

# Down to Earth Land Prices Changing Slowly

Charles E. Gilliland, Tian Su, and Clayton Watson  
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Despite continuing turmoil in worldwide oil markets, Texas’ statewide land markets managed to post a small gain in prices in third quarter 2016, moving up 2.25 percent to \$2,544 per acre from the 2015 third quarter price of \$2,460 per acre.

Despite the increase, price per acre inched up only 2.37 percent from the 2016 first quarter price. The typical size of properties statewide closed at 1,116 acres, down 76 acres from second quarter 2015 acreage. The 4,963 sales increased by 18 sales over 2015 third quarter volume. Total dollar volume of sales at \$769 million fell short of the 2015 third quarter total of \$910 million. Real price settled at \$444 per acre (in 1966 dollars), setting another record high real prices (see table and Figures 1–3).

Weak performances in Far West Texas, Gulf Coast–Brazos Bottom, and South Texas reflected downward market pressures from energy price declines. Nevertheless, annualized price increases in the Panhandle and South Plains, Northeast Texas, and Austin–Waco–Hill Country regions offset results in regions with price declines.

## The Takeaway

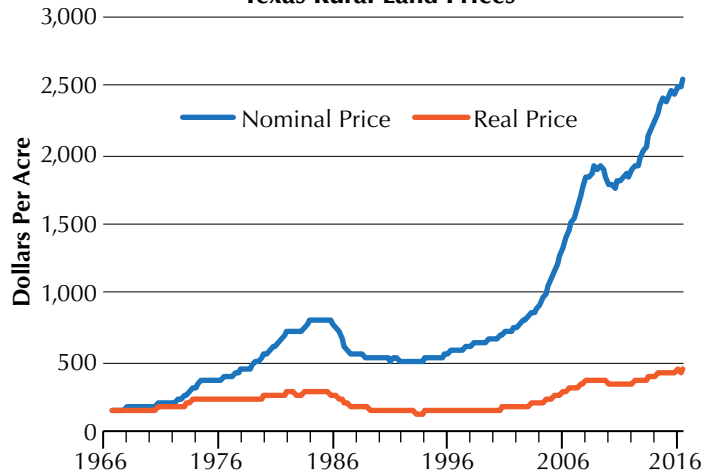
Texas 2016 land markets continue to see price increases. Center research reveals that while growth in total personal income has little impact on land prices in the short-run, over a ten-year period it may boost prices.

The number of transactions declined across the board, pointing to possible emerging caution among buyers at current prices.

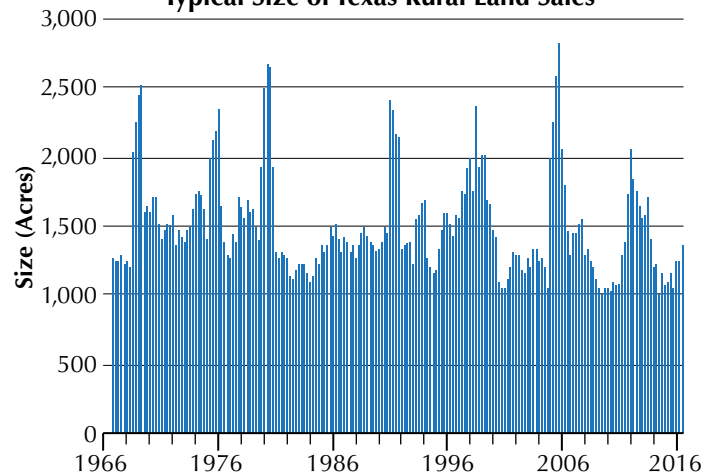
Adding to the cautionary negative regional price trends, the volume of sales retreated for at least two straight quarters statewide. This pullback suggests potential buyers may be cooling to land purchases at current prices. Weak energy prices coupled with low commodity prices threaten the general prosperity of much of the region.

Studies of Texas land markets indicate oil prices and total Texas personal income have a long-term impact on

**Figure 1. Four-Quarter Moving Average  
Texas Rural Land Prices**



**Figure 2. Four-Quarter Moving Average  
Typical Size of Texas Rural Land Sales**



land markets. Total personal income captures both growth in population and increases in individual incomes. In the short-run, both these factors have little impact on either land prices or the total number of acres traded. However, over a ten-year period, a 10 percent jump in Texas personal income will boost land prices by nearly 4 percent; a 10 percent bump in oil prices inspires a corresponding 2.5 percent increase in land prices.

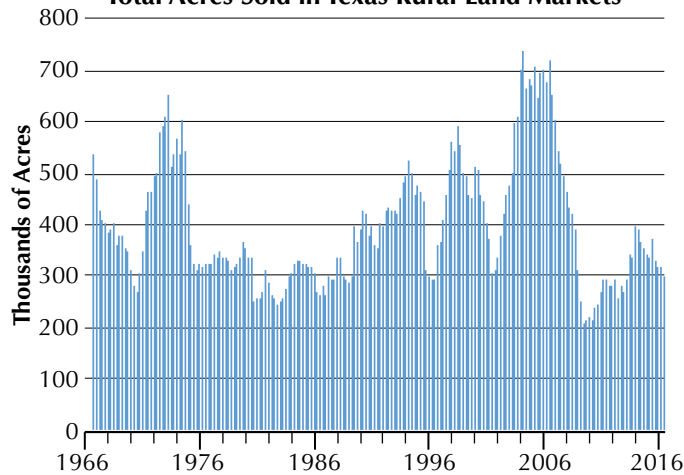
These two variables also have an impact on the total number of acres trading in the market but in different directions. Specifically, a 10 percent expansion in Texas personal income delivers a long-term, 2 percent increase in total acreage sold. However, a 10 percent increase in oil prices produces a 2 percent decline in total acreage transferred.

A 10 percent increase in Texas personal income incites nearly a 6 percent boost in the total dollar volume of transactions in Texas markets, while oil price changes have only a small impact, less than 1 percent for a 10 percent swing. This suggests Texas land market participants have a long memory of past price trends and a

### Data Descriptions

Date	Date of reported statistics.
Nominal Price Per Acre	Price per acre estimated as a weighted average of a four-quarterly moving average of the averages of regional market, size-segmented median prices. Weighted by percentage of land in the region.
Nominal Annual Percentage Change	Annualized percentage change from the price in corresponding quarter of the previous year.
Nominal 5-Year Growth Rate	Yield implied by price change over 20-quarter period expressed as an annual rate of increase.
Real Deflated Price Per Acre	The calculated nominal price per acre adjusted for changes in the implicit price deflator of gross domestic product to 1966Q4.
Real Annual Percentage Change	Annualized percentage change from the real price in the corresponding quarter of the previous year.
Real 5-Year Growth Rate	Yield implied by real price change over a 20-quarter period expressed as an annual rate of increase.
Volume of Sales	Sum of reported sales over a four-quarter span.
Average Size	Size of property in transactions estimated as a weighted average of a four-quarterly moving average of the averages of regional median tract size. Weighted by the percentage of land in the region.

**Figure 3. Four-Quarter Moving Average Total Acres Sold in Texas Rural Land Markets**



reluctance to quickly adjust to changing circumstances. The estimates also suggest that growing total personal income may outweigh the drop in oil prices when it comes to determining prices and volume in Texas land markets. 📌

*Dr. Gilliland (c-gilliland@tamu.edu) is a research economist and Su and Watson are research assistants with the Real Estate Center at Texas A&M University.*

**Four-Quarter Moving Average of Texas Statewide Trends in Rural Land Prices**

Date	Nominal			Real			Volume of Sales	Average Size
	Price Per Acre	Annual Percentage Change	5-Year Growth Rate	Deflated Price Per Acre	Annual Percentage Change	5-Year Growth Rate		
1966QIV	151	-	-	151	-	-	5,385	1,276
1967QI	153	-	-	152	-	-	5,147	1,251
1967QII	156	-	-	155	-	-	4,811	1,259
1967QIII	159	-	-	156	-	-	4,730	1,294
1967QIV	162	7.28	-	158	4.64	-	4,664	1,236
1968QI	165	7.84	-	158	3.95	-	4,416	1,252
1968QII	169	8.33	-	161	3.87	-	4,304	1,212
1968QIII	171	7.55	-	161	3.21	-	4,237	2,045
1968QIV	173	6.79	-	160	1.27	-	4,186	2,247
1969QI	175	6.06	-	161	1.9	-	4,517	2,458
1969QII	175	3.55	-	159	-1.24	-	4,591	2,512
1969QIII	179	4.68	-	160	-0.62	-	4,487	1,601
1969QIV	180	4.05	-	159	-0.63	-	4,203	1,649
1970QI	181	3.43	-	158	-1.86	-	3,791	1,590
1970QII	189	8.00	-	162	1.89	-	3,683	1,713
1970QIII	189	5.59	-	161	0.63	-	3,553	1,706
1970QIV	193	7.22	-	163	2.52	-	3,631	1,504
1971QI	200	10.50	-	165	4.43	-	3,580	1,396
1971QII	200	5.82	-	164	1.23	-	3,696	1,478
1971QIII	204	7.94	-	165	2.48	-	3,899	1,520
1971QIV	209	8.29	6.55	168	3.07	2.14	4,185	1,523
1972QI	212	6.00	6.58	168	1.82	2.01	4,594	1,578
1972QII	217	8.50	6.66	170	3.66	1.85	4,842	1,359
1972QIII	225	10.29	7.00	175	6.06	2.31	4,992	1,479
1972QIV	232	11.00	7.25	178	5.95	2.39	4,789	1,427
1973QI	245	15.57	7.98	186	10.71	3.28	4,964	1,383
1973QII	263	21.20	8.94	197	15.88	4.06	4,815	1,473
1973QIII	283	25.78	10.20	208	18.86	5.16	4,055	1,502
1973QIV	305	31.47	11.50	219	23.03	6.33	4,346	1,621
1974QI	326	33.06	12.64	230	23.66	7.20	4,392	1,726
1974QII	344	30.80	13.75	237	20.3	8.06	4,435	1,752
1974QIII	361	27.56	14.28	242	16.35	8.36	5,022	1,732
1974QIV	373	22.30	14.84	243	10.96	8.57	4,541	1,615

Date	Nominal			Real			Volume of Sales	Average Size
	Price Per Acre	Annual Percentage Change	5-Year Growth Rate	Deflated Price Per Acre	Annual Percentage Change	5-Year Growth Rate		
1975Q1	377	15.64	14.95	240	4.35	8.45	3,768	1,399
1975QII	376	9.30	14.00	236	-0.42	7.60	3,266	1,985
1975QIII	373	3.32	13.83	230	-4.96	7.20	2,995	2,137
1975QIV	374	0.27	13.45	227	-6.58	6.68	2,963	2,185
1976QI	375	-0.53	12.77	225	-6.25	6.25	3,147	2,355
1976QII	379	0.80	12.99	225	-4.66	6.37	3,232	1,645
1976QIII	387	3.75	13.01	227	-1.3	6.43	3,354	1,376
1976QIV	394	5.35	12.88	227	0	6.07	3,449	1,293
1977QI	398	6.13	12.80	226	0.44	5.98	3,486	1,271
1977QII	407	7.39	12.78	227	0.89	5.83	3,648	1,438
1977QIII	413	6.72	12.33	228	0.44	5.33	3,644	1,383
1977QIV	424	7.61	12.24	229	0.88	5.07	3,652	1,716
1978QI	436	9.55	11.70	232	2.65	4.44	3,498	1,652
1978QII	445	9.34	10.66	233	2.64	3.37	3,440	1,554
1978QIII	456	10.41	9.66	234	2.63	2.36	3,442	1,686
1978QIV	461	8.73	8.35	232	1.31	1.15	3,373	1,603
1979QI	472	8.26	7.47	233	0.43	0.26	3,351	1,615
1979QII	491	10.34	7.18	237	1.72	0.00	3,303	1,486
1979QIII	505	10.75	6.77	239	2.14	-0.25	3,248	1,399
1979QIV	519	12.58	6.66	241	3.88	-0.17	3,197	1,919
1980QI	547	15.89	7.51	249	6.87	0.74	3,102	2,496
1980QII	562	14.46	8.12	250	5.49	1.15	3,043	2,684
1980QIII	586	16.04	9.14	255	6.69	2.07	2,922	2,650
1980QIV	608	17.15	9.84	257	6.64	2.49	2,804	1,938
1981QI	620	13.35	10.18	256	2.81	2.59	2,949	1,309
1981QII	644	14.59	10.75	261	4.4	2.98	3,037	1,272
1981QIII	668	13.99	11.07	266	4.31	3.18	3,017	1,307
1981QIV	689	13.32	11.34	269	4.67	3.41	2,946	1,292
1982QI	712	14.84	11.80	275	7.42	3.94	2,755	1,267
1982QII	729	13.20	11.83	277	6.13	4.00	2,555	1,135
1982QIII	728	8.98	11.50	273	2.63	3.62	2,550	1,111
1982QIV	723	4.93	10.82	269	0	3.23	2,600	1,175
1983QI	719	0.98	10.13	265	-3.64	2.67	2,626	1,221
1983QII	719	-1.37	9.71	263	-5.05	2.43	2,812	1,232
1983QIII	755	3.71	10.21	273	0	3.09	2,955	1,219
1983QIV	776	7.33	10.55	279	3.72	3.71	3,109	1,155
1984QI	797	10.85	10.62	283	6.79	3.91	3,274	1,101
1984QII	807	12.24	10.06	285	8.37	3.71	3,386	1,140
1984QIII	791	4.77	9.08	277	1.47	2.96	3,413	1,278
1984QIV	801	3.22	8.77	278	-0.36	2.87	3,411	1,235
1985QI	809	1.51	7.90	278	-1.77	2.21	3,276	1,353
1985QII	811	0.50	7.40	277	-2.81	2.06	3,316	1,307
1985QIII	812	2.65	6.58	275	-0.72	1.51	3,281	1,369
1985QIV	804	0.37	5.63	271	-2.52	1.06	3,266	1,482
1986QI	772	-4.57	4.41	259	-6.83	0.23	3,122	1,423
1986QII	740	-8.75	2.79	247	-10.83	-1.10	2,768	1,505
1986QIII	708	-12.81	1.16	236	-14.18	-2.39	2,631	1,413
1986QIV	667	-17.04	-0.65	221	-18.45	-3.91	2,630	1,322
1987QI	619	-19.82	-2.79	204	-21.24	-5.93	2,404	1,435
1987QII	595	-19.59	-4.04	195	-21.05	-6.96	2,487	1,384
1987QIII	570	-19.49	-4.86	185	-21.61	-7.71	2,545	1,312
1987QIV	553	-17.09	-5.33	178	-19.46	-8.17	2,521	1,365

Date	Nominal			Real			Volume of Sales	Average Size
	Price Per Acre	Annual Percentage Change	5-Year Growth Rate	Deflated Price Per Acre	Annual Percentage Change	5-Year Growth Rate		
1988QI	560	-9.53	-4.97	179	-12.25	-7.77	2,874	1,272
1988QII	554	-6.89	-5.18	175	-10.26	-8.06	2,980	1,355
1988QIII	545	-4.39	-6.47	170	-8.11	-9.36	3,030	1,443
1988QIV	543	-1.81	-7.08	169	-5.06	-9.90	3,032	1,483
1989QI	537	-4.11	-7.82	165	-7.82	-10.65	3,080	1,432
1989QII	534	-3.61	-8.17	162	-7.43	-11.14	3,095	1,389
1989QIII	533	-2.20	-7.82	161	-5.29	-10.71	3,095	1,355
1989QIV	528	-2.76	-8.25	158	-6.51	-11.14	3,087	1,307
1990QI	533	-0.74	-8.26	158	-4.24	-11.14	3,144	1,332
1990QII	529	-0.94	-8.45	155	-4.32	-11.44	3,223	1,385
1990QIII	522	-2.06	-8.74	151	-6.21	-11.81	3,212	1,487
1990QIV	521	-1.33	-8.58	150	-5.06	-11.66	3,153	1,445
1991QI	512	-3.94	-8.13	146	-7.59	-11.30	3,097	2,415
1991QII	523	-1.13	-6.88	148	-4.52	-10.11	3,030	2,336
1991QIII	518	-0.77	-6.20	146	-3.31	-9.49	3,051	2,164
1991QIV	509	-2.30	-5.37	143	-4.67	-8.61	3,168	2,146
1992QI	514	0.39	-3.70	143	-2.05	-7.04	3,162	1,339
1992QII	501	-4.21	-3.42	139	-6.08	-6.71	3,197	1,368
1992QIII	505	-2.51	-2.41	139	-4.79	-5.68	3,289	1,383
1992QIV	510	0.20	-1.62	140	-2.1	-4.77	3,364	1,378
1993QI	499	-2.92	-2.30	136	-4.9	-5.46	3,444	1,222
1993QII	495	-1.20	-2.25	134	-3.6	-5.30	3,485	1,561
1993QIII	498	-1.39	-1.80	134	-3.6	-4.73	3,496	1,589
1993QIV	505	-0.98	-1.45	135	-3.57	-4.47	3,509	1,660
1994QI	518	3.81	-0.72	138	1.47	-3.56	3,651	1,684
1994QII	522	5.45	-0.45	138	2.99	-3.19	3,879	1,266
1994QIII	525	5.42	-0.30	138	2.99	-3.07	3,993	1,217
1994QIV	527	4.36	-0.04	138	2.22	-2.70	4,073	1,157
1995QI	527	1.74	-0.23	137	-0.72	-2.84	4,112	1,188
1995QII	533	2.11	0.15	138	0	-2.32	3,941	1,329
1995QIII	537	2.29	0.57	138	0	-1.80	3,690	1,465
1995QIV	546	3.61	0.94	140	1.45	-1.38	3,267	1,599
1996QI	560	6.26	1.80	143	4.38	-0.42	3,243	1,594
1996QII	578	8.44	2.00	147	6.52	-0.14	3,339	1,503
1996QIII	587	9.31	2.51	149	7.97	0.41	3,431	1,434
1996QIV	591	8.24	3.00	149	6.43	0.82	3,408	1,583
1997QI	596	6.43	2.97	150	4.9	0.96	3,333	1,553
1997QII	595	2.94	3.45	149	1.36	1.39	3,289	1,757
1997QIII	600	2.21	3.46	149	0	1.39	3,323	1,739
1997QIV	605	2.37	3.43	150	0.67	1.38	3,633	1,920
1998QI	619	3.86	4.33	153	2	2.36	3,622	2,004
1998QII	627	5.38	4.76	155	4.03	2.92	3,565	1,759
1998QIII	631	5.17	4.76	156	4.7	3.05	3,555	2,358
1998QIV	632	4.46	4.51	156	4	2.90	3,502	1,934
1999QI	637	2.91	4.16	156	1.96	2.46	3,593	2,015
1999QII	638	1.75	4.03	155	0	2.33	3,807	2,019
1999QIII	655	3.80	4.45	159	1.92	2.84	3,940	1,681
1999QIV	663	4.91	4.62	161	3.21	3.09	3,854	1,674
2000QI	664	4.24	4.65	159	1.92	2.99	3,816	1,460
2000QII	679	6.43	4.87	162	4.52	3.22	3,680	1,423
2000QIII	682	4.12	4.81	162	1.89	3.22	3,489	1,102
2000QIV	694	4.68	4.83	164	1.86	3.18	3,540	1,059

Date	Nominal			Real			Volume of Sales	Average Size
	Price Per Acre	Annual Percentage Change	5-Year Growth Rate	Deflated Price Per Acre	Annual Percentage Change	5-Year Growth Rate		
2001QI	708	6.63	4.72	166	4.4	2.99	3,519	1,042
2001QII	719	5.89	4.39	168	3.7	2.68	3,440	1,115
2001QIII	731	7.18	4.41	170	4.94	2.65	3,315	1,196
2001QIV	742	6.92	4.58	171	4.27	2.76	3,115	1,320
2002QI	759	7.20	4.86	175	5.42	3.09	3,330	1,303
2002QII	771	7.23	5.22	177	5.36	3.46	3,601	1,294
2002QIII	794	8.62	5.64	181	6.47	3.91	3,878	1,177
2002QIV	816	9.97	6.03	186	8.77	4.33	4,087	1,164
2003QI	830	9.35	5.91	188	7.43	4.14	4,288	1,265
2003QII	853	10.64	6.20	192	8.47	4.30	4,414	1,210
2003QIII	868	9.32	6.43	195	7.73	4.49	4,570	1,336
2003QIV	883	8.21	6.74	197	5.91	4.69	4,774	1,330
2004QI	917	10.48	7.35	203	7.98	5.30	4,863	1,248
2004QII	957	12.19	8.19	210	9.38	6.12	5,050	1,263
2004QIII	999	15.09	8.53	218	11.79	6.36	5,197	1,197
2004QIV	1059	19.93	9.48	229	16.24	7.11	5,245	1,044
2005QI	1100	19.96	10.22	236	16.26	7.98	5,220	1,988
2005QII	1156	20.79	10.78	246	17.14	8.44	5,263	2,250
2005QIII	1206	20.72	11.56	254	16.51	9.10	5,319	2,594
2005QIV	1263	19.26	12.16	264	15.28	9.64	5,362	2,824
2006QI	1333	21.18	12.86	277	17.37	10.37	5,433	2,064
2006QII	1392	20.42	13.43	286	16.26	10.78	5,407	1,794
2006QIII	1462	21.23	14.11	299	17.72	11.45	5,243	1,458
2006QIV	1510	19.56	14.47	308	16.67	11.94	5,127	1,298
2007QI	1551	16.35	14.55	313	13	11.80	4,948	1,455
2007QII	1617	16.16	15.09	324	13.29	12.28	4,776	1,452
2007QIII	1700	16.28	15.52	339	13.38	12.75	4,601	1,523
2007QIV	1754	16.16	15.60	349	13.31	12.79	4,435	1,566
2008QI	1826	17.73	16.08	361	15.34	13.26	4,330	1,295
2008QII	1844	14.04	15.72	363	12.04	12.94	4,080	1,335
2008QIII	1871	10.06	15.66	366	7.96	12.79	3,886	1,250
2008QIV	1914	9.12	15.78	374	7.16	13.03	3,700	1,208
2009QI	1906	4.38	14.90	371	2.77	12.24	3,077	1,108
2009QII	1912	3.69	14.08	373	2.75	11.66	2,634	1,044
2009QIII	1880	0.48	12.85	367	0.27	10.55	2,431	1,009
2009QIV	1830	-4.39	11.09	356	-4.81	8.92	2,407	1,053
2010QI	1796	-5.77	9.93	348	-6.2	7.84	2,493	1,055
2010QII	1795	-6.12	8.90	346	-7.24	6.88	2,511	1,041
2010QIII	1758	-6.49	7.61	338	-7.9	5.76	2,610	1,101
2010QIV	1807	-1.26	7.23	345	-3.09	5.39	2,773	1,072
2011QI	1811	0.84	6.18	345	-0.86	4.41	2,908	1,073
2011QII	1825	1.67	5.45	345	-0.29	3.77	2,971	1,304
2011QIII	1856	5.57	4.80	349	3.25	3.10	2,897	1,377
2011QIV	1848	2.27	4.06	346	0.29	2.33	2,653	1,739
2012QI	1893	4.53	4.01	353	2.32	2.41	2,659	2,068
2012QII	1919	5.15	3.44	356	3.19	1.89	2,763	1,841
2012QIII	1931	4.04	2.56	356	2.01	0.98	2,831	1,763
2012QIV	1986	7.47	2.49	365	5.49	0.90	3,116	1,646
2013QI	2041	7.82	2.23	374	5.95	0.71	3,200	1,556
2013QII	2064	7.56	2.26	377	5.9	0.76	3,538	1,568
2013QIII	2142	10.93	2.71	390	9.55	1.27	3,884	1,721
2013QIV	2197	10.62	2.77	398	9.04	1.25	3,998	1,399

Date	Nominal			Real			Volume of Sales	Average Size
	Price Per Acre	Annual Percentage Change	5-Year Growth Rate	Deflated Price Per Acre	Annual Percentage Change	5-Year Growth Rate		
2014QI	2243	9.90	3.27	404	8.02	1.71	4,192	1,204
2014QII	2310	11.92	3.80	414	9.81	2.09	4,310	1,233
2014QIII	2342	9.34	4.42	418	7.18	2.61	4,365	999
2014QIV	2409	9.65	5.54	429	7.79	3.75	4,415	1,167
2015QI	2391	6.60	5.76	426	5.45	4.07	4,747	1,084
2015QII	2430	5.19	6.10	431	4.11	4.42	4,783	1,087
2015QIII	2460	5.04	6.78	435	4.07	5.08	4,945	1,161
2015QIV	2433	1.00	5.99	429	0	4.38	5,067	1,055
2016QI	2481	3.76	6.35	437	2.58	4.76	4,935	1,260
2016QII	2485	2.26	6.22	435	0.93	4.66	5,039	1,260
2016QIII	2544	3.41	6.36	444	2.07	4.84	4,963	1,349

Note: Real values are in 1966 dollars.  
Source: Real Estate Center at Texas A&M University

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