

Research Report Publication

2018 **■** 3

Effective Property Tax Rates in 89 Illinois Communities

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INTRODUCTION

A home's effective property tax rate is the percentage of the house's value paid in property taxes for a given year, a straightforward calculation that allows comparison of tax burdens, be it among different states or within Illinois, where we have one system in Cook County and another in the rest of the state. The Taxpayers' Federation of Illinois periodically calculates effective tax rates (ETRs) for houses in selected communities throughout Illinois. The rates presented here are for 2016 property taxes paid in 2017, the most recent data available.

The 89 communities studied are those that were included in our 2005, 2008, 2010 and 2013 studies. (Studies before 2005 included fewer cities.) The communities have been chosen for their size and availability of data, with an eye towards providing an accurate representation of the entire state. The methodology we employ takes into account different levels of assessment (primarily the Cook County classification system), state equalization factors (commonly called multipliers), differing exemption levels, and different tax rates.

For this effort we are assuming a home with a market value of \$250,000 – the same market value used since 2005. For comparison purposes we used the same value home for each municipality, although we recognize that housing values vary widely around the State. See *Other Ways of Calculating Effective Tax Rates* on page 7.

While we calculate the ETR for a city or village, there are often variations within the city. Most commonly, there can be different taxing districts within a city, such as different elementary school districts. Or, for example, as shows up in Chicago there may be different levels of assessment. We use the overall level of assessment for Triad 1 in Cook County to calculate the assessment level in Chicago. (Cook County Triad 1 is Chicago, Triad 2 is the north suburbs and Triad 3 is the south suburbs.) However, within Chicago the sales ratio calculations from the Illinois Department of Revenue also present the data by township within the city. Using the Triad 1-wide data, we calculated a 1.61 percent ETR. Had we used township levels, ETRs would have ranged from 1.52 percent for West Chicago Township to 1.87 for Hyde Park Township, all within the City of Chicago.

The intra-city data illustrates that using averages masks some differences, but the value of the study — looking at identical communities over time — remains valid. Toward this end, we added a column to the table to show where the cities ranked in 2005 and illustrate how communities have moved in the rankings over this period that

spans the end of the real estate boom, the ensuing collapse of market values of homes, particularly in the Chicago metropolitan area, and the gradual recovery.

We assume the house is eligible for a General Homestead Exemption, but not eligible for the additional senior citizens homestead exemption, the senior assessment freeze, or for any other kind of homestead exemption. (See Examining the Effects of Increased Homestead Exemptions, in the April 2017 Tax Facts for a discussion of the proliferation of property tax exemptions and their impact on other taxpayers.)

METHODOLOGY

The calculation of an ETR for a community requires the following steps for a hypothetical house worth \$250,000.

Step 1 – Determine the Assessed Value (AV)

Obtain the adjusted median level of assessment for residential property for the township in which the community is located from the Illinois Department of Revenue's sales ratio studies and multiply it by \$250,000. For Chicago we use the median level for Triad 1. We use the 2015 sales ratio studies which were used to create the equalization factor for 2016.

Step 2– Determine the property's Equalized Assessed Value (EAV)

Multiply the assessed value by the county's "multiplier" (equalization factor) to determine

the property's Equalized Assessed Value. The Department of Revenue assigns a multiplier to each county to equalize assessments across the state, bringing the median level of assessment to the required 33 1/3%. When assessments in a county are within 1% of the required level, they do not need to be adjusted, and the county is given a multiplier of 1.

Step 3 – Determine the EAV after exemption (taxable value)

Subtract the homestead exemption from the EAV. In 2016 the General Homestead Exemption was \$6,000 outside of Cook County. For Cook the General Homestead Exemption was \$7,000.

Step 4 – Figure the tax bill

Obtain the community's aggregate tax rate from the Department of Revenue's Annual Property Tax Statistics report. The aggregate tax rate is the sum of the property tax rates calculated for cities, counties, townships, fire protection districts, park districts, school districts, sanitary districts, airport authorities, and a host of other governmental entities. Multiply it by the taxable value.

Step 5 –Calculate the Effective Tax Rate

Divide the tax bill by the \$250,000 fair market value of the home to find the ETR.

FINDINGS

For the first time since TFI has been doing an ETR study, Chicago does not have the lowest ETR on residential property. Glenview, in north suburban Cook County now holds the honor. This is not surprising: when the 2016 rates were calculated, Cook County Clerk David Orr, who

calculated, Cook County Clerk David Orr, who calculates the rates property owners actually see on their bills, noted that for the first time since 2008, the lowest tax rate was not in the City of Chicago, which he attributed to tax levy increases by Chicago and the Chicago Public Schools.

Looking at changes in rankings between 2005 and 2016, cities in Cook County Triad 3 (the south suburbs) have moved up the ladder (i.e. have seen their ETR increase). Park Forest, which has the highest ETR, was always at the top, but Dolton, Chicago Heights, Oak Lawn, Cicero, and Oak Park have all moved up significantly. In Triad 2, the north suburbs, Streamwood moved up while Palatine. Northbrook. Des Plaines and **Evanston** remained near the bottom of the pack.

The periods covered by our studies include the boom and bust years. For 2016 the tax base actually grew faster than property taxes billed, meaning that average tax rates (total taxes billed divided by total equalized assessed value) fell, reversing a seven-year trend. See *Property Tax Rates Fall in 2016*, page 9.

Effective tax rates and estimated 2016 property taxes (collected in 2017) on a \$250,000 home in 89 Illinois cities

2016	Effective Tax	Rate as a	% of Fair	Market	Value	%68.9	2.69%	2.66%	5.37%	4.98%	4.98%	4.88%	4.54%	4.26%	4.06%	3.88%	3.64%	3.54%	3.53%	3.49%	3.45%	3.43%	3.35%	3.33%	3.31%	3.29%	3.28%	3.26%	3.21%	3.20%	3.20%	3.19%	3.12%	3.11%	3.11%
9	2016	Tax Bill	on a	\$250,000	Home	\$17,234	\$14,234	\$14,154	\$13,423	\$12,459	\$12,446	\$12,196	\$11,341	\$10,645	\$10,146	\$9,697	\$60'6\$	\$8,857	\$8,824	\$8,736	\$8,620	\$8,568	\$8,378	\$8,313	\$8,281	\$8,223	\$8,196	\$8,149	\$8,021	\$8,000	\$7,993	\$7,985	\$7,809	\$7,776	\$7,775
				Tax Rate	(%)	27.413	22.742	17.058	17.089	19.966	17.786	19.399	15.106	13.061	17.248	12.664	13.083	12.621	12.637	10.468	11.440	11.278	10.469	12.298	10.672	10.939	13.954	10.021	10.44	12.298	10.629	10.566	10.475	10.215	17.119
				Taxable	Value	\$62,870	\$62,589	\$82,975	\$78,550	\$62,400	\$69,975	\$62,870	\$75,075	\$81,500	\$58,825	\$76,575	\$69,500	\$70,175	\$69,825	\$83,450	\$75,350	\$75,975	\$80,025	\$67,600	\$77,600	\$75,175	\$58,735	\$81,075	\$76,825	\$65,050	\$75,200	\$75,575	\$74,550	\$76,125	\$45,420
				Homestead	Exemption	\$7,000	7,000	000′9	6,000	6,000	6,000	2,000	000′9	6,000	6,000	9,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	7,000	6,000	000′9	6,000	6,000	000′9	6,000	6,000	7,000
					Multiplier	2.8032	2.8032	1.0000	1.0000	1.0000	1.0000	2.8032	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2.8032	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2.8032
				Assessment	Level	9.97	9.93	35.59	33.82	27.36	30.39	9.97	32.43	35.00	25.93	33.03	30.20	30.47	30.33	35.78	32.54	32.79	34.41	29.44	33.44	32.47	9.38	34.83	33.13	28.42	32.48	32.63	32.22	32.85	7.48
					County	Cook	Cook	Kankakee	St. Clair	Lake	Alexander	Cook	Winnebago	Stephenson	Lake	Knox	Lake	McHenry	DeKalb	Ogle	Henry	Iroquois	Jackson	McHenry	Cass	Whiteside	Cook	Bond	Livingston	McHenry	Champaign	Macon	LaSalle	St. Clair	Cook
					City	Park Forest	Dolton	Kankakee	East St. Louis	Zion	Cairo	Chicago Heights	Rockford	Freeport	North Chicago	Galesburg	Waukegan	Woodstock	DeKalb	Oregon	Kewanee	Watseka	Carbondale	Crystal Lake	Virginia	Sterling	Oak Lawn	Greenville	Pontiac	McHenry	Urbana	Decatur	LaSalle	Belleville	Cicero
				2016 2005	Rank Rank	1 2	2 40	3 4			6 1	7 62	8 7	6 6	10 42	11 8	12 28	13 52	14 55		16 14	17 11	18 41	19 56	20 6		22 75	23 33	24 13	25 71	26 36	27 19	28 37	29 21	30 69

Effective tax rates and estimated 2016 property taxes (collected in 2017) on a \$250,000 home in 89 Illinois cities (continued)

2016 Effoctive Tay	בווברווגב ומע	Rate as a	% of Fair	Market	Value	3.08%	2.96%	2.93%	2.92%	2.92%	2.90%	2.89%	2.87%	2.86%	2.86%	2.85%	2.85%	2.84%	2.83%	2.83%	2.80%	2.77%	2.76%	2.71%	2.71%	2.69%	2.69%	2.65%	2.65%	2.64%	2.63%	2.62%	2.61%	2.61%	2.59%
2000	2010	Tax Bill	on a	\$250,000	Home	\$2,688	\$7,402	\$7,337	\$7,307	\$7,305	\$7,256	\$7,218	\$7,187	\$7,153	\$7,152	\$7,128	\$7,122	\$7,109	\$7,081	\$2,065	\$7,009	\$6,919	\$6,912	\$6,776	\$6,775	\$6,724	\$6,714	\$6,619	\$6,617	\$6,602	\$6,573	\$6,554	\$6,533	\$6,519	\$6,485
				Tax Rate	(%)	10.843	10.047	11.067	9.898	9.22	14.358	10.267	11.134	10.401	10.328	9.351	9.276	9.584	9.53	9.639	11.090	9.673	9.186	9.487	10.116	8.824	10.401	8.867	9.525	9.891	8.592	10.623	9:036	9.004	8.322
				Taxable	Value	\$70,900	\$73,675	\$66,300	\$73,825	\$79,225	\$50,536	\$70,300	\$64,550	\$68,775	\$69,250	\$76,225	\$76,775	\$74,175	\$74,300	\$73,300	\$63,200	\$71,525	\$75,250	\$71,425	\$66,975	\$76,200	\$64,550	\$74,650	\$69,475	\$66,750	\$76,500	\$61,700	\$72,300	\$72,400	\$77,925
				Homestead	Exemption	6,000	6,000	6,000	000′9	6,000	7,000	000′9	6,000	6,000	6,000	6,000	6,000	9000	6,000	9000'9	6,000	6,000	6,000	000′9	6,000	6,000	6,000	000′9	6,000	6,000	6,000	000′9	6,000	6,000	9'000
					Multiplier	1.0000	1.0000	1.0000	1.0000	1.0000	2.8032	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
				Assessment	Level	30.76	31.87	28.92	31.93	34.09	8.21	30.52	28.22	29.91	30.10	32.89	33.11	32.07	32.12	31.72	27.68	31.01	32.50	30.97	29.19	32.88	28.22	32.26	30.19	29.10	33.00	27.08	31.32	31.36	33.57
					County	Boone	Fulton	Vermillion	Moultrie	Bureau	Cook	Rock Island	Kendall	LaSalle	Will	Madison	Logan	Rock Island	Warren	McDonough	Kane	Fayette	Tazewell	Johnson	Franklin	Coles	Kendall	Peoria	Will	Will	Tazewell	Kane	Will	Morgan	Jefferson
					City	Belvidere	Canton	Danville	Sullivan	Princeton	Oak Park	Rock Island	Yorkville	Ottawa	Joliet	Alton	Lincoln	Moline	Monmouth	Macomb	Elgin	Vandalia	East Peoria	Vienna	Benton	Charleston	Oswego	Peoria	Plainfield	Lockport	Pekin	Aurora	Frankfort	Jacksonville	Mt. Vernon
				2016 2005	Rank Rank	31 63	32 24	33 23	34 22	35 43	36 79	37 16	38 74	39 30	40 65	41 53	42 32	43 25	44 77	45 15	46 46	47 26	48 39	49 18	50 17	51 10	52 68	53 34	54 64	55 51	56 50	27 66	58 70	59 49	60 38

Effective tax rates and estimated 2016 property taxes (collected in 2017) on a \$250,000 home in 89 Illinois cities (continued)

2016	Effective Tax	Rate as a	% of Fair	Market	Value	2.56%	2.54%	2.54%	2.48%	2.48%	2.45%	2.41%	2.37%	2.36%	2.34%	2.33%	2.32%	2.28%	2.27%	2.23%	2.20%	2.17%	2.16%	2.11%	2.05%	2.04%	1.99%	1.91%	1.90%	1.79%	1.77%	1.74%	1.61%	1.41%
	2016	Tax Bill	on a	\$250,000	Home	\$6,405	\$6,362	\$6,358	\$6,197	\$6,193	\$6,132	\$6,020	\$5,937	\$5,906	\$5,855	\$5,822	\$5,800	\$5,710	\$5,682	\$5,569	\$5,493	\$5,414	\$5,407	\$5,268	\$5,123	\$5,100	\$4,968	\$4,771	\$4,760	\$4,465	\$4,419	\$4,346	\$4,026	\$3,517
				Tax Rate	(%)	9.252	8.404	11.555	8.282	8.176	8.106	8.272	8.391	7.807	8.801	7.973	8.149	7.87	7.556	7.282	7.753	7.388	7.643	10.115	7.607	6.82	10.362	6.811	80.6	6.712	6.206	9.065	7.145	7.512
				Taxable	Value	\$69,225	\$75,700	\$55,021	\$74,825	\$75,751	\$75,650	\$72,775	\$70,750	\$75,650	\$66,525	\$73,025	\$71,175	\$72,550	\$75,200	\$76,475	\$70,850	\$73,275	\$70,750	\$52,077	\$67,350	\$74,775	\$47,943	\$70,050	\$52,428	\$66,525	\$71,200	\$47,943	\$56,352	\$46,821
				Homestead	Exemption	6,000	6,000	2,000	6,000	6,000	000′9	000′9	6,000	6,000	6,000	9'000	6,000	000′9	6,000	6,000	9,000	6,000	6,000	2,000	000′9	6,000	7,000	000′9	2,000	6,000	6,000	2,000	7,000	2,000
					Multiplier	1.0000	1.0000	2.8032	1.0000	1.0168	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2.8032	1.0000	1.0000	2.8032	1.0000	2.8032	1.0000	1.0000	2.8032	2.8032	2.8032
				Assessment	Level	30.09	32.68	8.85	32.33	32.16	32.66	31.51	30.70	32.66	29.01	31.61	30.87	31.42	32.48	32.99	30.74	31.71	30.70	8.43	29.34	32.31	7.84	30.42	8.48	29.01	30.88	7.84	9.04	7.68
					County	Kane	McLean	Cook	Sangamon	Lawrence	McLean	Champaign	DuPage	Edgar	DuPage	Grundy	Richland	White	Christian	Crawford	Lake	Effingham	DuPage	Cook	Lake	Adams	Cook	DuPage	Cook	DuPage	Madison	Cook	Cook	Cook
					Citv	Geneva	Bloomington	Streamwood	Springfield	Lawrenceville	Normal	Champaign	Lombard	Paris	Addison	Morris	Olney	Carmi	Taylorville	Robinson	Lake Zurich	Effingham	Wheaton	Palatine	Libertyville	Quincy	Northbrook	Naperville	Des Plaines	Elmhurst	Edwardsville	Evanston	Chicago	Glenview
				2016 2005			62 45		64 48	65 20			92 89				72 44				76 57		78 78		80 72		82 88		84 86	85 83	86 73	87 85	88 89	89 87

Other Ways of Calculating Effective Tax Rates

Effective tax rate (ETR) studies are imperfect and best used to put property taxes in context rather than to measure the absolute level of taxation. The TFI study, which we repeat periodically using the same methodology, is no exception. It allows us to view both the differences in property taxation among communities in different parts of the state and how those differences change over time. It also for Cook County's accounts unique classification system, with its low assessment levels and high state multipliers.

Looking at an identically valued house, in our case a \$250,000 property in each community, is both the study's strength and chief drawback. The strength is that the fixed \$250,000 value approach illustrates how different laws and practices affect tax bills; the weakness is that a \$250,000 house in Naperville is going to be very different from a \$250,000 house in East St. Louis. In their 50-State Property Tax Study the Lincoln Institute of Land Policy and the Minnesota Center for Fiscal Excellence, compute ETRs two ways: (1) for identically valued homes in various cities, to show how differences in tax laws affect ETRs and (2) for the median valued home in each city, to show the ETR on a "typical" home. See A Fresh Look at Illinois Property Taxes, Tax Facts, November 2017.

As a comparison to what we did in this study, we recomputed the ETRs for 10 communities using median values that we obtained from Census Bureau data.

The information is presented in Table 2; the median value calculation is in yellow and the TFI fixed \$250,000 value approach is shown in green. Several things pop out:

- 1. A difference in median values makes a difference in ETRs. Where a community's median value is close to the \$250,000 used in our methodology (e.g. in Chicago) there is little difference in ETRs. Where there is a large difference between median value and \$250,000 (e.g. East St. Louis) there is a large difference in ETRs.
- 2. If the actual median is lower than \$250,000, the ETR is lower than in the TFI study, while if the actual median is higher than the \$250,000 the ETR is higher than in the TFI study. That happens because the fixed value General Homestead Exemption has a much more significant impact on the ETR of a lower valued home than of a higher valued property.
- 3. Looking at true medians reinforces the point that low ETRs don't mean low tax bills. Glenview had the lowest ETR in the TFI study, but taxes on a median valued home were third highest among 10 communities we looked at. Along the same line, the fixed \$250,000 value shows a Lawrenceville homeowner paying more tax than one in Libertyville. However, when differences in median values are taken into account, the taxes on a median valued home in Libertyville are 10 times higher.

A third methodology that calculates ETR using averages has been developed by the Department of Revenue and is published in Table 10 of its 2016 Property Tax Statistics. The Department has available to it a lot of data on property taxes by township, including: (1) level of assessment, (2) assessed value, (3) residential taxable value, and (4) the number of residential parcels. It uses that data to produce per parcel averages for market value and for taxable value, arriving at an average ETR without having to account for multipliers or exemptions.

One advantage of the DOR methodology is that it takes all homestead exemptions into consideration, not just the General Homestead Exemption that TFI assumes in its calculations. The DOR methodology results are presented in the blue section of Table 2.

As you can see, on larger communities the IDOR method produces an ETR closer to the median value calculation than does the TFI study. For some smaller communities – East St. Louis and Vienna, for example, it produces values that appear markedly lower. Ironically, the lowest ETR in the DOR average methodology is Winnetka which has among the highest residential tax bills in Illinois.

The lesson here is clear. ETRs are a good way to make comparisons across different tax systems. But they don't account well for property values, and higher valued property means higher tax bills.

TABLE 2. Effective Tax Rates Computed Three Ways in Selected Communities															
Community		Median alue View		1000000	d \$250,000 lue View)	IDC Va	10.00							
	Median Value	Tax	ETR	Value	Tax	ETR	Average Value	Tax	ETR						
Park Forest	\$71,900	\$3,590	4.99%	\$250,000	\$17,234	6.89%	\$96,474	\$5,691	5.90%						
East St. Louis	East St. Louis \$45,900 \$1,627 3.55% \$250,000 \$13,423 5.37% \$10,963 \$212 1.939														
Vienna	\$76,400	\$1,676	2.19%	\$250,000	\$6,776	2.71%	\$49,547	\$567	1.14%						
Peoria	\$130,500	\$3,201	2.45%	\$250,000	\$6,619	2.65%	\$88,124	\$2,192	2.49%						
Aurora	\$176,200	\$4,431	2.51%	\$250,000	\$6,554	2.62%	\$139,787	\$3,595	2.57%						
awrenceville \$58,100 \$1,063 1.83% \$250,000 \$6,193 2.48% \$57,080 \$799 1.40															
Libertyville	ibertyville \$504,900 \$10,812 2.14% \$250,000 \$5,123 2.05% \$356,774 \$7,752 2.17%														
Naperville	\$421,400	\$8,322	1.97%	\$250,000	\$4,771	1.91%	\$315,308	\$6,245	1.98%						
Chicago	\$243,900	\$3,916	1.61%	\$250,000	\$4,026	1.61%	\$270,757	\$4,295	1.59%						
Glenview \$476,800 \$7,185 1.51% \$250,000 \$3,517 1.41% \$883,440 \$16,396 1.86%															
Sources: Comp	uted by aut	hor from	Departm	ent of Reve	nue and C	ensus B	ureau data								

Property Tax Rates Fall in 2016

Property tax rates fell in Illinois last year, while total property taxes billed rose by the largest percentage since 2008. On the tax rate side of the question, average tax rates (total property taxes billed divided by total property value) marked an end to a seven-year run up that saw average rates rise each year and skyrocket 43 percent over the period. Data published by the Department of Revenue shows that the state-wide average tax rate dropped to 8.88 percent for 2016 taxes paid in 2017, from 9.14 percent the previous year. Rates fell in Cook County, the collar counties, and in the other 96 counties. Chart A illustrates what has happened with property tax rates since 2006.

The rate decrease did not mean anyone's taxes went down; the \$1.1 billion in increased property tax billings for 2016 was the fifth largest in the last 20 years. Instead, it means that Illinois has returned to the more typical pattern that existed before the 2009 real estate crash: property values increased faster than taxes billed, allowing rates to fall. Between 2009 and 2013, the real estate crash and the ensuing market chaos eroded the property tax base by \$89 billion, or 23 percent, as illustrated in Chart B.

While property values were falling, property taxes billed continued to grow, albeit relatively slowly – averaging less than 2 percent per year. Chart C illustrates slowly increasing property taxes billed, which when coupled with the falling values in Chart B produced the skyrocketing property tax rates we saw in Chart A. From the perspective of homeowners and other property owners, their taxes went up while their property values fell.

The return to the stability of the "normal" pattern should comfort both homeowners who will see their property values grow faster than their tax bills and local governments who will again be able to rely on growth in their tax base.





