

Austin-Round Rock-Georgetown Housing Affordability Outlook



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Texas Real Estate Research Center

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Austin-Round Rock-Georgetown MSA Housing Affordability Outlook 1Q2023

About this Report

Texas Real Estate Research Center economists continuously monitor many facets of both state and local housing markets. *Austin-Round Rock-Georgetown MSA Housing Affordability Outlook* summarizes significant housing activity and trends as related to affordability in the Austin-Round Rock-Georgetown MSA. Home prices reflect single-family existing homes unless otherwise stated. This report does not seasonally adjust home prices.

This publication is designed to be a one-stop resource for information on housing affordability for potential homebuyers in the Austin-Round Rock-Georgetown MSA. We hope you find them as useful as we do. Your feedback is always appreciated. Send comments and suggestions to info@recenter.tamu.edu.

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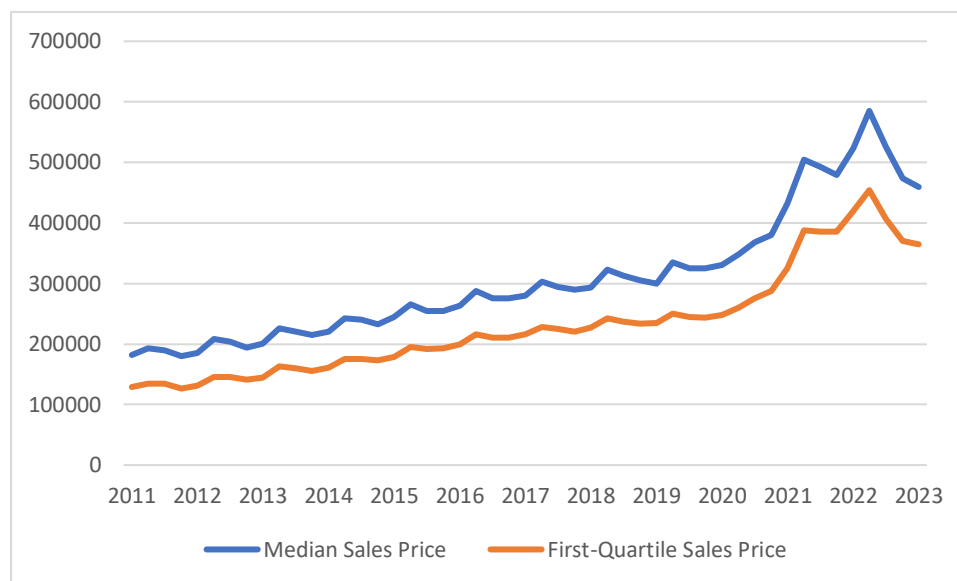


Purchase Affordability

Affordability remained low in 1Q2023 amid high mortgage interest rates and still-elevated home prices. Year-over-year (YOY), affordability increased in 1Q2023. YOY change in both the median and first-quartile sales price was negative, at -14 percent and -14.5 percent, respectively (Figure 1 and Table 1).¹ The significant YOY increase in family income seen a year ago in 1Q2022 followed years of modest rises (Table 2).

The rapid rise in mortgage interest rates in 3Q2022 and 4Q2022 moderated going into 1Q2023. Rates averaged 6.37 percent in 1Q2023, a slight decrease from 4Q2022, which averaged 6.66 percent (Figure 2). All other things being equal, lower (higher) mortgage interest rates translate into lower (higher) monthly mortgage payments and ease (diminish) purchase affordability. For more information on the effect of mortgage interest rates on purchase affordability, see [“How Higher Interest Rates Affect Homebuying”](https://recenter.tamu.edu/articles/tierra-grande/How-Higher-Interest-Rates-Affect-Homebuying-2339) at recenter.tamu.edu/articles/tierra-grande/How-Higher-Interest-Rates-Affect-Homebuying-2339.

**Figure 1. Median and First-Quartile Sales Prices,
Austin-Round Rock-Georgetown MSA**



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

¹ The first quartile reflects the lowest-priced 25 percent of homes sold in a particular geography. The first-quartile sales price represents the highest home price among those lowest-priced 25 percent of homes sold. If the price of the lowest 25 percent of homes sold ranges from \$100,000 to \$150,000, then the first-quartile sales price would be \$150,000.

Table 1. Median Sales Price and First-Quartile Sales Price by Quarter

Year	Median Home Price	YOY Change	First-Quartile Home Price	YOY Change
1Q2011	\$181,500		\$129,000	
1Q2012	\$185,000	1.9%	\$131,000	1.6%
1Q2013	\$201,000	8.6%	\$144,900	10.6%
1Q2014	\$220,000	9.5%	\$161,000	11.1%
1Q2015	\$244,125	11.0%	\$179,000	11.2%
1Q2016	\$263,000	7.7%	\$192,400	7.5%
1Q2017	\$280,000	6.5%	\$210,000	9.1%
1Q2018	\$293,000	4.6%	\$220,000	4.8%
1Q2019	\$300,000	2.4%	\$233,100	6.0%
1Q2020	\$330,000	10.0%	\$247,500	6.2%
1Q2021	\$431,325	30.7%	\$325,000	31.3%
1Q2022	\$523,500	21.4%	\$420,000	29.2%
1Q2023	\$450,000	-14.0%	\$359,000	-14.5%

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

Table 2. Median Family Income by Year

Year	Income for First-Time Homebuyers	YOY Change	Median Family income	YOY Change
2011	\$59,900		\$74,900	
2012	\$60,700	1.3%	\$75,900	1.3%
2013	\$58,550	-3.5%	\$73,200	-3.6%
2014	\$60,300	3.0%	\$75,400	3.0%
2015	\$61,450	1.9%	\$76,800	1.9%
2016	\$62,250	1.3%	\$77,800	1.3%
2017	\$65,100	4.6%	\$81,400	4.6%
2018	\$68,800	5.7%	\$86,000	5.7%
2019	\$75,500	9.7%	\$95,900	11.5%
2020	\$78,100	3.4%	\$97,600	1.8%
2021	\$79,100	1.3%	\$98,900	1.3%
2022	\$88,250	11.6%	\$110,300	11.5%
2023*	-	-	-	-

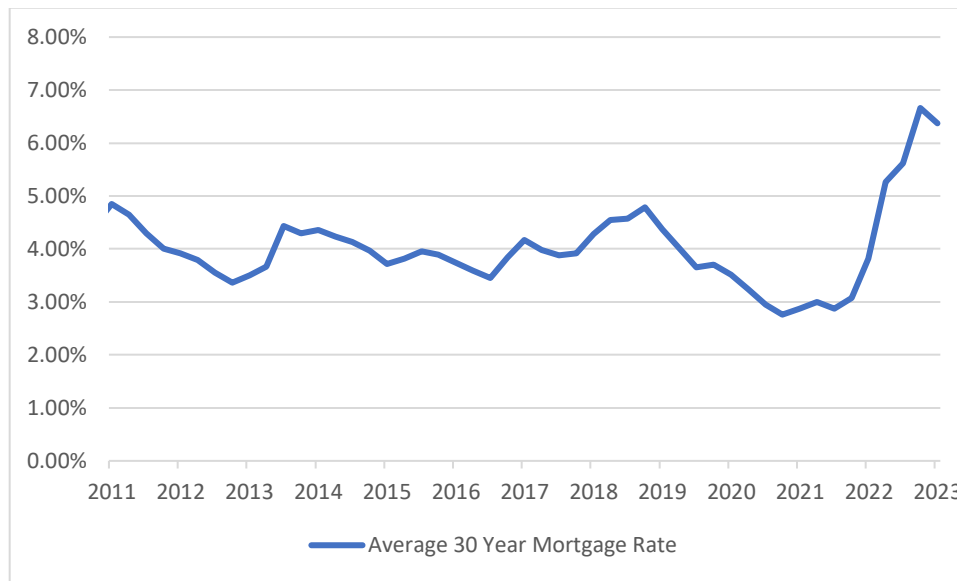
* 2023 Estimates have not been released yet, 2022 estimated incomes are used where necessary.

Note: The income for first-time homebuyers reflects the income limit for low-income families, who earn no more than 80 percent of the median family income. This table reflects income figures for a four-person family.

Source: United States Department of Housing and Urban Development



Figure 2. 30-Year Fixed Rate Mortgage Average in the United States



Sources: Federal Reserve Economic Data and Freddie Mac

Repeat Homebuyer

Despite significant YOY growth in family income and negative home price growth, the gap between home price and family income remained wide. For households earning the median family income for the Austin-Round Rock-Georgetown MSA in 2022 (\$110,300), the median sales price for 1Q2023 was not affordable unless the home price-to-income multiplier approached 4.5 (Table 3). Only 17 percent of homes sold in 1Q2023 were affordable to households earning the median family income with a home price-to-income multiplier of 3 (Table 4). Households would have to earn nearly \$150,000 annually to afford the median sales price with a home price-to-income multiplier of 3.

**Table 3. Maximum Home Price Affordable by Family Income
and Home Price-to-Income Multiplier**

		Home-Purchasing Power							
	Family Income	2	2.5	3	3.5	4	4.5	5	5.5
	\$90,000	\$180,000	\$225,000	\$270,000	\$315,000	\$360,000	\$405,000	\$450,000	\$495,000
	\$95,000	\$190,000	\$237,500	\$285,000	\$332,500	\$380,000	\$427,500	\$475,000	\$522,500
	\$100,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000	\$550,000
	\$105,000	\$210,000	\$262,500	\$315,000	\$367,500	\$420,000	\$472,500	\$525,000	\$577,500
Median Family Income	\$110,300	\$220,600	\$275,750	\$330,900	\$386,050	\$441,200	\$496,350	\$551,500	\$606,650
	\$115,000	\$230,000	\$287,500	\$345,000	\$402,500	\$460,000	\$517,500	\$575,000	\$632,500
	\$120,000	\$240,000	\$300,000	\$360,000	\$420,000	\$480,000	\$540,000	\$600,000	\$660,000
	\$125,000	\$250,000	\$312,500	\$375,000	\$437,500	\$500,000	\$562,500	\$625,000	\$687,500
	\$130,000	\$260,000	\$325,000	\$390,000	\$455,000	\$520,000	\$585,000	\$650,000	\$715,000
Workforce Households (120%)	\$132,400	\$264,800	\$331,000	\$397,200	\$463,400	\$529,600	\$595,800	\$662,000	\$728,200
	\$135,000	\$270,000	\$337,500	\$405,000	\$472,500	\$540,000	\$607,500	\$675,000	\$742,500
	\$140,000	\$280,000	\$350,000	\$420,000	\$490,000	\$560,000	\$630,000	\$700,000	\$770,000
	\$150,000	\$300,000	\$375,000	\$450,000	\$525,000	\$600,000	\$675,000	\$750,000	\$825,000
	\$155,000	\$310,000	\$387,500	\$465,000	\$542,500	\$620,000	\$697,500	\$775,000	\$852,500
	\$160,000	\$320,000	\$400,000	\$480,000	\$560,000	\$640,000	\$720,000	\$800,000	\$880,000
	\$165,000	\$330,000	\$412,500	\$495,000	\$577,500	\$660,000	\$742,500	\$825,000	\$907,500
	\$170,000	\$340,000	\$425,000	\$510,000	\$595,000	\$680,000	\$765,000	\$850,000	\$935,000

Note: Figures in red indicate the maximum affordable home price meets or exceeds the current median sales price.

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

**Table 4. Percentage of Homes Sold in 1Q2023 Affordable by Family Income
and Home Price-to-Income Multiplier**

		Home-Purchasing Power							
	Family Income	2	2.5	3	3.5	4	4.5	5	5.5
	\$90,000	0.7%	1.9%	5.0%	12.8%	26.0%	38.6%	50.3%	57.8%
	\$95,000	0.9%	2.5%	6.8%	17.2%	31.8%	44.5%	54.9%	62.0%
	\$100,000	1.2%	3.3%	10.1%	23.4%	37.9%	50.3%	59.3%	66.5%
	\$105,000	1.5%	4.1%	12.8%	27.5%	42.7%	53.9%	62.8%	68.9%
Median Family Income	\$110,300	1.8%	5.6%	17.0%	32.8%	47.7%	57.9%	66.6%	72.1%
	\$115,000	2.2%	7.0%	21.1%	38.1%	52.1%	61.4%	68.9%	74.5%
	\$120,000	2.7%	10.1%	26.0%	42.7%	55.6%	65.2%	71.8%	77.2%
	\$125,000	3.3%	12.0%	30.6%	46.6%	59.3%	67.4%	73.9%	79.1%
	\$130,000	4.0%	15.6%	34.4%	51.0%	61.9%	69.9%	76.6%	81.1%
Workforce Households (120%)	\$132,400	4.1%	17.0%	35.7%	52.4%	63.1%	70.5%	77.3%	81.9%
	\$135,000	5.0%	18.5%	38.6%	53.9%	65.2%	72.1%	78.4%	82.8%
	\$140,000	6.1%	23.4%	42.7%	57.1%	67.4%	74.4%	80.5%	84.2%
	\$150,000	10.1%	30.6%	50.3%	62.8%	71.8%	78.4%	83.4%	87.1%
	\$155,000	11.8%	32.9%	53.0%	65.3%	73.2%	79.6%	84.5%	88.1%
	\$160,000	14.3%	37.9%	55.6%	67.4%	75.6%	81.5%	85.7%	88.9%
	\$165,000	17.0%	40.4%	57.8%	68.9%	77.2%	82.8%	87.1%	89.9%
	\$170,000	19.9%	44.3%	60.5%	70.5%	78.9%	84.0%	88.1%	90.8%

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



Mortgage Interest Rate

Holding home price constant, the total monthly mortgage payment increases as the mortgage interest rate increases (Table 5). At a 6.37 percent rate, this payment was \$3,745 for the median sales price in 1Q2023, nearly 2.5 times the total monthly mortgage payment for the median-priced home in 1Q2011.

Table 6 shows the home price-to-income multiplier by mortgage interest rate. A 6.37 percent interest rate translates into a home price-to-income multiplier of 3,² meaning a household could afford a maximum home price of three times its annual income. The home price-to-income multiplier declines as the mortgage interest rate increases.

The income required to qualify for a loan with a 6.37 percent mortgage interest rate was \$149,790 for the median sales price in 1Q2023 (Table 7). An estimated 35.9 percent of homeowners in the Austin-Round Rock-Georgetown MSA could afford the median sales price in 1Q2023 with a 6.37 percent interest rate (Table 8), a decline of over 30 percentage points from 1Q2011.

Table 5. Total Monthly Mortgage Payment for Repeat Buyers by Mortgage Interest Rate

Year	Home Price	Mortgage Interest Rate						
		3%	4%	5%	6%	6.37%	6.5%	7%
1Q2011	181500	\$1,217	\$1,298	\$1,384	\$1,476	\$1,510	\$1,523	\$1,571
1Q2012	185000	\$1,241	\$1,323	\$1,411	\$1,504	\$1,540	\$1,552	\$1,601
1Q2013	201000	\$1,348	\$1,438	\$1,533	\$1,634	\$1,673	\$1,686	\$1,740
1Q2014	220000	\$1,475	\$1,574	\$1,678	\$1,789	\$1,831	\$1,846	\$1,904
1Q2015	244125	\$1,637	\$1,746	\$1,862	\$1,985	\$2,032	\$2,048	\$2,113
1Q2016	263000	\$1,764	\$1,881	\$2,006	\$2,138	\$2,189	\$2,207	\$2,276
1Q2017	280000	\$1,878	\$2,003	\$2,136	\$2,276	\$2,330	\$2,349	\$2,424
1Q2018	293000	\$1,965	\$2,096	\$2,235	\$2,382	\$2,438	\$2,458	\$2,536
1Q2019	300000	\$2,012	\$2,146	\$2,288	\$2,439	\$2,497	\$2,517	\$2,597
1Q2020	330000	\$2,213	\$2,360	\$2,517	\$2,683	\$2,746	\$2,769	\$2,856
1Q2021	431325	\$2,893	\$3,085	\$3,290	\$3,507	\$3,589	\$3,619	\$3,733
1Q2022	523500	\$3,511	\$3,744	\$3,993	\$4,256	\$4,356	\$4,392	\$4,531
1Q2023	450000	\$3,018	\$3,219	\$3,433	\$3,658	\$3,745	\$3,775	\$3,895

Note: Assumes a 30-year loan term, 80 percent loan-to-value (LTV) ratio, 30 percent debt-to-income (DTI) ratio, and additional costs of homeownership at 4 percent of home price.

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

² The home price-to-income multiplier assumes a 30-year loan term, 80 percent LTV ratio, 30 percent DTI ratio, and property taxes and insurance of 4 percent.

**Table 6. Home Price-to-Income Multiplier
for Repeat Buyers by Mortgage Interest Rate**

Mortgage Interest Rate	Home Purchasing Power
3%	3.73
4%	3.50
5%	3.28
6%	3.08
6.37%	3.00
6.5%	2.98
7%	2.89

Note: Assumes a 30-year loan term, 80 percent LTV ratio, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 7. Required Qualifying Income for Repeat Buyers by Mortgage Interest Rate

Year	Home Price	Mortgage Interest Rate						
		3%	4%	5%	6%	6.37%	6.5%	7%
1Q2011	\$181,500	\$48,687	\$51,928	\$55,379	\$59,022	\$60,415	\$60,911	\$62,841
1Q2012	\$185,000	\$49,626	\$52,930	\$56,447	\$60,160	\$61,580	\$62,085	\$64,053
1Q2013	\$201,000	\$53,918	\$57,507	\$61,328	\$65,363	\$66,906	\$67,455	\$69,592
1Q2014	\$220,000	\$59,014	\$62,943	\$67,126	\$71,542	\$73,231	\$73,831	\$76,171
1Q2015	\$244,125	\$65,486	\$69,846	\$74,487	\$79,387	\$81,261	\$81,927	\$84,523
1Q2016	\$263,000	\$70,549	\$75,246	\$80,246	\$85,525	\$87,544	\$88,262	\$91,059
1Q2017	\$280,000	\$75,109	\$80,110	\$85,433	\$91,053	\$93,203	\$93,967	\$96,944
1Q2018	\$293,000	\$78,596	\$83,829	\$89,399	\$95,281	\$97,530	\$98,329	\$101,445
1Q2019	\$300,000	\$80,474	\$85,832	\$91,535	\$97,557	\$99,860	\$100,679	\$103,869
1Q2020	\$330,000	\$88,521	\$94,415	\$100,688	\$107,313	\$109,846	\$110,746	\$114,256
1Q2021	\$431,325	\$115,701	\$123,405	\$131,604	\$140,262	\$143,574	\$144,751	\$149,338
1Q2022	\$523,500	\$140,427	\$149,777	\$159,728	\$170,237	\$174,256	\$175,684	\$181,251
1Q2023	\$450,000	\$120,711	\$128,748	\$137,302	\$146,335	\$149,790	\$151,018	\$155,804

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 80 percent LTV ratio, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 8. Percentage of Repeat Buyers Who Earned Required Qualifying Income by Mortgage Interest Rate

Year	Home Price	Mortgage Interest Rate						
		3%	4%	5%	6%	6.37%	6.5%	7%
1Q2011	\$181,500	75.0%	72.5%	69.9%	67.1%	66.1%	65.7%	64.2%
1Q2012	\$185,000	73.9%	71.5%	68.8%	66.1%	65.0%	64.6%	63.2%
1Q2013	\$201,000	71.2%	68.6%	65.8%	62.8%	61.7%	61.3%	59.7%
1Q2014	\$220,000	68.0%	65.2%	62.2%	59.1%	57.9%	57.4%	55.9%
1Q2015	\$244,125	64.1%	61.0%	57.8%	54.6%	53.5%	53.0%	51.4%
1Q2016	\$263,000	62.0%	58.8%	55.7%	52.5%	51.2%	50.8%	49.1%
1Q2017	\$280,000	61.1%	58.1%	54.9%	51.5%	50.2%	49.8%	48.0%
1Q2018	\$293,000	61.5%	58.5%	55.3%	51.8%	50.5%	50.1%	48.4%
1Q2019	\$300,000	62.6%	59.5%	56.3%	52.9%	51.6%	51.2%	49.8%
1Q2020	\$330,000	60.0%	56.8%	53.4%	50.3%	49.1%	48.7%	47.1%
1Q2021	\$431,325	49.3%	45.7%	41.9%	37.9%	36.4%	35.8%	33.7%
1Q2022	\$523,500	40.2%	35.9%	35.4%	35.0%	34.9%	34.8%	34.6%
1Q2023	\$450,000	49.4%	45.6%	41.7%	37.5%	35.9%	35.8%	35.6%

Note: Assumes a 30-year loan term, 80 percent LTV ratio, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. As repeat homebuyers constitute owner-occupied households, this table reflects income data solely for owner-occupied households.

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

LTV Ratio

Holding home price constant, the total monthly mortgage payment increases as the LTV ratio increases (Table 9). For an 80 percent LTV ratio, the mortgage payment was \$3,745 for the median sales price in 1Q2023, nearly 2.5 times the total monthly mortgage payment for the median-priced home in 1Q2011.

Table 10 shows the home price-to-income multiplier by LTV ratio. An 80 percent LTV ratio translates into a home price-to-income multiplier of 3.00,³ meaning a household could afford a maximum home price of three times its annual income. The home price-to-income multiplier declines as the LTV ratio increases.

The income required to qualify for a loan with an 80 percent LTV ratio was \$149,790 for the median sales price in 1Q2023 (Table 11). An estimated 35.9 percent of homeowners in the

³ The home price-to-income multiplier is based on a 30-year loan term, 6.37 percent mortgage interest rate, 30 percent DTI ratio, and property taxes and insurance of 4 percent. A 0.5 percent mortgage insurance premium is added to loans with a 90 percent or more LTV ratio.

Austin-Round Rock-Georgetown MSA could afford the median sales price in 1Q2023 with an 80 percent LTV ratio (Table 12), a decline of over 30 percentage points from 1Q2011.

Table 9. Total Monthly Mortgage Payment for Repeat Buyers by LTV Ratio

Year	Home Price	LTV Ratio				
		80%	85%	90%	95%	100%
1Q2011	\$181,500	\$1,510	\$1,567	\$1,624	\$1,680	\$1,737
1Q2012	\$185,000	\$1,540	\$1,597	\$1,655	\$1,713	\$1,770
1Q2013	\$201,000	\$1,673	\$1,735	\$1,798	\$1,861	\$1,923
1Q2014	\$220,000	\$1,831	\$1,899	\$1,968	\$2,037	\$2,105
1Q2015	\$244,125	\$2,032	\$2,108	\$2,184	\$2,260	\$2,336
1Q2016	\$263,000	\$2,189	\$2,271	\$2,353	\$2,435	\$2,517
1Q2017	\$280,000	\$2,330	\$2,417	\$2,505	\$2,592	\$2,679
1Q2018	\$293,000	\$2,438	\$2,530	\$2,621	\$2,712	\$2,804
1Q2019	\$300,000	\$2,497	\$2,590	\$2,684	\$2,777	\$2,871
1Q2020	\$330,000	\$2,746	\$2,849	\$2,952	\$3,055	\$3,158
1Q2021	\$431,325	\$3,589	\$3,724	\$3,858	\$3,993	\$4,127
1Q2022	\$523,500	\$4,356	\$4,520	\$4,683	\$4,846	\$5,009
1Q2023	\$450,000	\$3,745	\$3,885	\$4,025	\$4,166	\$4,306

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. A mortgage insurance premium of 0.5 percent is added to loans with an LTV ratio of 90 percent or more.

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

**Table 10. Home Price-to-Income Multiplier
for Repeat Buyers by LTV Ratio**

LTV Ratio	Home Purchasing Power
80%	3.00
85%	2.90
90%	2.79
95%	2.70
100%	2.61

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. A mortgage insurance premium of 0.5 percent is added to loans with an LTV ratio of 90 percent or more.

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



Table 11. Required Qualifying Income for Repeat Buyers by LTV Ratio

Year	Home Price	LTV Ratio				
		80%	85%	90%	95%	100%
1Q2011	\$181,500	\$60,415	\$62,679	\$64,942	\$67,206	\$69,469
1Q2012	\$185,000	\$61,580	\$63,888	\$66,195	\$68,502	\$70,809
1Q2013	\$201,000	\$66,906	\$69,413	\$71,920	\$74,426	\$76,933
1Q2014	\$220,000	\$73,231	\$75,974	\$78,718	\$81,462	\$84,205
1Q2015	\$244,125	\$81,261	\$84,306	\$87,350	\$90,395	\$93,439
1Q2016	\$263,000	\$87,544	\$90,824	\$94,104	\$97,384	\$100,663
1Q2017	\$280,000	\$93,203	\$96,695	\$100,186	\$103,678	\$107,170
1Q2018	\$293,000	\$97,530	\$101,184	\$104,838	\$108,492	\$112,146
1Q2019	\$300,000	\$99,860	\$103,601	\$107,343	\$111,084	\$114,825
1Q2020	\$330,000	\$109,846	\$113,962	\$118,077	\$122,192	\$126,308
1Q2021	\$431,325	\$143,574	\$148,953	\$154,332	\$159,711	\$165,090
1Q2022	\$523,500	\$174,256	\$180,784	\$187,313	\$193,841	\$200,370
1Q2023	\$450,000	\$149,790	\$155,402	\$161,014	\$166,626	\$172,238

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. A mortgage insurance premium of 0.5 percent is added to loans with an LTV ratio of 90 percent or more.

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



Table 12. Percentage of Repeat Buyers Who Earned Required Qualifying Income by LTV Ratio

Year	Home Price	LTV Ratio				
		80%	85%	90%	95%	100%
1Q2011	\$181,500	66.1%	64.4%	62.6%	60.9%	59.2%
1Q2012	\$185,000	65.0%	63.3%	61.6%	59.9%	58.1%
1Q2013	\$201,000	61.7%	59.8%	58.0%	56.1%	54.5%
1Q2014	\$220,000	57.9%	56.0%	54.3%	52.6%	50.9%
1Q2015	\$244,125	53.5%	51.6%	49.6%	47.7%	45.8%
1Q2016	\$263,000	51.2%	49.2%	47.2%	45.2%	43.3%
1Q2017	\$280,000	50.2%	48.2%	46.1%	44.5%	43.0%
1Q2018	\$293,000	50.5%	48.6%	46.9%	45.2%	43.6%
1Q2019	\$300,000	51.6%	49.9%	48.2%	46.6%	44.9%
1Q2020	\$330,000	49.1%	47.2%	45.3%	43.4%	41.4%
1Q2021	\$431,325	36.4%	33.9%	33.3%	33.0%	32.8%
1Q2022	\$523,500	34.9%	34.6%	34.4%	34.1%	33.8%
1Q2023	\$450,000	35.9%	35.6%	35.4%	35.2%	34.9%

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 30 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. A mortgage insurance premium of 0.5 percent is added to loans with an LTV ratio of 90 percent or more. As repeat homebuyers constitute owner-occupied households, this table reflects income data solely for owner-occupied households.

Sources: American Community Survey, U.S. Census Bureau, Texas Real Estate Research Center at Texas A&M University

DTI Ratio

A 30 percent DTI ratio translates into a home price-to-income multiplier of 3⁴ (Table 13), meaning a household could afford a maximum home price of three times its annual income at that interest rate. The home price-to-income multiplier increases as the DTI ratio increases.

The income required to qualify for a loan with a 30 percent DTI ratio was \$149,790 for the median sales price in 1Q2023 (Table 14). An estimated 35.9 percent of homeowners in the Austin-Round Rock-Georgetown MSA could afford the median sales price in 1Q2023 with a 30 percent DTI ratio (Table 15), a decline of over 30 percentage points from 1Q2011.

⁴ The home price-to-income multiplier is based on a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and property taxes and insurance of 4 percent.

**Table 13. Home Price-to-Income Multiplier
for Repeat Buyers by DTI Ratio**

DTI Ratio	Home Purchasing Power
20%	2.00
25%	2.50
30%	3.00
35%	3.50
40%	4.01
45%	4.51
50%	5.01

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 14. Required Qualifying Income for Repeat Buyers by DTI Ratio

Year	Home Price	DTI Ratio						
		20%	25%	30%	35%	40%	45%	50%
1Q2011	\$181,500	\$90,623	\$72,498	\$60,415	\$51,785	\$45,312	\$40,277	\$36,249
1Q2012	\$185,000	\$92,371	\$73,896	\$61,580	\$52,783	\$46,185	\$41,054	\$36,948
1Q2013	\$201,000	\$100,359	\$80,288	\$66,906	\$57,348	\$50,180	\$44,604	\$40,144
1Q2014	\$220,000	\$109,846	\$87,877	\$73,231	\$62,769	\$54,923	\$48,821	\$43,938
1Q2015	\$244,125	\$121,892	\$97,513	\$81,261	\$69,652	\$60,946	\$54,174	\$48,757
1Q2016	\$263,000	\$131,316	\$105,053	\$87,544	\$75,038	\$65,658	\$58,363	\$52,526
1Q2017	\$280,000	\$139,804	\$111,843	\$93,203	\$79,888	\$69,902	\$62,135	\$55,922
1Q2018	\$293,000	\$146,295	\$117,036	\$97,530	\$83,597	\$73,148	\$65,020	\$58,518
1Q2019	\$300,000	\$149,790	\$119,832	\$99,860	\$85,594	\$74,895	\$66,573	\$59,916
1Q2020	\$330,000	\$164,769	\$131,815	\$109,846	\$94,154	\$82,385	\$73,231	\$65,908
1Q2021	\$431,325	\$215,361	\$172,289	\$143,574	\$123,063	\$107,680	\$95,716	\$86,144
1Q2022	\$523,500	\$261,384	\$209,107	\$174,256	\$149,362	\$130,692	\$116,171	\$104,554
1Q2023	\$450,000	\$224,685	\$179,748	\$149,790	\$128,392	\$112,343	\$99,860	\$89,874

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and additional costs of homeownership at 4 percent of home price.

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

**Table 15. Percentage of Repeat Buyers Who Earned Required
Qualifying Income by DTI Ratio**

Year	Home Price	DTI Ratio						
		20%	25%	30%	35%	40%	45%	50%
1Q2011	\$181,500	44.9%	56.9%	66.1%	72.6%	77.4%	81.1%	84.0%
1Q2012	\$185,000	44.0%	55.8%	65.0%	71.6%	76.4%	80.2%	83.2%
1Q2013	\$201,000	39.8%	52.4%	61.7%	68.7%	74.0%	77.9%	81.1%
1Q2014	\$220,000	36.9%	48.6%	57.9%	65.4%	71.0%	75.3%	78.7%
1Q2015	\$244,125	32.4%	43.3%	53.5%	61.1%	67.2%	72.0%	75.7%
1Q2016	\$263,000	29.9%	41.4%	51.2%	58.9%	65.3%	70.2%	74.2%
1Q2017	\$280,000	28.6%	40.9%	50.2%	58.2%	64.5%	69.6%	73.6%
1Q2018	\$293,000	28.1%	41.4%	50.5%	58.6%	64.8%	69.8%	73.8%
1Q2019	\$300,000	29.1%	42.6%	51.6%	59.7%	65.7%	70.6%	74.5%
1Q2020	\$330,000	29.9%	38.9%	49.1%	56.9%	63.4%	68.5%	72.6%
1Q2021	\$431,325	31.0%	32.6%	36.4%	45.9%	53.0%	58.8%	63.9%
1Q2022	\$523,500	31.5%	33.5%	34.9%	36.1%	44.7%	51.5%	56.9%
1Q2023	\$450,000	32.9%	34.6%	35.9%	45.8%	53.3%	59.0%	64.1%

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and additional costs of homeownership at 4 percent of home price. As repeat homebuyers constitute owner-occupied households, this table reflects income data solely for owner-occupied households.

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

Property Taxes and Insurance

Holding home price constant, the total monthly mortgage payment increases as the annual costs of property taxes and insurance increase (Table 16). Assuming the cost of property taxes and insurance is 4 percent of the home price, the monthly mortgage payment was \$3,745 for the median sales price in 1Q2023, nearly 2.5 times the total monthly mortgage payment for the median-priced home in 1Q2011.

Table 17 shows the home price-to-income multiplier by the costs of property taxes and insurance. A 4 percent property tax and insurance rate translates into a home price-to-income multiplier of 3,⁵ meaning a household could afford a maximum home price of three times its annual income. The home price-to-income multiplier declines as the mortgage interest rate increases.

⁵ The home price-to-income multiplier is based on a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and 30 percent DTI ratio.

The income required to qualify for a loan with property taxes and insurance at 4 percent of home price was \$149,790 for the median sales price in 1Q2023 (Table 18). An estimated 35.9 percent of homeowners in the Austin-Round Rock-Georgetown MSA could afford the median sales price in 1Q2023 with property taxes and insurance at 4 percent of home price (Table 19), a decline of over 30 percentage points from 1Q2011.

**Table 16. Total Monthly Mortgage Payment for Repeat Buyers
by Additional Homeownership Costs**

Year	Home Price	Property Taxes & Insurance				
		2%	3%	4%	5%	6%
1Q2011	\$181,500	\$1,208	\$1,359	\$1,510	\$1,662	\$1,813
1Q2012	\$185,000	\$1,231	\$1,385	\$1,540	\$1,694	\$1,848
1Q2013	\$201,000	\$1,338	\$1,505	\$1,673	\$1,840	\$2,008
1Q2014	\$220,000	\$1,464	\$1,647	\$1,831	\$2,014	\$2,197
1Q2015	\$244,125	\$1,625	\$1,828	\$2,032	\$2,235	\$2,438
1Q2016	\$263,000	\$1,750	\$1,969	\$2,189	\$2,408	\$2,627
1Q2017	\$280,000	\$1,863	\$2,097	\$2,330	\$2,563	\$2,797
1Q2018	\$293,000	\$1,950	\$2,194	\$2,438	\$2,682	\$2,927
1Q2019	\$300,000	\$1,997	\$2,247	\$2,497	\$2,747	\$2,997
1Q2020	\$330,000	\$2,196	\$2,471	\$2,746	\$3,021	\$3,296
1Q2021	\$431,325	\$2,870	\$3,230	\$3,589	\$3,949	\$4,308
1Q2022	\$523,500	\$3,484	\$3,920	\$4,356	\$4,793	\$5,229
1Q2023	\$450,000	\$2,995	\$3,370	\$3,745	\$4,120	\$4,495

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and 30 percent DTI ratio.

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

**Table 17. Home Price-to-Income Multiplier
for Repeat Buyers by Additional Homeownership Costs**

Property Taxes & Insurance	Home Purchasing Power
2%	3.76
3%	3.34
4%	3.00
5%	2.73
6%	2.50

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and 30 percent DTI ratio.

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



**Table 18. Required Qualifying Income for Repeat Homebuyers
by Additional Homeownership Costs**

Year	Home Price	Property Taxes & Insurance				
		2%	3%	4%	5%	6%
1Q2011	\$181,500	\$48,315	\$54,365	\$60,415	\$66,465	\$72,515
1Q2012	\$185,000	\$49,247	\$55,414	\$61,580	\$67,747	\$73,914
1Q2013	\$201,000	\$53,506	\$60,206	\$66,906	\$73,606	\$80,306
1Q2014	\$220,000	\$58,564	\$65,897	\$73,231	\$80,564	\$87,897
1Q2015	\$244,125	\$64,986	\$73,124	\$81,261	\$89,399	\$97,536
1Q2016	\$263,000	\$70,011	\$78,777	\$87,544	\$96,311	\$105,077
1Q2017	\$280,000	\$74,536	\$83,869	\$93,203	\$102,536	\$111,869
1Q2018	\$293,000	\$77,997	\$87,763	\$97,530	\$107,297	\$117,063
1Q2019	\$300,000	\$79,860	\$89,860	\$99,860	\$109,860	\$119,860
1Q2020	\$330,000	\$87,846	\$98,846	\$109,846	\$120,846	\$131,846
1Q2021	\$431,325	\$114,819	\$129,196	\$143,574	\$157,951	\$172,329
1Q2022	\$523,500	\$139,356	\$156,806	\$174,256	\$191,706	\$209,156
1Q2023	\$450,000	\$119,790	\$134,790	\$149,790	\$164,790	\$179,790

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and 30 percent DTI ratio.

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

**Table 19. Percentage of Repeat Homeowners Who Earned Required Qualifying Income
by Additional Homeownership Costs**

Year	Home Price	Property Taxes & Insurance				
		2%	3%	4%	5%	6%
1Q2011	\$181,500	75.2%	70.7%	66.1%	61.5%	56.9%
1Q2012	\$185,000	74.2%	69.6%	65.0%	60.4%	55.8%
1Q2013	\$201,000	71.5%	66.6%	61.7%	56.7%	52.4%
1Q2014	\$220,000	68.4%	63.1%	57.9%	53.2%	48.6%
1Q2015	\$244,125	64.4%	58.7%	53.5%	48.4%	43.2%
1Q2016	\$263,000	62.3%	56.6%	51.2%	45.8%	41.3%
1Q2017	\$280,000	61.5%	55.9%	50.2%	45.0%	40.9%
1Q2018	\$293,000	61.9%	56.2%	50.5%	45.8%	41.3%
1Q2019	\$300,000	62.9%	57.3%	51.6%	47.1%	42.6%
1Q2020	\$330,000	60.4%	54.3%	49.1%	44.0%	38.9%
1Q2021	\$431,325	49.7%	43.0%	36.4%	33.1%	32.6%
1Q2022	\$523,500	40.7%	35.5%	34.9%	34.2%	33.5%
1Q2023	\$450,000	49.8%	42.8%	35.9%	35.2%	34.6%

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 80 percent LTV ratio, and 30 percent DTI ratio. As repeat homebuyers constitute owner-occupied households, this table reflects income data solely for owner-occupied households.

Sources: American Community Survey, U.S. Census Bureau, and Texas Real Estate Research Center

First-Time Homebuyer

Higher mortgage interest rates and a still-elevated first-quartile sales price constrained purchase affordability for Austin-Round Rock-Georgetown's first-time buyers in 1Q2023. Table 20 shows the maximum home price affordable by family income and home-purchasing power. For example, households earning between \$33,100 and \$55,150 annually (i.e., between 31 and 50 percent of median family income) could afford a maximum home price between \$99,300 and \$165,450 with a home price-to-income multiplier of 3. Meanwhile, the range in the maximum home price affordable to that range in household income rises to between \$132,400 and \$220,600 should the home price-to-income multiplier measure 4.

Depending on the home price-to-income multiplier, only households earning approximately \$70,000 annually could afford the first-quartile sales price in 1Q2023. Homeownership is largely not feasible to households earning no more than 50 percent of median family income. In fact, homeownership generally only becomes viable for households earning at least 80 percent of area median income. Even at that point it largely depends on whether mortgage lenders are willing to accept loans with high home price-to-income multipliers. Moreover, few homes are available for sale at these income thresholds. For instance, with a home price-to-income multiplier of 3, only 4.1 percent of homes for sale were affordable to households earning no more than 80 percent of area median income in 1Q2023 (Table 21).



**Table 20. Maximum Home Price Affordable by Family Income
and Home Price-to-Income Multiplier**

		Home-Purchasing Power							
		Home Price-to-Income Multiplier							
	Family Income	2	2.5	3	3.5	4	4.5	5	5.5
	\$20,000	\$40,000	\$50,000	\$60,000	\$70,000	\$80,000	\$90,000	\$100,000	\$110,000
	\$25,000	\$50,000	\$62,500	\$75,000	\$87,500	\$100,000	\$112,500	\$125,000	\$137,500
	\$30,000	\$60,000	\$75,000	\$90,000	\$105,000	\$120,000	\$135,000	\$150,000	\$165,000
Extremely Low-Income (30%)	\$33,100	\$66,200	\$82,750	\$99,300	\$115,850	\$132,400	\$148,950	\$165,500	\$182,050
	\$35,000	\$70,000	\$87,500	\$105,000	\$122,500	\$140,000	\$157,500	\$175,000	\$192,500
	\$40,000	\$80,000	\$100,000	\$120,000	\$140,000	\$160,000	\$180,000	\$200,000	\$220,000
	\$45,000	\$90,000	\$112,500	\$135,000	\$157,500	\$180,000	\$202,500	\$225,000	\$247,500
	\$50,000	\$100,000	\$125,000	\$150,000	\$175,000	\$200,000	\$225,000	\$250,000	\$275,000
Very Low-Income (50%)	\$55,150	\$110,300	\$137,875	\$165,450	\$193,025	\$220,600	\$248,175	\$275,750	\$303,325
	\$60,000	\$120,000	\$150,000	\$180,000	\$210,000	\$240,000	\$270,000	\$300,000	\$330,000
	\$65,000	\$130,000	\$162,500	\$195,000	\$227,500	\$260,000	\$292,500	\$325,000	\$357,500
	\$70,000	\$140,000	\$175,000	\$210,000	\$245,000	\$280,000	\$315,000	\$350,000	\$385,000
	\$75,000	\$150,000	\$187,500	\$225,000	\$262,500	\$300,000	\$337,500	\$375,000	\$412,500
	\$80,000	\$160,000	\$200,000	\$240,000	\$280,000	\$320,000	\$360,000	\$400,000	\$440,000
	\$85,000	\$170,000	\$212,500	\$255,000	\$297,500	\$340,000	\$382,500	\$425,000	\$467,500
Low-Income (80%)	\$88,250	\$176,500	\$220,625	\$264,750	\$308,875	\$353,000	\$397,125	\$441,250	\$485,375

Note: Figures in red indicate the maximum affordable home price meets or exceeds the first-quartile home sales price.

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

Table 21. Percentage of Homes Sold in 1Q2023 Affordable by Family Income and Home Price-to-Income Multiplier

		Home-Purchasing Power							
		Home Price-to-Income Multiplier							
	Family Income	2	2.5	3	3.5	4	4.5	5	5.5
	\$20,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	\$25,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%
	\$30,000	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.4%
Extremely Low-Income (30%)	\$33,100	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.4%	0.7%
	\$35,000	0.0%	0.0%	0.0%	0.1%	0.2%	0.4%	0.5%	0.9%
	\$40,000	0.0%	0.0%	0.1%	0.2%	0.4%	0.7%	1.2%	1.8%
	\$45,000	0.0%	0.0%	0.2%	0.4%	0.7%	1.2%	1.9%	2.9%
	\$50,000	0.0%	0.1%	0.3%	0.5%	1.2%	1.9%	3.3%	5.6%
Very Low-Income (50%)	\$55,150	0.0%	0.2%	0.4%	0.9%	1.8%	3.0%	5.6%	10.2%
	\$60,000	0.1%	0.3%	0.7%	1.5%	2.7%	5.0%	10.1%	17.0%
	\$65,000	0.1%	0.4%	1.0%	1.9%	4.0%	8.2%	15.6%	24.8%
	\$70,000	0.2%	0.5%	1.5%	2.9%	6.1%	12.8%	23.4%	32.7%
	\$75,000	0.3%	0.8%	1.9%	4.1%	10.1%	18.5%	30.6%	40.4%
	\$80,000	0.4%	1.2%	2.7%	6.1%	14.3%	26.0%	37.9%	47.7%
	\$85,000	0.4%	1.5%	3.6%	8.9%	19.9%	32.0%	44.3%	53.1%
Low-Income (80%)	\$88,250	0.5%	1.8%	4.1%	11.1%	23.7%	35.7%	47.7%	56.3%

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

Mortgage Interest Rate

Holding home price constant, the total monthly mortgage payment increases as the mortgage interest rate increases (Table 22). A 6.37 percent rate brought the mortgage payment to \$3,436 for the first-quartile sales price in 1Q2023, nearly three times the total monthly mortgage payment for the same home in 1Q2011.



Table 23 shows the home price-to-income multiplier by mortgage interest rate. A 6.37 percent interest rate translates into a home price-to-income multiplier of 3.05,⁶ meaning a household could afford a maximum home price of 3.05 times its annual income. The home price-to-income multiplier declines as the mortgage interest rate increases.

The income required to qualify for a loan with a 6.37 percent mortgage interest rate was \$117,805 for the first-quartile sales price in 1Q2023 (Table 24). An estimated 17.6 percent of renters in the Austin-Round Rock-Georgetown MSA could afford the first-quartile sales price in 1Q2023 with a 6.37 percent interest rate (Table 25), a decline of more than 26 percentage points from 1Q2011.

Table 22. Total Monthly Mortgage Payment for First-Time Buyers by Mortgage Interest Rate

Year	Home Price	Mortgage Interest Rate						
		3%	4%	5%	6%	6.37%	6.5%	7%
1Q2011	\$129,000	\$980	\$1,051	\$1,126	\$1,205	\$1,235	\$1,245	\$1,287
1Q2012	\$131,000	\$996	\$1,067	\$1,143	\$1,223	\$1,254	\$1,265	\$1,307
1Q2013	\$144,900	\$1,101	\$1,180	\$1,265	\$1,353	\$1,387	\$1,399	\$1,446
1Q2014	\$161,000	\$1,223	\$1,312	\$1,405	\$1,503	\$1,541	\$1,554	\$1,606
1Q2015	\$179,000	\$1,360	\$1,458	\$1,562	\$1,671	\$1,713	\$1,728	\$1,786
1Q2016	\$192,400	\$1,462	\$1,567	\$1,679	\$1,797	\$1,841	\$1,857	\$1,919
1Q2017	\$210,000	\$1,596	\$1,711	\$1,833	\$1,961	\$2,010	\$2,027	\$2,095
1Q2018	\$220,000	\$1,672	\$1,792	\$1,920	\$2,054	\$2,106	\$2,124	\$2,195
1Q2019	\$233,100	\$1,771	\$1,899	\$2,034	\$2,177	\$2,231	\$2,250	\$2,325
1Q2020	\$247,500	\$1,881	\$2,016	\$2,160	\$2,311	\$2,369	\$2,389	\$2,469
1Q2021	\$325,000	\$2,470	\$2,648	\$2,836	\$3,035	\$3,111	\$3,137	\$3,242
1Q2022	\$420,000	\$3,192	\$3,422	\$3,665	\$3,922	\$4,020	\$4,055	\$4,190
1Q2023	\$359,000	\$2,728	\$2,925	\$3,133	\$3,352	\$3,436	\$3,466	\$3,581

Note: Assumes a 30-year loan term, 95 percent LTV ratio, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

⁶ The home price-to-income multiplier is based on a 30-year loan term, 95 percent LTV ratio, 35 percent DTI ratio, and property taxes and insurance of 4 percent.

**Table 23. Home Price-to-Income Multiplier
for First-Time Buyers by Mortgage Interest Rate**

Mortgage Interest Rate	Home Purchasing Power
3%	3.84
4%	3.58
5%	3.34
6%	3.12
6.37%	3.05
6.5%	3.02
7%	2.92

Note: Assumes a 30-year loan term, 95 percent LTV ratio, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 24. Required Qualifying Income by Mortgage Interest Rate

Year	Home Price	Mortgage Interest Rate						
		3%	4%	5%	6%	6.37%	6.5%	7%
1Q2011	\$129,000	\$33,610	\$36,032	\$38,600	\$41,301	\$42,331	\$42,697	\$44,122
1Q2012	\$131,000	\$34,132	\$36,591	\$39,198	\$41,941	\$42,987	\$43,359	\$44,806
1Q2013	\$144,900	\$37,753	\$40,474	\$43,357	\$46,391	\$47,549	\$47,960	\$49,560
1Q2014	\$161,000	\$41,948	\$44,971	\$48,175	\$51,546	\$52,832	\$53,288	\$55,067
1Q2015	\$179,000	\$46,638	\$49,998	\$53,561	\$57,309	\$58,738	\$59,246	\$61,223
1Q2016	\$192,400	\$50,129	\$53,741	\$57,570	\$61,599	\$63,136	\$63,681	\$65,807
1Q2017	\$210,000	\$54,715	\$58,657	\$62,837	\$67,233	\$68,911	\$69,507	\$71,826
1Q2018	\$220,000	\$57,320	\$61,450	\$65,829	\$70,435	\$72,193	\$72,817	\$75,247
1Q2019	\$233,100	\$60,733	\$65,110	\$69,749	\$74,629	\$76,491	\$77,152	\$79,727
1Q2020	\$247,500	\$64,485	\$69,132	\$74,058	\$79,239	\$81,217	\$81,919	\$84,652
1Q2021	\$325,000	\$84,677	\$90,779	\$97,247	\$104,052	\$106,648	\$107,570	\$111,160
1Q2022	\$420,000	\$109,429	\$117,315	\$125,674	\$134,467	\$137,822	\$139,013	\$143,653
1Q2023	\$359,000	\$93,536	\$100,276	\$107,421	\$114,937	\$117,805	\$118,823	\$122,789

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 95 percent LTV ratio, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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



Table 25. Percentage of Renter-Occupied Households That Earned Required Qualifying Income by Mortgage Interest Rate

Year	Home Price	Mortgage Interest Rate						
		3%	4%	5%	6%	6.37%	6.5%	7%
1Q2011	\$129,000	54.4%	51.2%	48.2%	45.0%	43.8%	43.4%	41.7%
1Q2012	\$131,000	54.7%	51.6%	48.5%	45.3%	44.0%	43.6%	41.9%
1Q2013	\$144,900	50.9%	47.7%	44.4%	40.8%	39.5%	39.0%	37.1%
1Q2014	\$161,000	47.4%	44.0%	40.3%	37.1%	36.2%	35.8%	34.5%
1Q2015	\$179,000	44.1%	40.3%	37.6%	34.8%	33.7%	33.4%	31.9%
1Q2016	\$192,400	43.2%	40.4%	37.3%	34.1%	32.9%	32.4%	30.7%
1Q2017	\$210,000	42.4%	39.1%	35.7%	32.1%	30.7%	30.2%	28.3%
1Q2018	\$220,000	43.1%	39.6%	36.0%	32.1%	30.6%	30.1%	28.1%
1Q2019	\$233,100	43.1%	39.4%	35.5%	31.5%	30.4%	30.1%	28.9%
1Q2020	\$247,500	42.7%	38.9%	34.8%	31.8%	30.8%	30.4%	29.0%
1Q2021	\$325,000	30.5%	27.2%	23.6%	20.8%	20.1%	19.8%	18.7%
1Q2022	\$420,000	20.3%	17.7%	15.0%	12.1%	11.1%	10.7%	9.2%
1Q2023	\$359,000	27.1%	23.2%	20.9%	18.5%	17.6%	17.2%	15.9%

Note: Assumes a 30-year loan term, 95 percent LTV ratio, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. As first-time homebuyers constitute renter-occupied households, this table reflects income data solely for renter-occupied households.

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

LTV Ratio

Holding home price constant, the total monthly mortgage payment increases as the LTV ratio increases (Table 26). For a 95 percent LTV ratio, this payment amounted to \$3,436 for the first-quartile sales price in 1Q2023, nearly 2.8 times the total monthly mortgage payment for the same home in 1Q2011.

Table 27 shows the home price-to-income multiplier by LTV ratio. A 95 percent LTV ratio translates into a home price-to-income multiplier of 3.05,⁷ meaning a household could afford a maximum home price of 3.05 times its annual income. The home price-to-income multiplier declines as the LTV ratio increases.

⁷ The home price-to-income multiplier is based on a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 35 percent DTI ratio, and property taxes and insurance of 4 percent.

The income required to qualify for a loan with a 95 percent LTV ratio was \$117,805 for the first-quartile sales price in 1Q2023 (Table 28). An estimated 17.6 percent of renters in the Austin-Round Rock-Georgetown MSA could afford the first-quartile sales price in 1Q2023 with a 95 percent LTV ratio (Table 29), a decline of over 26 percentage points from 1Q2011.

Table 26. Total Monthly Mortgage Payment by LTV Ratio

Year	Home Price	LTV Ratio				
		95%	96.5%	97%	98%	100%
1Q2011	\$129,000	\$1,235	\$1,247	\$1,252	\$1,260	\$1,277
1Q2012	\$131,000	\$1,254	\$1,267	\$1,271	\$1,280	\$1,297
1Q2013	\$144,900	\$1,387	\$1,401	\$1,406	\$1,415	\$1,434
1Q2014	\$161,000	\$1,541	\$1,557	\$1,562	\$1,573	\$1,594
1Q2015	\$179,000	\$1,713	\$1,731	\$1,737	\$1,748	\$1,772
1Q2016	\$192,400	\$1,841	\$1,860	\$1,867	\$1,879	\$1,905
1Q2017	\$210,000	\$2,010	\$2,031	\$2,037	\$2,051	\$2,079
1Q2018	\$220,000	\$2,106	\$2,127	\$2,135	\$2,149	\$2,178
1Q2019	\$233,100	\$2,231	\$2,254	\$2,262	\$2,277	\$2,308
1Q2020	\$247,500	\$2,369	\$2,393	\$2,401	\$2,418	\$2,450
1Q2021	\$325,000	\$3,111	\$3,143	\$3,153	\$3,175	\$3,217
1Q2022	\$420,000	\$4,020	\$4,061	\$4,075	\$4,103	\$4,158
1Q2023	\$359,000	\$3,436	\$3,471	\$3,483	\$3,507	\$3,554

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

**Table 27. Home Price-to-Income Multiplier
for First-Time Buyers by LTV Ratio**

LTV Ratio	Home Purchasing Power
95%	3.05
96.5%	3.02
97%	3.01
98%	2.99
100%	2.95

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 28. Required Qualifying Income by LTV Ratio

Year	Home Price	LTV Ratio				
		95%	96.5%	97%	98%	100%
1Q2011	\$129,000	\$42,331	\$42,767	\$42,912	\$43,202	\$43,783
1Q2012	\$131,000	\$42,987	\$43,430	\$43,577	\$43,872	\$44,462
1Q2013	\$144,900	\$47,549	\$48,038	\$48,201	\$48,527	\$49,180
1Q2014	\$161,000	\$52,832	\$53,375	\$53,557	\$53,919	\$54,644
1Q2015	\$179,000	\$58,738	\$59,343	\$59,544	\$59,947	\$60,753
1Q2016	\$192,400	\$63,136	\$63,785	\$64,002	\$64,435	\$65,301
1Q2017	\$210,000	\$68,911	\$69,620	\$69,857	\$70,329	\$71,275
1Q2018	\$220,000	\$72,193	\$72,935	\$73,183	\$73,678	\$74,669
1Q2019	\$233,100	\$76,491	\$77,278	\$77,541	\$78,066	\$79,115
1Q2020	\$247,500	\$81,217	\$82,052	\$82,331	\$82,888	\$84,002
1Q2021	\$325,000	\$106,648	\$107,746	\$108,111	\$108,843	\$110,306
1Q2022	\$420,000	\$137,822	\$139,240	\$139,713	\$140,659	\$142,550
1Q2023	\$359,000	\$117,805	\$119,017	\$119,421	\$120,230	\$121,846

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 29. Percentage of Renter-Occupied Households That Earned Required Qualifying Income by LTV Ratio

Year	Home Price	LTV Ratio				
		95%	96.5%	97%	98%	100%
1Q2011	\$129,000	43.8%	43.3%	43.1%	42.8%	42.1%
1Q2012	\$131,000	44.0%	43.5%	43.3%	43.0%	42.3%
1Q2013	\$144,900	39.5%	38.9%	38.7%	38.3%	37.6%
1Q2014	\$161,000	36.2%	35.8%	35.6%	35.4%	34.8%
1Q2015	\$179,000	33.7%	33.3%	33.1%	32.8%	32.2%
1Q2016	\$192,400	32.9%	32.4%	32.2%	31.8%	31.2%
1Q2017	\$210,000	30.7%	30.1%	29.9%	29.5%	28.8%
1Q2018	\$220,000	30.6%	30.0%	29.8%	29.3%	28.5%
1Q2019	\$233,100	30.4%	30.0%	29.9%	29.7%	29.1%
1Q2020	\$247,500	30.8%	30.4%	30.2%	29.9%	29.4%
1Q2021	\$325,000	20.1%	19.7%	19.6%	19.4%	19.0%
1Q2022	\$420,000	11.1%	10.6%	10.4%	10.1%	9.5%
1Q2023	\$359,000	17.6%	17.2%	17.0%	16.8%	16.2%

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 35 percent DTI ratio, and additional costs of homeownership at 4 percent of home price. As first-time homebuyers constitute renter-occupied households, this table reflects income data solely for renter-occupied households.

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

DTI Ratio

A 35 percent DTI ratio translates into a home price-to-income multiplier of 3.05⁸ (Table 30), meaning a household could afford a maximum home price of nearly three times its annual income. The home price-to-income multiplier increases as the DTI ratio increases.

The income required to qualify for a loan with a 35 percent DTI ratio was \$117,805 for the first-quartile sales price in 1Q2023 (Table 31). An estimated 17.6 percent of Texas households could afford the first-quartile sales price in 1Q2023 with a 35 percent DTI ratio (Table 32), a decline of over 26 percentage points from 1Q2011.

⁸ The home price-to-income multiplier is based on a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and property taxes and insurance of 4 percent.

**Table 30. Home Price-to-Income Multiplier
for First-Time Buyers by DTI Ratio**

DTI Ratio	Home Purchasing Power
20%	1.74
25%	2.18
30%	2.61
35%	3.05
40%	3.48
45%	3.92
50%	4.35

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and additional costs of homeownership at 4 percent of home price.

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

Table 31. Required Qualifying Income for First-Time Buyers by DTI Ratio

Year	Home Price	DTI Ratio						
		20%	25%	30%	35%	40%	45%	50%
1Q2011	\$129,000	\$74,079	\$59,264	\$49,386	\$42,331	\$37,040	\$32,924	\$29,632
1Q2012	\$131,000	\$75,228	\$60,182	\$50,152	\$42,987	\$37,614	\$33,435	\$30,091
1Q2013	\$144,900	\$83,210	\$66,568	\$55,473	\$47,549	\$41,605	\$36,982	\$33,284
1Q2014	\$161,000	\$92,456	\$73,965	\$61,637	\$52,832	\$46,228	\$41,091	\$36,982
1Q2015	\$179,000	\$102,792	\$82,234	\$68,528	\$58,738	\$51,396	\$45,685	\$41,117
1Q2016	\$192,400	\$110,487	\$88,390	\$73,658	\$63,136	\$55,244	\$49,106	\$44,195
1Q2017	\$210,000	\$120,594	\$96,476	\$80,396	\$68,911	\$60,297	\$53,598	\$48,238
1Q2018	\$220,000	\$126,337	\$101,070	\$84,225	\$72,193	\$63,168	\$56,150	\$50,535
1Q2019	\$233,100	\$133,860	\$107,088	\$89,240	\$76,491	\$66,930	\$59,493	\$53,544
1Q2020	\$247,500	\$142,129	\$113,703	\$94,753	\$81,217	\$71,065	\$63,168	\$56,852
1Q2021	\$325,000	\$186,634	\$149,307	\$124,423	\$106,648	\$93,317	\$82,949	\$74,654
1Q2022	\$420,000	\$241,189	\$192,951	\$160,793	\$137,822	\$120,594	\$107,195	\$96,476
1Q2023	\$359,000	\$206,159	\$164,927	\$137,439	\$117,805	\$103,079	\$91,626	\$82,464

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and additional costs of homeownership at 4 percent of home price.

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



Table 32. Percentage of Households That Earned Required Qualifying Income by DTI Ratio

Year	Home Price	DTI Ratio						
		20%	25%	30%	35%	40%	45%	50%
1Q2011	\$129,000	17.1%	28.0%	35.5%	43.8%	50.0%	55.4%	60.1%
1Q2012	\$131,000	17.9%	28.5%	35.7%	44.0%	50.4%	55.6%	60.3%
1Q2013	\$144,900	15.9%	24.9%	32.8%	39.5%	46.4%	51.8%	56.4%
1Q2014	\$161,000	13.2%	20.6%	29.7%	36.2%	42.5%	48.4%	53.1%
1Q2015	\$179,000	11.2%	18.7%	26.4%	33.7%	39.2%	45.2%	50.5%
1Q2016	\$192,400	11.1%	17.8%	24.5%	32.9%	39.2%	44.3%	49.7%
1Q2017	\$210,000	10.6%	16.2%	23.3%	30.7%	37.8%	43.3%	48.2%
1Q2018	\$220,000	11.1%	16.5%	24.0%	30.6%	38.2%	44.1%	48.8%
1Q2019	\$233,100	10.9%	17.3%	24.2%	30.4%	37.9%	44.1%	49.1%
1Q2020	\$247,500	9.7%	17.3%	23.8%	30.8%	37.3%	43.7%	48.9%
1Q2021	\$325,000	6.8%	7.4%	14.8%	20.1%	25.7%	31.5%	36.2%
1Q2022	\$420,000	6.2%	6.7%	7.0%	11.1%	16.6%	21.0%	25.4%
1Q2023	\$359,000	6.5%	6.9%	11.2%	17.6%	22.3%	28.2%	33.6%

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and additional costs of homeownership at 4 percent of home price. As first-time homebuyers constitute renter-occupied households, this table reflects income data solely for renter-occupied households.

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

Property Taxes and Insurance

Holding home price constant, the total monthly mortgage payment increases as additional annual homeownership costs (property taxes and insurance) increase (Table 33). With a rate of 4 percent of home price, this payment amounted to \$3,436 for the first-quartile sales price in 1Q2023, nearly 2.8 times the total monthly mortgage payment for the same home in 1Q2011.

Table 34 shows the home price-to-income multiplier by the costs of property taxes and insurance. A 4 percent property tax and insurance rate translates into a home price-to-income multiplier of 3.05,⁹ meaning a household could afford a maximum home price of 3.05 times its annual income. The home price-to-income multiplier declines as the mortgage interest rate increases.

⁹ The home price-to-income multiplier is based on a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and 35 percent DTI ratio.

The income required to qualify for a loan with property taxes and insurance at 4 percent of home price was \$117,805 for the first-quartile sales price in 1Q2023 (Table 35). An estimated 17.6 percent of Texas households could afford the first-quartile sales price in 1Q2023 with property taxes and insurance at 4 percent of home price (Table 36), a decline of over 26 percentage points from 1Q2011.

**Table 33. Total Monthly Mortgage Payment
by Additional Homeownership Costs**

Year	Home Price	Property Taxes & Insurance				
		2%	3%	4%	5%	6%
1Q2011	\$129,000	\$1,020	\$1,127	\$1,235	\$1,342	\$1,450
1Q2012	\$131,000	\$1,035	\$1,145	\$1,254	\$1,363	\$1,472
1Q2013	\$144,900	\$1,145	\$1,266	\$1,387	\$1,508	\$1,628
1Q2014	\$161,000	\$1,273	\$1,407	\$1,541	\$1,675	\$1,809
1Q2015	\$179,000	\$1,415	\$1,564	\$1,713	\$1,862	\$2,012
1Q2016	\$192,400	\$1,521	\$1,681	\$1,841	\$2,002	\$2,162
1Q2017	\$210,000	\$1,660	\$1,835	\$2,010	\$2,185	\$2,360
1Q2018	\$220,000	\$1,739	\$1,922	\$2,106	\$2,289	\$2,472
1Q2019	\$233,100	\$1,842	\$2,037	\$2,231	\$2,425	\$2,619
1Q2020	\$247,500	\$1,956	\$2,163	\$2,369	\$2,575	\$2,781
1Q2021	\$325,000	\$2,569	\$2,840	\$3,111	\$3,381	\$3,652
1Q2022	\$420,000	\$3,320	\$3,670	\$4,020	\$4,370	\$4,720
1Q2023	\$359,000	\$2,838	\$3,137	\$3,436	\$3,735	\$4,034

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and 35 percent DTI ratio.

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

**Table 34. Home Price-to-Income Multiplier for First-Time
Buyers by Additional Homeownership Costs**

Property Taxes and Insurance	Home Purchasing Power
2%	3.69
3%	3.34
4%	3.05
5%	2.80
6%	2.60

Note: Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and 35 percent DTI ratio.

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

Table 35. Required Qualifying Income by Additional Homeownership Costs

Year	Home Price	Property Taxes & Insurance				
		2%	3%	4%	5%	6%
1Q2011	\$129,000	\$34,960	\$38,645	\$42,331	\$46,017	\$49,703
1Q2012	\$131,000	\$35,502	\$39,245	\$42,987	\$46,730	\$50,473
1Q2013	\$144,900	\$39,269	\$43,409	\$47,549	\$51,689	\$55,829
1Q2014	\$161,000	\$43,632	\$48,232	\$52,832	\$57,432	\$62,032
1Q2015	\$179,000	\$48,510	\$53,624	\$58,738	\$63,853	\$68,967
1Q2016	\$192,400	\$52,141	\$57,639	\$63,136	\$68,633	\$74,130
1Q2017	\$210,000	\$56,911	\$62,911	\$68,911	\$74,911	\$80,911
1Q2018	\$220,000	\$59,621	\$65,907	\$72,193	\$78,478	\$84,764
1Q2019	\$233,100	\$63,171	\$69,831	\$76,491	\$83,151	\$89,811
1Q2020	\$247,500	\$67,074	\$74,145	\$81,217	\$88,288	\$95,359
1Q2021	\$325,000	\$88,077	\$97,362	\$106,648	\$115,934	\$125,220
1Q2022	\$420,000	\$113,822	\$125,822	\$137,822	\$149,822	\$161,822
1Q2023	\$359,000	\$97,291	\$107,548	\$117,805	\$128,062	\$138,319

Note: The required qualifying income reflects the minimum income a household must earn to qualify for a mortgage loan for a particular home price. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and 35 percent DTI ratio.

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

Table 36. Percentage of Households That Earned the Required Qualifying Income by Additional Homeownership Costs

Year	Home Price	Property Taxes & Insurance				
		2%	3%	4%	5%	6%
1Q2011	\$129,000	52.5%	48.1%	43.8%	39.5%	35.1%
1Q2012	\$131,000	52.9%	48.4%	44.0%	39.6%	35.4%
1Q2013	\$144,900	49.1%	44.3%	39.5%	35.4%	32.5%
1Q2014	\$161,000	45.5%	40.3%	36.2%	32.8%	29.4%
1Q2015	\$179,000	42.0%	37.6%	33.7%	29.9%	26.1%
1Q2016	\$192,400	41.6%	37.3%	32.9%	28.5%	24.1%
1Q2017	\$210,000	40.6%	35.6%	30.7%	25.8%	23.1%
1Q2018	\$220,000	41.2%	35.9%	30.6%	26.6%	23.8%
1Q2019	\$233,100	41.0%	35.5%	30.4%	27.2%	23.9%
1Q2020	\$247,500	40.5%	34.7%	30.8%	27.1%	23.4%
1Q2021	\$325,000	28.6%	23.5%	20.1%	17.3%	14.5%
1Q2022	\$420,000	18.8%	14.9%	11.1%	7.2%	7.0%
1Q2023	\$359,000	24.9%	20.9%	17.6%	14.2%	10.9%

Note: Because first-time homebuyers constitute renter-occupied households, this table reflects income data solely for renter-occupied households. Assumes a 30-year loan term, 6.37 percent mortgage interest rate, 0.5 percent mortgage insurance premium, 95 percent LTV ratio, and 35 percent DTI ratio.

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

Overview of Housing Affordability

Housing affordability persistently proves one of the most salient topics in housing markets across the state. Although definitions vary, housing affordability broadly denotes the relationship between home price (or rent) and household (or family) income.¹⁰ As such, housing affordability generally reflects the two housing tenures: owner- and renter-occupied housing. However, Center economists further classify owner-occupied housing affordability into two distinct categories: purchase and repayment affordability.

This report focuses only on purchase affordability. Purchase affordability measures the ability of a household to buy a home. In other words, it reflects home-purchasing potential. Repayment affordability, on the other hand, measures an existing homeowner's ability to make timely monthly mortgage payments. While purchase affordability involves all potential homebuyers, regardless of whether a household already owns a home, repayment affordability solely involves current homeowners (i.e., only owner-occupied households).

Measuring Purchase Affordability

The vast majority of homebuyers—86 percent in Texas in 2020—rely on mortgage financing to purchase a home. As such, purchase affordability largely acts as a function of income, wealth, and credit. These three factors typically constitute the primary determinants of a mortgage applicant's creditworthiness, or the applicant's ability to repay the mortgage loan, a factor heavily weighed by the mortgage lender in the decision to extend mortgage financing to an applicant. In mortgage financing, income, wealth, and credit materialize through the DTI ratio, LTV ratio, and credit score.¹¹

Other factors that affect purchase affordability include the mortgage interest rate, any additional costs of borrowing mortgage capital (such as the mortgage insurance premium, which is generally charged if the LTV ratio is 80 percent or higher), and the additional costs of homeownership—property taxes and insurance.

¹⁰ Household income reflects all households in the income distribution, including both family and nonfamily households, which consist of a householder living alone or a householder who shares his/her home with individual(s) of no relation to him/her. Meanwhile, family income includes only households in which the householder lives with at least one other related family member.

¹¹ There are two types of DTI ratios: “front-end” and “back-end” ratios. The front-end DTI ratio measures mortgage debt as a percentage of household income, while the back-end ratio reflects total household debt—mortgage loans, car loans, credit card loans, student loans, etc.—as a percentage of household income. Should mortgage debt equal \$800 per month and the monthly household income equal \$2,400, then the front-end DTI ratio is 30 percent. Should total household debt equal \$1,200 per month, then the back-end DTI ratio is 50 percent. This report uses the front-end DTI ratio. The LTV ratio measures the household's down payment as a percentage of the home price. A 5 percent down payment translates into a 95 percent LTV ratio.

Table 37 shows how characteristics of a mortgage loan or applicant affect the maximum home price affordable to a particular household. Holding all else equal, an increase in the loan term decreases the total monthly mortgage payment, which increases the maximum affordable home price. Meanwhile, an increase in the DTI ratio also raises the maximum affordable home price. However, an increase in the mortgage interest rate, LTV ratio, additional costs of homeownership, and additional costs of borrowing mortgage capital increase the total monthly mortgage payment, which decreases the maximum affordable home price and reduces home-purchasing potential.

Table 37. How Loan, Applicant Characteristics Affect Purchase Affordability

Loan or Applicant Characteristics	Effect on Purchase Affordability
Mortgage interest rate	An increase in the mortgage interest rate diminishes purchase affordability
Loan term	An increase in the loan term increases purchase affordability
LTV ratio	An increase in the loan-to-value ratio diminishes purchase affordability
DTI ratio	An increase in the debt-to-income ratio increases purchase affordability
Additional costs of homeownership (property taxes and insurance)	An increase in the additional costs of homeownership diminishes purchase affordability
Additional costs of borrowing mortgage capital (such as the mortgage insurance premium)	An increase in the additional costs of borrowing mortgage capital diminishes purchase affordability

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

The Center uses the home price-to-income multiplier (also known as “home-purchasing power”) to find the ratio between home price and household income, or the maximum home price affordable to a household of a particular income. For example, a multiplier of 3 indicates a household could afford a home priced at three times the household’s income (so, a household earning \$50,000 annually could afford a maximum home price of \$150,000).

The multiplier generally measures lower for conventional borrowers, a function of the lower DTI ratios that such borrowers tend to present, and higher for first-time borrowers, who depict higher DTI ratios. The home price-to-income multiplier typically measures around 3 for the repeat homebuyer, and between 3 and 4 for first-time homebuyers.

This report computes purchase affordability for both repeat and first-time homebuyers. For the repeat buyer, calculations in this report assume the prevailing mortgage interest rate

(6.37 percent in 1Q2023),¹² 80 percent LTV ratio, 30 percent DTI ratio, and property taxes and insurance of 4 percent of home value. First-time homebuyers, who tend to be younger and therefore have not accumulated as much wealth or achieved peak earnings, tend to have higher LTV and DTI ratios. The lower income, wealth, and credit of first-time homebuyers generally reduces the maximum home price affordable to them. The calculations of purchase affordability for first-time homebuyers reflect the prevailing mortgage interest rate (6.37 percent in 1Q2023), 0.5 percent mortgage insurance premium, 95 percent LTV ratio, 35 percent DTI ratio, and property taxes and insurance of 4 percent of home value.

¹² The source for the prevailing mortgage interest rate is FRED/Freddie Mac.





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