

# Contrasting Costs

## Location-Based Differences in Homeowner Expenses

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**T**exas homeowners with a mortgage pay an average of \$18,156 per year in housing costs. Homeowner costs, however, vary depending on where the home is located.

On the upper end of the scale, 2017 data compiled by the Real Estate Center show Frisco homeowners have the highest costs in the Lone Star State (Table 1). Annual costs in the North Texas city are \$30,936.

Residents of The Woodlands (\$29,016), Sugar Land (\$28,044), Flower Mound (\$27,084), Cedar Park (\$25,716), and McKinney (\$25,008) pay some of the highest costs in the 59 cities studied.

At \$13,104 per year, Brownsville homeowners incur the lowest housing costs. Other Texas cities where costs are less than \$14,000 are Pharr (\$13,824), Harlingen (\$13,812), Wichita Falls (\$13,728), Abilene (\$13,704), Killeen (\$13,608), and Bryan (\$13,572).

Why should real estate agents care? The numbers offer comparative choices for buyers. All things being equal,

### The Takeaway

According to 2017 Census data, Texas ranks 18th among all U.S. states in average annual homeowner costs, which include real estate taxes, insurance premiums, utility payments, and any debts on a property. It ranks seventh in terms of homeowner costs as a percentage of home prices.

having such data could be an important factor when choosing between homes in different cities. Would an undecided buyer, for example, appreciate knowing that housing costs vary in adjoining Bryan and College Station by \$6,924? Perhaps. They likely would appreciate having the information.

The Center's research used data on median homeowner costs, median homeowner incomes, and median home prices from the U.S. Census Bureau's American Community Survey (ACS).

**Table 1. Annual Texas Homeowner Costs for Homes with a Mortgage, 2017**

Rank	City	Dollars	Rank	City	Dollars
1	Frisco	30,936	31	Grand Prairie	17,748
2	The Woodlands	29,016	32	Corpus Christi	17,568
3	Sugar Land	28,044	33	Arlington	17,112
4	Flower Mound	27,084	34	Lubbock	16,548
5	Cedar Park	25,716	35	Garland	16,212
6	McKinney	25,008	36	San Antonio	15,924
7	Pearland	24,276	37	Mission	15,756
8	Allen	24,216	38	Pasadena	15,708
9	Plano	23,412	39	Edinburg	15,660
10	League City	23,196	40	Mesquite	15,636
11	Austin	23,028	41	Victoria	15,504
12	Mansfield	22,920	42	McAllen	15,444
13	Richardson	20,940	43	San Angelo	15,420
14	Round Rock	20,880	44	Baytown	15,408
15	Georgetown	20,784	45	Laredo	15,252
16	College Station	20,496	46	Longview	14,928
17	Carrollton	20,328	47	Amarillo	14,700
18	Atascocita	19,824	48	Waco	14,676
19	Missouri City	19,596	49	Beaumont	14,640
20	Irving	19,572	50	Temple	14,556
21	Denton	19,476	51	El Paso	14,472
22	Lewisville	19,332	52	Tyler	14,136
23	Midland	19,224	53	Pharr	13,824
24	Dallas	19,104	54	Harlingen	13,812
25	Conroe	19,056	55	Wichita Falls	13,728
26	Houston	18,696	56	Abilene	13,704
27	New Braunfels	18,684	57	Killeen	13,608
28	North Richland Hills	18,384	58	Bryan	13,572
29	Fort Worth	18,168	59	Brownsville	13,104
30	Odessa	17,832	<b>State Average</b>		<b>\$18,156</b>

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

Among all U.S. states, Texas ranked:

- 18<sup>th</sup> in average annual homeowner costs,
- seventh in terms of homeowner costs as a percentage of home prices,
- tenth in amount of property taxes, and
- fifth in property tax as a percentage of home prices.

The research found a positive relationship between home prices and homeowners' incomes and a negative relationship between home prices and homeowner costs.

### Texas Homeowner Costs

The ACS defines homeowner costs as the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property; real estate taxes; fire, hazard, and flood insurance on the property; and utilities. Median annual amount of housing costs spent by Texas homeowners in 2017 was \$18,156, ranking the state 18<sup>th</sup> among U.S. states (Table 2). The ratio of Texas median homeowner costs to median home values was 9.15 percent, ranking Texas seventh (Table 3).

Property taxes imposed by cities, counties, and school districts are important components of the state's housing costs given that Texas does not impose a state income tax and relies mainly on sales and property taxes for public finance. The state's median property tax in Texas

in 2017 was \$3,724, ranking Texas tenth among states (Table 4). The median property tax accounted for 20.51 percent of the state's median homeowner costs, ranking Texas eighth (Table 5). The median property tax as a percentage of median home value indicates an effective property tax rate of 1.88 percent, ranking Texas fifth (Table 6).

**Table 2. Homeowner Costs, 2017**

Rank	State	Dollars
1	District of Columbia	29,184
2	New Jersey	28,176
3	Hawaii	28,044
4	California	27,228
5	Massachusetts	25,296
6	New York	24,432
7	Connecticut	23,712
8	Maryland	22,980
9	New Hampshire	22,488
10	Alaska	22,128
11	Washington	21,672
12	Rhode Island	21,384
13	Virginia	20,616
14	Colorado	20,172
15	Oregon	19,548
16	Illinois	19,236
17	Vermont	18,324
<b>18</b>	<b>Texas</b>	<b>18,156</b>
19	Delaware	18,084
20	Minnesota	18,000
U.S. Average		18,180

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

**Table 3. Housing Costs as Percentages of Home Prices, 2017**

Rank	State	Percentage
1	Nebraska	9.66
2	Kansas	9.54
3	Ohio	9.49
4	Oklahoma	9.33
5	Illinois	9.21
6	Iowa	9.16
<b>7</b>	<b>Texas</b>	<b>9.15</b>
8	Mississippi	9.12
9	Indiana	8.83
10	Michigan	8.79
11	Wisconsin	8.76
12	Missouri	8.75
13	Pennsylvania	8.68
14	Kentucky	8.66
15	Arkansas	8.61
16	Connecticut	8.53
16	Alabama	8.53
18	Georgia	8.42
19	New Hampshire	8.31
20	South Dakota	8.32
	U.S. Average	8.48

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

**Table 4. Annual Median Property Taxes, 2017**

Rank	State	Dollars
1	New Jersey	8,250
2	New Hampshire	5,807
3	Connecticut	5,806
4	New York	5,658
5	Illinois	4,692
6	Massachusetts	4,556
7	Vermont	4,317
8	Rhode Island	4,254
9	California	4,174
<b>10</b>	<b>Texas</b>	<b>3,724</b>
11	Maryland	3,431
12	District of Columbia	3,421
13	Alaska	3,411
14	Wisconsin	3,351
15	Washington	3,309
16	Pennsylvania	3,181
17	Oregon	3,088
18	Nebraska	2,844
19	Maine	2,712
20	Michigan	2,546
	U.S. Average	2,556

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

**Table 5. Annual Property Taxes as Percentages of Homeowner Costs, 2017**

Rank	State	Percentage
1	New Jersey	29.28
2	New Hampshire	25.82
3	Connecticut	24.49
4	Illinois	24.39
5	Vermont	23.56
6	New York	23.16
7	Wisconsin	20.56
<b>8</b>	<b>Texas</b>	<b>20.51</b>
9	Rhode Island	19.89
10	Pennsylvania	18.43
11	Massachusetts	18.01
12	Nebraska	17.77
13	Iowa	17.26
14	Michigan	17.24
15	Maine	17.21
16	Ohio	16.79
17	Oregon	15.80
18	Alaska	15.41
19	California	15.33
20	Washington	15.27
	U.S. Average	14.06

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

**Table 6. Annual Property Tax Rates Ratios of Median Property Tax to Median Home Values, 2017**

Rank	State	Percentage
1	New Jersey	2.42
2	Illinois	2.25
3	New Hampshire	2.15
4	Connecticut	2.09
<b>5</b>	<b>Texas</b>	<b>1.88</b>
6	Vermont	1.85
7	Wisconsin	1.80
8	Nebraska	1.72
9	New York	1.71
10	Rhode Island	1.64
11	Pennsylvania	1.60
12	Ohio	1.59
13	Iowa	1.58
14	Michigan	1.51
15	Kansas	1.38
16	Maine	1.35
17	South Dakota	1.26
18	Alaska	1.19
19	Massachusetts	1.16
20	Minnesota	1.09
	U.S. Average	1.19

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

## Homeowners' Costs in Texas Cities

Harlingen had the highest homeowner costs as a percentage of median home values in 2017 followed by Mission, Pharr, Brownsville, Wichita Falls, and Beaumont (Table 7). Austin homeowners had the smallest ratio of housing costs to home values followed by Plano, Flower Mound, Frisco, Allen, and Richardson. The smaller ratios in these cities are mainly because of higher home prices due to higher homeowners' incomes. The average of median ratios of housing costs to housing values for Texas cities was 9.15 percent.

Property taxes also vary significantly across Texas cities. The Woodlands homeowners incurred the largest amount of property taxes in 2017 followed by Frisco, Flower Mound, Cedar Park, and Sugar Land (Table 8). Longview homeowners had the smallest amount of property taxes followed by Harlingen, Tyler, Brownsville, Odessa, and Abilene. The average annual property tax for Texas cities in 2017 was \$3,724 (Table 8).

Property taxes accounted for 26.92 percent of housing costs in Cedar Park, the highest percentage in the state

**Table 7. Annual Texas Homeowner Costs as Percentage of Median Home Values, 2017**

Rank	City	Percentage	Rank	City	Percentage
1	Harlingen	13.26	31	Garland	9.63
2	Mission	13.17	32	Pearland	9.46
3	Pharr	12.45	33	Longview	9.38
4	Brownsville	12.07	34	Atascocita	9.32
5	Wichita Falls	11.67	35	Irving	9.09
6	Beaumont	11.59	36	League City	9.08
7	Pasadena	10.99	36	Mansfield	9.08
8	Lubbock	10.94	38	Conroe	9.07
9	Edinburg	10.84	39	Houston	9.06
10	Baytown	10.77	40	North Richland Hills	8.85
11	Corpus Christi	10.73	41	Midland	8.68
12	McAllen	10.70	42	Dallas	8.33
13	Mesquite	10.64	43	Carrollton	8.31
14	Missouri City	10.52	44	Denton	8.22
15	Amarillo	10.41	44	Lewisville	8.22
16	Odessa	10.35	46	New Braunfels	8.14
17	El Paso	10.32	47	College Station	8.09
18	Laredo	10.26	47	Cedar Park	8.09
19	Waco	10.24	49	Sugar Land	8.06
20	Abilene	10.13	50	Round Rock	7.91
21	Bryan	10.08	51	Georgetown	7.83
22	Grand Prairie	9.99	52	McKinney	7.64
23	Victoria	9.97	52	The Woodlands	7.64
24	Temple	9.91	52	Richardson	7.64
25	Killeen	9.85	55	Allen	7.46
26	Tyler	9.84	56	Frisco	7.41
27	San Antonio	9.80	57	Flower Mound	7.24
27	Arlington	9.80	58	Plano	7.13
29	Fort Worth	9.73	59	Austin	6.83
30	San Angelo	9.69		<b>State Average</b>	<b>9.15</b>

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

**Table 8. Texas Cities' Average Annual Property Taxes, 2017**

Rank	City	Dollars	Rank	City	Dollars
1	The Woodlands	7,683	31	Conroe	3,495
2	Frisco	7,501	32	San Antonio	3,432
3	Flower Mound	6,937	33	Corpus Christi	3,424
4	Cedar Park	6,922	34	El Paso	3,285
5	Sugar Land	6,913	35	McAllen	3,279
6	McKinney	6,457	36	Laredo	3,235
7	Pearland	6,268	37	Victoria	3,122
8	Allen	6,188	38	Waco	3,102
9	Mansfield	5,976	39	Mission	3,091
10	Austin	5,900	40	Edinburg	3,082
11	Plano	5,588	41	Garland	3,035
12	College Station	5,335	42	Temple	3,032
13	Round Rock	5,149	43	Pharr	2,992
14	League City	5,098	44	San Angelo	2,991
15	Atascocita	4,798	45	Lubbock	2,983
16	Georgetown	4,480	46	Pasadena	2,950
17	Richardson	4,451	47	Baytown	2,786
18	Carrollton	4,410	48	Killeen	2,748
19	Missouri City	4,249	49	Wichita Falls	2,674
20	Dallas	4,183	50	Amarillo	2,643
21	North Richland Hills	4,135	51	Beaumont	2,510
22	Denton	4,076	52	Mesquite	2,501
23	Lewisville	3,979	53	Bryan	2,477
24	Fort Worth	3,849	54	Abilene	2,446
25	Irving	3,755	55	Odessa	2,364
26	Houston	3,744	56	Brownsville	2,283
27	New Braunfels	3,715	57	Tyler	2,277
28	Midland	3,672	58	Harlingen	2,273
29	Grand Prairie	3,591	59	Longview	2,048
30	Arlington	3,521		<b>State Average</b>	<b>3,724</b>

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

(Table 9). It was followed by The Woodlands, Mansfield, College Station, Pearland, and McKinney. Odessa had the smallest percentage of homeowner costs followed by Longview, Mesquite, Tyler, Harlingen, and Beaumont. The average percentage for Texas cities was 20.51 percent.

Pharr homeowners incurred the largest effective property tax rate (that is, property tax as a percentage of median home values) followed by Mission, Pearland, Mansfield, El Paso, and Missouri City (Table 10). Longview had the smallest rate followed by Odessa, Tyler, New Braunfels, Richardson, and Midland. The average effective property tax rate for Texas cities was 1.88 percent.

## Home Values and Housing Costs

Homes are considered both consumption and investment goods. As an asset, home prices are the present values of expected future net cash flows from the property (net cash flow is rent income minus housing costs). Home prices are positively related to rents. That is, the higher (lower) the rental value, the higher (lower) the home values. However, home prices are negatively related to housing costs (the higher [lower] the housing costs, the lower [higher] the home values).

Whether a home is rented out or occupied by its owner, its rental value depends on the occupant's income because rents are determined by the occupant's willingness to pay a higher rent. That willingness depends on and is determined by the occupant's income. For owner-occupied homes, ACS assumes homeowners

**Table 9. Texas Cities' Property Taxes as Percentages of Housing Costs, 2017**

Rank	City	Percentage	Rank	City	Percentage
1	Cedar Park	26.92	31	Lewisville	20.58
2	The Woodlands	26.48	31	Arlington	20.58
3	Mansfield	26.07	33	Grand Prairie	20.23
4	College Station	26.03	34	Killeen	20.19
5	Pearland	25.82	35	Victoria	20.14
5	McKinney	25.82	36	Houston	20.03
7	Austin	25.62	37	New Braunfels	19.88
8	Flower Mound	25.61	38	Edinburg	19.68
9	Allen	25.55	39	Mission	19.62
10	Round Rock	24.66	40	Corpus Christi	19.49
11	Sugar Land	24.65	41	Wichita Falls	19.48
12	Frisco	24.25	42	San Angelo	19.40
13	Atascocita	24.20	43	Irving	19.19
14	Plano	23.87	44	Midland	19.10
15	El Paso	22.70	45	Pasadena	18.78
16	North Richland Hills	22.49	46	Garland	18.72
17	League City	21.98	47	Conroe	18.34
18	Dallas	21.90	48	Bryan	18.25
19	Carrollton	21.69	49	Baytown	18.08
20	Missouri City	21.68	50	Lubbock	18.03
21	Pharr	21.64	51	Amarillo	17.98
22	Georgetown	21.56	52	Abilene	17.85
23	San Antonio	21.55	53	Brownsville	17.42
24	Richardson	21.26	54	Beaumont	17.14
25	McAllen	21.23	55	Harlingen	16.46
26	Laredo	21.21	56	Tyler	16.11
27	Fort Worth	21.19	57	Mesquite	16.00
28	Waco	21.14	58	Longview	13.72
29	Denton	20.93	59	Odessa	13.26
30	Temple	20.83		<b>State Average</b>	<b>20.51</b>

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

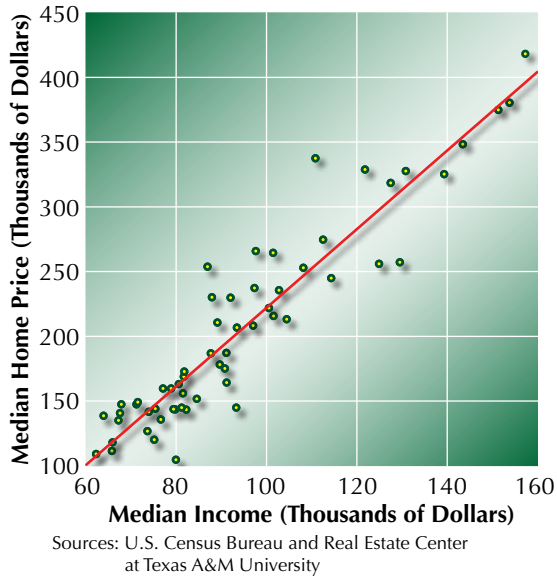
**Table 10. Texas Cities' Property Taxes as Percentages of Housing Prices, 2017**

Rank	City	Percentage	Rank	City	Percentage
1	Pharr	2.70	31	McKinney	1.97
2	Mission	2.58	31	Lubbock	1.97
3	Pearland	2.44	33	Round Rock	1.95
4	Mansfield	2.37	33	Baytown	1.95
5	El Paso	2.34	35	Allen	1.91
6	Missouri City	2.28	36	San Angelo	1.88
7	Wichita Falls	2.27	37	Amarillo	1.87
7	McAllen	2.27	38	Flower Mound	1.85
9	Atascocita	2.26	39	Bryan	1.84
10	Harlingen	2.18	40	Dallas	1.82
10	Cedar Park	2.18	41	Houston	1.81
10	Laredo	2.18	41	Abilene	1.81
13	Waco	2.16	43	Carrollton	1.80
14	Edinburg	2.13	43	Garland	1.80
15	San Antonio	2.11	43	Frisco	1.80
15	College Station	2.11	46	Austin	1.75
17	Brownsville	2.10	47	Irving	1.74
18	Corpus Christi	2.09	48	Denton	1.72
19	Pasadena	2.06	49	Plano	1.70
19	Temple	2.06	49	Mesquite	1.70
19	Fort Worth	2.06	51	Lewisville	1.69
22	The Woodlands	2.02	51	Georgetown	1.69
22	Grand Prairie	2.02	53	Conroe	1.66
22	Arlington	2.02	53	Midland	1.66
25	Victoria	2.01	55	Richardson	1.62
26	League City	2.00	55	New Braunfels	1.62
27	North Richland Hills	1.99	57	Tyler	1.59
27	Killeen	1.99	58	Odessa	1.37
27	Beaumont	1.99	59	Longview	1.29
27	Sugar Land	1.99		<b>State Average</b>	<b>1.88</b>

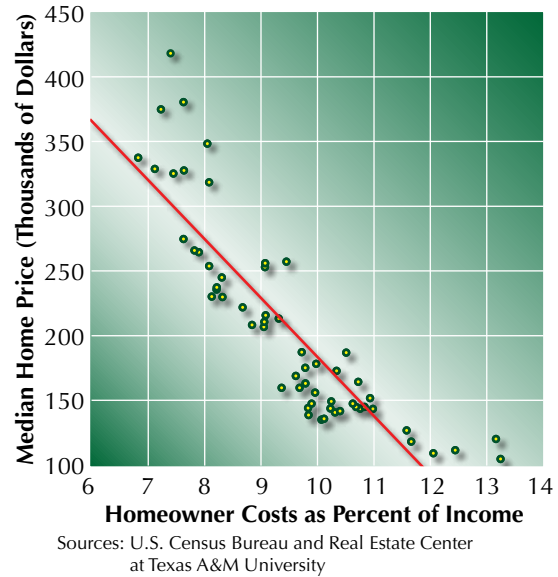
Sources: U.S. Census Bureau and Real Estate Center at Texas A&amp;M University



**Figure 1. Relationship Between Texas Home Prices and Homeowners' Incomes, 2017**



**Figure 2. Relationship Between Texas Home Prices and Homeowner Costs, 2017**



rent their homes to themselves and estimates owners' equivalent rent for home rental values. Home mortgage is another channel of the positive relation between home prices and homeowners' incomes because the mortgage amount depends on a homeowner's income.

Figure 1 shows a positive relationship between median home prices of 59 Texas cities and the median incomes of their owners in 2017. In other words, the higher the income, the higher the home value. Figure 2, meanwhile, shows a negative relationship between median home prices of the same Texas cities and homeowner

costs as the percentages of home prices. That is, the larger (smaller) the percentages of homeowners' costs, the lower (higher) the home values.

Using 2017 data, the Center estimated median home prices across Texas cities are 2.85 times homeowners' median income minus \$6,837 for each percentage of homeowner costs. ➤

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