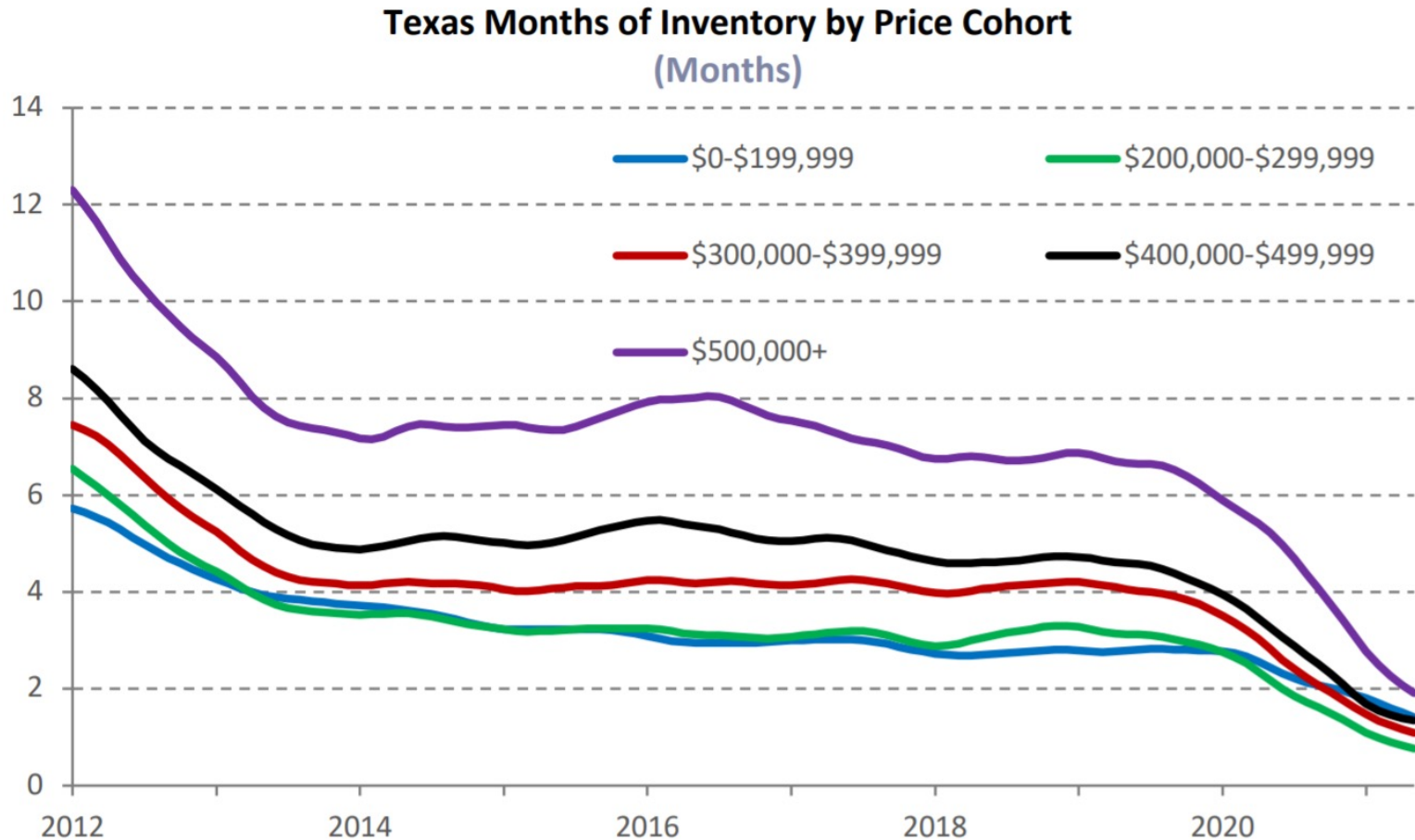


Note: Trend-cycle component. Months of inventory for the United States is estimated using weights for all existing homes and new single-family homes; new nonsingle-family homes are not included. Texas includes all existing and new homes.

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

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

Declining Supply of Homes Affordable at the Lowest-Price Cohorts



Note: Trend-cycle component.

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

Loss of Employment Income (March-April 2020)

Household Income	Percentage of Households Who Experienced a Loss of Employment Income
Less than \$25,000	56.9%
\$25,000 - \$34,999	47.8%
\$35,000 - \$49,999	46.7%
\$50,000 - \$74,999	48.9%
\$75,000 - \$99,999	43.5%
\$100,000 - \$149,999	41.1%
\$150,000 - \$199,999	43.2%
\$200,000 and above	33.6%

Source: U.S. Census Bureau

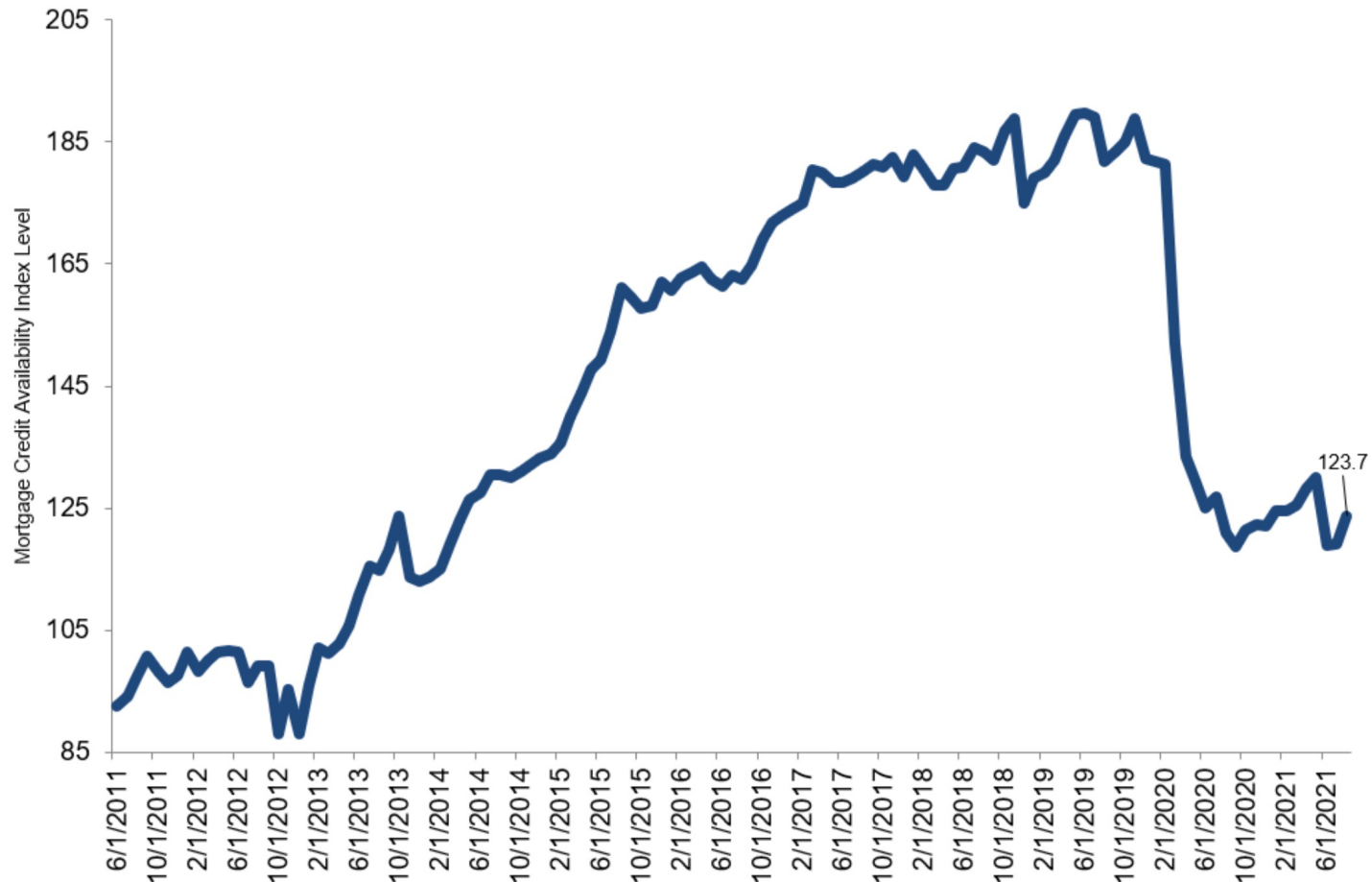
Loss of Employment Income (August-September 2021)

Household Income	Percentage of Households Who Experienced a Loss of Employment Income
Less than \$25,000	34.9%
\$25,000 - \$34,999	37.7%
\$35,000 - \$49,999	25.8%
\$50,000 - \$74,999	19.8%
\$75,000 - \$99,999	16.8%
\$100,000 - \$149,999	12.2%
\$150,000 - \$199,999	13.5%
\$200,000 and above	5.9%

Source: U.S. Census Bureau

Higher Mortgage Lending Standards

**Mortgage Credit Availability Index, Index Level by Month
(NSA, 3/2012=100)**



Source: Mortgage Bankers Association

Maximum Home Price Affordable

		Decline in Income								
Household Income	Max Home Price Affordable	-5%	-10%	-15%	-25%	-30%	-35%	-40%	-45%	-50%
\$20,000	\$60,000	\$57,000	\$54,000	\$51,000	\$45,000	\$42,000	\$39,000	\$36,000	\$33,000	\$30,000
\$25,000	\$75,000	\$71,250	\$67,500	\$63,750	\$56,250	\$52,500	\$48,750	\$45,000	\$41,250	\$37,500
\$30,000	\$90,000	\$85,500	\$81,000	\$76,500	\$67,500	\$63,000	\$58,500	\$54,000	\$49,500	\$45,000
\$35,000	\$105,000	\$99,750	\$94,500	\$89,250	\$78,750	\$73,500	\$68,250	\$63,000	\$57,750	\$52,500
\$40,000	\$120,000	\$114,000	\$108,000	\$102,000	\$90,000	\$84,000	\$78,000	\$72,000	\$66,000	\$60,000
\$45,000	\$135,000	\$128,250	\$121,500	\$114,750	\$101,250	\$94,500	\$87,750	\$81,000	\$74,250	\$67,500
\$50,000	\$150,000	\$142,500	\$135,000	\$127,500	\$112,500	\$105,000	\$97,500	\$90,000	\$82,500	\$75,000
\$55,000	\$165,000	\$156,750	\$148,500	\$140,250	\$123,750	\$115,500	\$107,250	\$99,000	\$90,750	\$82,500
\$60,000	\$180,000	\$171,000	\$162,000	\$153,000	\$135,000	\$126,000	\$117,000	\$108,000	\$99,000	\$90,000

Source: Texas Real Estate Research Center



Supply of Homes Affordable (2020)

		Decline in Income								
Household Income	Max Home Price Affordable	-5%	-10%	-15%	-25%	-30%	-35%	-40%	-45%	-50%
\$20,000	\$60,000	2.0%	1.9%	1.8%	1.6%	1.5%	1.4%	1.3%	1.1%	1.0%
\$25,000	\$75,000	2.6%	2.4%	2.2%	2.0%	1.8%	1.7%	1.6%	1.4%	1.3%
\$30,000	\$90,000	3.9%	3.5%	3.0%	2.4%	2.2%	2.0%	1.9%	1.7%	1.6%
\$35,000	\$105,000	5.2%	4.7%	4.2%	3.2%	2.8%	2.4%	2.2%	2.0%	1.8%
\$40,000	\$120,000	7.6%	6.6%	5.6%	4.3%	3.7%	3.2%	2.6%	2.3%	2.1%
\$45,000	\$135,000	10.0%	8.9%	7.7%	5.4%	4.7%	4.1%	3.5%	2.8%	2.4%
\$50,000	\$150,000	12.5%	11.2%	9.9%	7.3%	6.1%	5.0%	4.3%	3.6%	2.9%
\$55,000	\$165,000	16.0%	13.5%	12.1%	9.3%	7.9%	6.4%	5.1%	4.4%	3.6%
\$60,000	\$180,000	20.7%	17.7%	14.8%	11.2%	9.7%	8.1%	6.6%	5.1%	4.3%





Source: Texas Real Estate Research Center



The Future: The Texas Housing Market After the COVID-19 Pandemic

Demand-Side Factors

Demand-Side Factors

- **Demographics (population growth, household composition, etc.)** 
- **Conditions in the labor market (income & wages, unemployment, taxation, etc.)** 
- **Changes in the cost of borrowing mortgage credit (changes in the mortgage interest rate)** 
- **Consumer tastes & preferences (housing preferences)** 
- **Texas is the fastest growing state in the nation; raises concerns about balance between supply and demand**
- **Rising income inequality in light of COVID-19 Recession particularly hampers low-income households.**
- **Mortgage interest rates anticipated to remain low in the near-term, but can't decline much more!**
- **Greater proportion of nonfamily households purchasing homes (married couples comprised 67% of homebuyers in Texas in 2020; measured 72% in 2015).**

Demographics

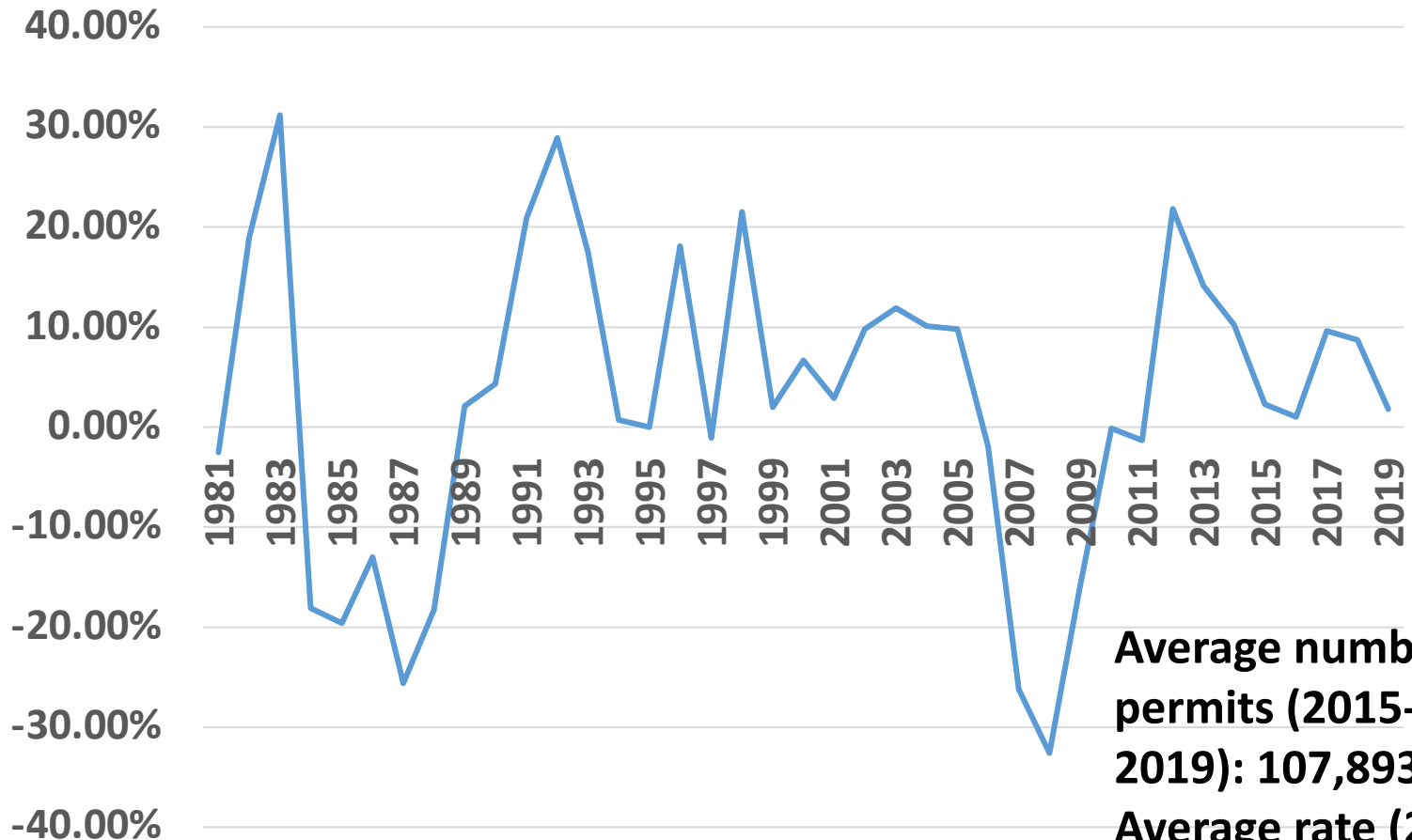
- Texas is one of the fastest growing states in the nation.
- Population is expected to grow between 16-18% on a decennial basis from 2020-2050.
- Population growth is expected to decelerate slightly, projected growth rate less than the decennial growth rate from 1960-2010 (17-27%).

Year	Anticipated Population
2020	29,695,345
2025	32,204,920
2030	34,894,452
2035	37,716,495
2040	40,686,496
2045	43,866,965
2050	47,342,105

Source: Texas Water Development Board, 2021 Regional Water Plan Population & Water Demand Projections

Can Supply Keep Pace With Demand?

YOY Change in Single-Family Building Permits



Average number of permits (2015-2019): 107,893
Average rate (2012-2019): 8.7%

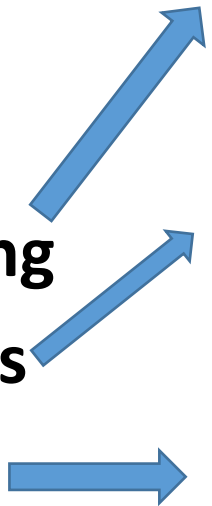
Source: Texas Real Estate Research Center

Can Supply Keep Pace With Demand?

- From 2012-2019, building permits for single-family homes averaged 107,829 annually.
- To maintain the current homeownership rate (62.4%) and size of owner-occupied households (2.99), the state needs, on average, approximately **108,872** additional housing units each year (from 2020-2030) to keep pace with population growth.

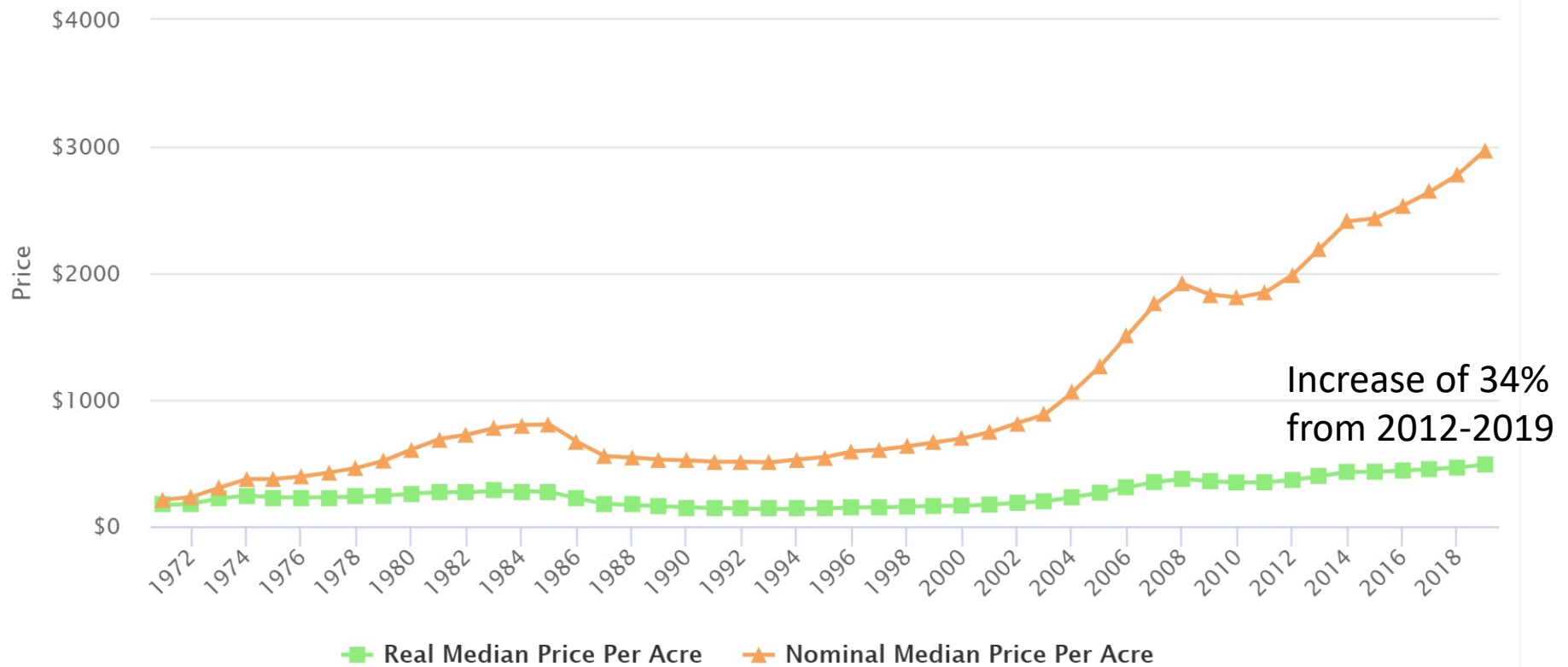
Supply-Side Factors

Supply-Side Factors

- Availability of developable land
 - Regulations/zoning
 - Construction costs
 - Availability of mortgage credit
- 
- Exclusionary zoning imposes constraints on the number of new units which can be supplied.
 - I.e., increases home prices
 - The average construction cost of a single-family home in 2019 was \$114 per square foot, a 43% increase from 2011.
 - Depending on the trajectory of mortgage default and foreclosure in the wake of COVID-19 Recession, federal government may significantly restructure mortgage qualifying standards.

Land Prices

Texas Land Price Data



Source: Texas Real Estate Research Center

Summary

- **Prior to the COVID-19 Recession, housing affordability was declining throughout the state, but particularly for lower-income cohorts.**
- **The disproportionate impact of the COVID-19 Recession on low-income households dictates that housing affordability will likely further decline for these folks.**
- **Moving forward, anticipations for strong population growth will bolster demand for housing. Supply must increase rapidly to meet demand.**

Thank you!
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