

50 – State Property Tax Comparison Study

March 2014

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We pursue this mission by

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I. Introduction

This is MCFE's thirteenth national property tax comparison study, which reports on relative property tax burdens across the United States. We compare effective property tax rates (that is, total tax divided by total value) for four classes of property located in the largest city of each state (plus an additional city for Illinois and New York) and the District of Columbia, the largest fifty cities in the United States, and a rural area for each state. We select cities for our rural analysis based on a rural-urban classification continuum developed by the U.S. Department of Agriculture. Cities included in the rural analysis must be county seats with populations of 2,500 to 10,000 located outside of metropolitan statistical areas. See Appendix A for more information on this methodology.

This study is most useful when used in connection with other information about state and local tax structures. Some locations have relatively high property tax levies because those local governments are more dependent on "own-source" revenue (revenue they raise themselves) or have limited non-property tax options available to them. Other states have higher income and sales taxes in part to finance a greater share of the cost of local government. Also, the property tax on a selected class of property may be relatively high or low due to state or local policies designed to redistribute property tax burdens across the classes of property through exemptions, differential assessment rates, or other classification schemes.

We continue to use fixed-value examples to facilitate comparisons with earlier studies¹. We do deviate from this in one instance, when we compare tax burdens on median-valued homes in the various metropolitan areas. We recognize that our lowest-valued properties are not typical values in many urban areas. We deliberately use fixed values because one goal of this study is to compare the tax burden resulting from each state's tax structure, unaffected by local real estate markets. Businesses desiring to expand operations by building a new manufacturing facility or opening a new retail location perform this sort of analysis regularly when determining where to locate the expansion (we note for the record that such decisions are not based entirely on property tax burdens).

This study assumes that the "true market value" of each of several parcels of property is the same in all 124 locations studied. Because the "assessed value" of property varies from state to state, sometimes significantly, our tax calculations necessarily account for the effects of local assessment practices as well as statutory tax provisions. This involves the use of the "sales ratio" statistic – the comparison of actual sales prices to assessed values. Since this statistic can significantly impact year-to-year changes in property tax burdens and rankings, we encourage readers to turn to the Appendix to better understand how this statistic works, why we include it in our calculations, and what implications it can have for our results. The appendix also generally reviews the methodology used in determining the property tax liabilities of the four sample property types and the important assumptions necessary to standardize the calculations and make the numbers comparable across the states.

This edition of the report includes a new feature – estimates of the effect that relief program which freeze or limit increases in home value and/or property taxes at the individual level have on homeowner property tax burdens.

Note that we provide two sets of industrial rankings; one where personal property equals 50% of total parcel value and one where personal property equals 60% of total parcel value. Our research indicates that, on a statewide basis, the shares of personal property for industrial properties ranges from 52.1% (Oregon) to 60.7% (Montana). Our Frequently Asked Questions and Methodology sections have much more on this topic.

Data for property tax calculations were collected in one of two ways. Where possible, property tax data was collected directly from various state and local websites. Where such data was not

¹ Previous studies are available for taxes payable 1995, 1998, 2000, 2002, and 2004 through 2012.

I. Introduction

available, we calculated property taxes using a contact-verification approach in which state or local tax experts were asked to provide information and provided verification when necessary.

This report is organized as follows:

Section II contains our “Frequently Asked Questions” section, designed to provide interested readers with additional clarity about the contents of the report.

Section III presents urban and rural results for all classes of property by U.S. Census Bureau geographic region, with states assigned to the various regions as follows. **New England:** Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont. **Mid-Atlantic:** Delaware, District of Columbia, Maryland, New Jersey, New York and Pennsylvania. **South:** Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia. **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, North Dakota, Nebraska, Ohio, South Dakota and Wisconsin. **Southwest:** Arizona, New Mexico, Oklahoma and Texas. **West:** Alaska, Colorado, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming. This section also provides information on the highest and lowest property tax burdens for individual cities in our largest fifty city and urban city sets. It also includes an analysis of several key features such as classification systems, disparities between homestead and non-homestead properties (particularly business property), the effects of assessment limitations, and personal property assumptions.

Sections IV, V and VI contain the complete set of comparison tables referenced in this report.

Section VII is an appendix detailing our methodology and assumptions.

II. Frequently Asked Questions

What's in this publication?

Our *50-State Property Tax Comparison Study* calculates the net property taxes paid and the effective tax rates for homestead, commercial (retail), industrial (manufacturing), and apartment properties of various values in:

- The largest city in each of the fifty states² and the District of Columbia, as well as Buffalo, New York and Aurora, Illinois (Urban analysis);
- The largest fifty cities in the United States³ (Top 50 analysis); and
- A rural city in each of the fifty states (Rural analysis).

The study also provides additional analysis and commentary.

Why does the Urban analysis include two cities from Illinois and New York?

In most cases, property tax structures are uniform within states. However, this is not the case in Cook County (Chicago) and New York City, which have substantially different property tax regimes than the remainder of Illinois and New York. We include the second-largest cities in those states (Buffalo and Aurora) to represent the prevalent property tax structures in those states. In essence, our Urban analysis is a comparison of 53 different property tax structures, not 50 different states and D.C. with over-representation in two states.

How do you select cities for the Rural analysis?

For early editions of this study, local contacts selected cities in “typical rural areas” for our Rural analysis. Beginning with our payable 2008 study, we now use the rural-urban continuum codes⁴ developed by the U.S. Department of Agriculture to guide our rural city choices. We have limited ourselves wherever possible to county seats in counties with one of two codes:

- Code 6 (Nonmetro, urban population of 2,500-19,999, adjacent to a metro area)
- Code 7 (Nonmetro, urban population of 2,500-19,999, not adjacent to a metro area)

Five states (Connecticut, Delaware, Massachusetts, New Jersey, and Rhode Island) either have no usable Code 6 or Code 7 counties, or have Code 6 or Code 7 counties that are not useful for our studies purposes (for example, the Code 6 or Code 7 counties in Massachusetts comprise Nantucket and Dukes Islands).

All cities used in the Rural analysis are county seats with populations between 2,500 and 10,000. Wherever possible, we have tried to maintain continuity in the set of rural cities from one study to the next.

Substituting this methodology improved the study as follows:

- Cities are more tightly grouped with regard to population and relationship to urban areas.
- Subjectivity involved in city choice is largely removed.

So, this report compares property tax burdens between different locations. What else does it do?

The study also provides a comparison of subsidization inherent in property tax systems. The study measures homeowner subsidies paid by business property by measuring ratios of commercial-to-homestead effective tax rates and apartment-to-homestead effective tax rates.

How do you compute the net tax on a property?

We use the following equation to calculate the net property taxes on our hypothetical properties:

$$\text{Net Property Tax} = ((\text{TMV} \times \text{SR}) - \text{EX}) \times \text{CR} \times \text{TR} - \text{C}$$

² U.S. Census Bureau estimate, July 1, 2012.

³ Also as of July 1, 2012.

⁴ <http://www.ers.usda.gov/briefing/rurality/ruralurbcon/>

II. Frequently Asked Questions

True Market Value (TMV) is the value a parcel of property would fetch in an arms-length transaction between willing buyers and sellers. For some locations, the assumed true market value may not be typical (a \$150,000 home in Boston, for example). However, having constant market values from location to location allows us to observe the isolated effects of tax structures – effectively comparing property taxes, not local real estate markets.

Sales Ratio (SR) data measures the effects of assessment practices on relative tax burdens. This is a unique aspect of our study. Most simply, sales ratios measure the accuracy of assessments. The sales ratio figure is determined by comparing assessments to actual sales. Ideally, that figure will be close to 100%. There are three main reasons why assessed values differ from actual sales:

- Changes in the real estate market since the assessment date change the value of the property,
- Some sort of assessment error or bias has been introduced; or,
- Assessors are by law prevented from assessing a property at its full market value.

We adjust the assumed true market values for each of the sample properties in our study based on the sales ratio data provided for each location. Since our fixed reference point for all calculations is an assumed true market value, it is important to adjust for the fact that a \$150,000 residential homestead may be “on the books” at \$155,000 in one location, and \$140,000 in another; and that the actual tax on the property will be based on these estimates of market value. Applying the sales ratio allows us to treat properties consistently, regardless of assessment differences between locations.

Certain states or localities will **Exempt (EX)** a certain portion of a property’s value from taxation. Generally, these exemptions are for residential property, but some states or localities also provide exemptions for business properties. Since the exemption is applied to the assessed value of a property, we apply it after generating the sales-ratio-adjusted property value.

The **Classification Rate (CR)** indicates the portion of a property’s total value subject to the property tax, based on the “class” a property is grouped into. For example, the classification rate for homes in Alabama is 10%; so a home with a true market value of \$150,000 is valued at \$15,000 for tax purposes. Many states that have classification rates have different rates for different classes of properties. This is designed to affect the distribution of property tax levies, by favoring certain classes at the expense of others.

The **Total Local Tax Rate** is the combination of state and local tax rates for payable 2013 that apply to the largest number of properties in each of our study locations. We defined “payable 2013 property taxes” as those taxes where the lien affixes to the property in 2013, regardless of when the taxes are actually due.

Finally, we subtract **Credits or Refunds (C)** that are offered to the majority of homeowners. We do not include credits, refunds, or other special provisions offered to senior or disabled homeowners, because they do not make up a majority of homeowners, and so do not represent the typical experience.

Note that the study does not include special assessments, since they can be thought of as user charges, may not affect a majority of parcels, and are usually not sources of general revenue.

How do you determine the property values you use for your sample properties?

This report analyzes two different kinds of property: real property (land and buildings), and personal property (movable property). The study examines commercial and industrial properties with “low”, “medium”, and “high” real property values. Apartment property consists of only one value. Rural homes have “low”, “medium”, and “high” real property values; the “low” valued-home is eliminated for our Urban and Top 50 analyses as being too unrealistic for most urban areas in the study.

How do you deal with assessment limitations or other property relief programs?

This study incorporates relief programs that are broadly applicable (i.e. those not aimed at certain classes of homeowners, such as the elderly), where the value of the relief is not based on homeowner tenure or income.

Policies that limit year-to-year growth in residential property assessments or taxes through a cap or a freeze mechanism often influence tax burdens. Beginning with our payable 2012 study, we incorporated additional analyses that measure the effect of relief programs that freeze or limit increases in home value or property taxes at the individual parcel level. See our methodology section for details.

Why don't you look at other types of property, like farms or cabins?

Ideally, this study would include every type of property. However, time and resource constraints limit us to the four types of property already discussed. It would be difficult to set true market values for farms or utility properties, given their complexities. Cabins are problematic because of their limited geographic scope. However, apartment, commercial, industrial, and residential homesteads comprised over 70% of total market value in Minnesota, so we believe that this report covers a wide majority of properties across the nation.

Tell me more about "personal property" – for starters, what is it?

"Personal property" includes those things that businesses own that are not land or buildings (individuals also own personal property, but it is almost always exempt from tax). This study assumes three kinds of personal property:

- Machinery and Equipment (found in industrial/manufacturing properties only)
- Inventories (found in industrial/manufacturing properties only; commercial inventories are generally exempt); and,
- Fixtures (furniture, office equipment, et cetera; found in all types of business property)

Why does personal property matter?

The amount of assumed personal property is important, because for states that fully exempt personal property, effective tax rates and rankings fall as that share of property value attributable to personal property rises, since a larger share of the total property is exempt from taxation.

How do you know how much personal property a parcel has?

This study assumes that 1/6th of total commercial property value is attributable to personal property. For industrial properties, the study presented two different assumptions: that personal property comprised 50% of total property value, and that personal property comprised 60% of total property value. We arrived at these assumptions after consulting with our sister NTC organizations and by studying data provided by an actual company with property holdings in multiple states.

With the permission of the Minnesota Department of Revenue's Research Division, we have borrowed the methodology they use to determine shares of real and personal business property in their biennial *Tax Incidence Study*. Using that methodology, we have calculated state-specific real property, machinery and equipment, fixtures, and inventory shares for industrial parcels. Essentially, this analysis indicates how each state-specific industry mixes affect the property tax burden on industrial parcels of equal real property value.

This model indicated that our assumptions regarding industrial personal property are very reasonable; according to the model, the average split for industrial parcels nationwide is 43.5% land and buildings (real property) and 56.5% personal property. Overall, the shares of personal property range from 52.1% (Oregon) to 60.7% (Montana), with corresponding shares of real property value.

II. Frequently Asked Questions

In previous editions of this study we measured tax burdens and rankings for industrial parcels where we allowed the shares of personal property to vary from state to state. We discontinued this analysis beginning with our payable 2011 report to focus resources on other study-related initiatives.

What are the study's limitations?

It's important to recognize that property taxes are just one piece of the total state and local tax system. Some states have higher property tax levies because their local governments are more dependent on "own-source" revenues. Certain states place more responsibility for public service delivery with local government, which often translates into relatively higher property tax burdens. In other cases, the property tax on a selected class of property may be relatively high or low because of policies designed to redistribute property tax burdens between classes through exemptions, differential assessment rates, or other classification schemes. As a result, the study is most useful when used in connection with other information about state and local tax structures.

Making year-to-year comparisons of effective tax rates or net taxes paid is also problematic. If the study attempted to track the effective tax burden on an actual parcel over time, we would need to adjust property values annually based on changes in local real estate markets. Since we hold one piece of the property tax calculation (the value) constant over time but let another piece (the rate) vary from year to year, we prevent useful time-trend analysis of effective tax rates and net taxes paid. Consider that the average tax on a \$100,000-valued urban commercial property in this study is \$2,591, 4.1% lower than the average tax on a \$100,000 urban commercial property in our payable 1995 study (\$2,701). It does not make sense that the owner of a commercial property worth \$100,000 in payable 1995 paid 4.1% less in taxes on the same piece of property in 2012.

Another limitation involves income-sensitive property tax relief programs (often referred to as "circuit-breakers"). Our study does not incorporate those types of relief programs; however, we are also investigating this area for possible future inclusion.

III. Findings

Homestead Property Tax Rankings and Burdens – Urban and Rural Cities

Table 22 on page 15 shows the payable 2013 property tax on two differently valued residential homesteads for the largest city in each state, Table 29 on page 26 shows the same for the nation’s largest fifty cities, and Table 36 on page 37 shows the residential homestead taxes for three different valued properties in a rural area in each state.

Table 1 below provides a snapshot of payable 2013 homestead property tax burdens by Census region. Residential property tax burdens are highest, on average, in the New England region followed closely by the Midwest in urban areas and by the Mid-Atlantic region in rural areas. Such burdens were lowest in the West and the South. Note that effective tax rates (ETR) rise as property value rises – which indicates that the value of many residential property tax relief programs declines as home value rises.

Table 1: Urban and Rural Homestead Property Taxes by Census Region and Property Value, Pay 2013

	Urban				Rural			
	\$150,000		\$300,000		\$150,000		\$300,000	
	Amount	ETR	Amount	ETR	Amount	ETR	Amount	ETR
New England	\$3,112	2.075%	\$6,495	2.165%	\$3,236	2.157%	\$6,504	2.168%
Mid-Atlantic	\$2,563	1.709%	\$5,261	1.754%	\$3,005	2.003%	\$6,164	2.055%
South	\$1,680	1.120%	\$3,629	1.210%	\$1,339	0.893%	\$2,896	0.965%
Midwest	\$2,947	1.965%	\$6,058	2.019%	\$2,593	1.729%	\$5,308	1.769%
Southwest	\$2,002	1.335%	\$4,091	1.364%	\$1,679	1.120%	\$3,437	1.146%
West	\$1,528	1.018%	\$3,208	1.069%	\$1,258	0.839%	\$2,638	0.879%
U.S. Average	\$2,262	1.508%	\$4,712	1.571%	\$2,044	1.363%	\$4,221	1.407%

Highest and Lowest Homestead Taxes – Urban

The urban cities with payable 2013 homestead tax rankings in the top or bottom five for both fixed-value examples are shown in Table 2. Locations with high rankings have relatively high tax rates and/or impose the tax on a relatively large amount of the homestead’s market value. Locations ranking near the bottom tend to do so because of low property tax rates – many also offer sizable homestead exemptions: Honolulu offered a homestead exemption of \$80,000 of assessed value; Washington, D.C. offered a \$69,100 homestead exemption; and Boston offered a homestead exemption equal to the lesser of \$126,095 or 90% of the homestead’s market value.

Table 2: Highest and Lowest Homestead Taxes Among Urban Cities for \$150,000- and \$300,000-Valued Homes, Payable 2013

Rank (of 53)	\$150,000		\$300,000	
	City, State	Tax	City, State	Tax
1	Bridgeport, CT	\$6,143	Bridgeport, CT	\$12,285
2	Aurora, IL	\$5,182	Aurora, IL	\$10,982
3	Detroit, MI	\$4,988	Detroit, MI	\$9,976
4	Philadelphia, PA	\$4,437	Philadelphia, PA	\$8,874
5	Milwaukee, WI	\$4,113	Milwaukee, WI	\$8,419
49	Cheyenne, WY	\$979	Cheyenne, WY	\$1,959
50	Columbia, SC	\$915	Washington, DC	\$1,909
51	Washington, DC	\$661	Columbia, SC	\$1,829
52	Honolulu, HI	\$235	Boston, MA	\$1,784
53	Boston, MA	\$175	Honolulu, HI	\$750

Table 3 presents the highest and lowest taxes on median-valued homes. When residential values vary from city to city, Burlington, Aurora and Philadelphia continue to impose top five burdens but Detroit and Milwaukee are replaced by higher-valued Newark and Burlington. However, there is far more turnover in the list of cities with the lowest-taxed homes. When measured against median values the homestead exemptions in New York City, Honolulu, Boston, and

III. Findings

Washington (D.C.) become relatively less generous and none of those cities appear in the lowest-taxes list. Instead, they are replaced by cities where relatively low values are combined with moderate tax rates.

Table 3: Highest and Lowest Homestead Taxes Among Urban Cities for Median-Valued Homes, Pay 2013

Rank (of 53)	Median-Valued Home			
	City, State	Tax	Value	ETR
1	Bridgeport, CT	\$17,441	\$425,900	4.095%
2	Newark, NJ	\$8,703	\$398,100	2.186%
3	Aurora, IL	\$7,166	\$201,300	3.560%
4	Philadelphia, PA	\$6,721	\$227,200	2.958%
5	Burlington, VT	\$6,200	\$280,900	2.207%
49	Indianapolis, IN	\$1,393	\$139,700	0.997%
50	Cheyenne, WY	\$1,381	\$211,584	0.653%
51	Birmingham, AL	\$1,149	\$173,700	0.662%
52	Charleston, WV	\$1,024	\$135,600	0.755%
53	Columbia, SC	\$904	\$148,200	0.610%

Highest and Lowest Homestead Taxes – Largest 50 Cities

In the set of largest (top 50) U.S. cities, those shown in Table 4 had the highest and lowest payable 2013 property taxes for the \$150,000-valued and \$300,000-valued homesteads. There are a few changes from the previous year – most notably, Philadelphia has moved into second place at both values, reflecting the increased property tax burdens associated with the city’s recent revaluation. Both Colorado locations benefit from the tax and expenditure limitations imposed in that state, which manifest themselves in the assessment ratio for homesteads and the property tax rate.

Table 4: Highest and Lowest Homestead Taxes Among the 50 Largest U.S. Cities for \$150,000 and \$300,000 Valued Homes, Payable 2013

Rank (of 50)	\$150,000		\$300,000	
	City, State	Tax	City, State	Tax
1	Detroit, MI	\$4,988	Detroit, MI	\$9,976
2	Philadelphia, PA	\$4,437	Philadelphia, PA	\$8,874
3	Milwaukee, WI	\$4,113	Milwaukee, WI	\$8,419
4	Cleveland, OH	\$4,024	San Antonio, TX	\$8,111
5	San Antonio, TX	\$3,953	Cleveland, OH	\$8,047
46	New York, NY	\$1,087	Mesa, AZ	\$2,289
47	Denver, CO	\$1,005	Denver, CO	\$2,010
48	Colorado Springs, CO	\$706	Washington, DC	\$1,909
49	Washington, DC	\$661	Boston, MA	\$1,784
50	Boston, MA	\$175	Colorado Springs, CO	\$1,412

Effects of Provisions that Limit Growth in Parcel-Level Assessments on Urban and Top 50 Homestead Rankings and Burdens

This report also analyzes the impact of programs that freeze or limit increases in assessed value at the individual parcel level. Broadly, the methodology involves measuring the average change in home values over the period of an average homeowner’s tenure in locales where such provisions are in effect, and estimating the amount of value the provisions exclude from taxation. For more information on the methodology, see the Methodology section or the working paper prepared for the Lincoln Institute of Land Policy on the subject, available at: https://www.lincolninst.edu/pubs/2033_Property-Assessment-Limits--Effects-on-Homestead-Property-Tax-Burdens-and-National-Property-Tax-Rankings- .

Given the availability of data on local market home value changes, we performed this analysis for our Urban and Top 50 sets of cities only. Our assessment limitation-affected burdens and ranks

are for urban cities shown on Table 22 and Table 24, beginning on page 15 and for the fifty largest U.S. cities on Table 29 and Table 31, starting on page 26.

The sharp decline in home values since the beginning of the Great Recession eliminated much of the homestead market value excluded under these types of provisions, but the rebounding housing market has begun to create additional amounts of excluded value. Our modeling indicates assessment limitations would affect homeowners with average ownership tenure in five cities in our Urban set and thirteen cities of the nation’s largest fifty. Table 5 shows how assessment limitations affect homeowners in the Urban cities. In four of these locations – Phoenix, Los Angeles, Detroit and Portland – annual assessment limits range from 2% in Los Angeles to 10% in Phoenix. In the other location – Columbia, SC – assessment limits are combined with periodic (as opposed to annual) revaluations in such a way that, in times when home values decline over the long-term, these provisions actually yield higher taxable values than would otherwise be the case.

Table 5: Effects of Assessment Limitation Provisions, \$150,000- and \$300,000-Valued Homes, Urban Cities, on Payable 2013 Property Taxes

	Effects - \$150,000 Home		Effects - \$300,000 Home	
	Change in Rank	Change in Tax Burden	Change in Rank	Change in Tax Burden
Phoenix, AZ	-1	-\$66	-1	-\$131
Los Angeles, CA	-9	-\$496	-8	-\$991
Detroit, MI	--	-\$269	--	-\$539
Portland, OR	--	-\$188	-1	-\$376
Columbia, SC	+1	+\$67	+2	+\$135

Table 6 shows how assessment limitations affect homeowners in the nation’s fifty largest cities. As with Table 5, there are substantially more cities where assessment limitation provision effect the tax burden for a homeowner with an average ownership tenure. Such provisions provided relief equal to a low of 4% of the tax on a fully-valued home in Fresno to 32%-33% of the tax on a fully-valued home in Long Beach. In some cases, cities affected by assessment limitation provisions move up in rank when the assessment limitations are factored in. This results when multiple cities with relatively large property tax reductions fall below cities with much smaller reductions.

Table 6: Effects of Assessment Limitation Provisions, \$150,000- and \$300,000-Valued Homes, 50 Largest U.S. Cities

	Effects - \$150,000 Home		Effects - \$300,000 Home	
	Change in Rank	Change in Tax Burden	Change in Rank	Change in Tax Burden
Mesa, AZ	+1	-\$53	NC	-\$105
Phoenix, AZ	+1	-\$66	+1	-\$131
Fresno, CA	-2	-\$78	NC	-\$156
Long Beach, CA	-7	-\$524	-6	-\$1,048
Los Angeles, CA	-11	-\$496	-11	-\$1,129
Oakland, CA	-5	-\$135	-2	-\$270
Sacramento, CA	+2	-\$98	+1	-\$197
San Diego, CA	+1	-\$127	-1	-\$256
San Francisco, CA	-9	-\$400	-9	-\$800
San Jose, CA	-2	-\$142	-1	-\$346
Miami, FL	-2	-\$165	-2	-\$330
Detroit, MI	NC	-\$269	NC	-\$539
Portland, OR	-2	-\$188	-2	-\$376

Commercial Property Tax Rankings and Burdens – Urban and Rural Cities

Table 25 on page 18 shows the payable 2013 property tax for three commercial properties (assumed to be office buildings of selected value) in urban areas consisting of \$100,000 of real property value with \$20,000 of personal property; \$1 million of real property with \$200,000 of

III. Findings

personal property; and \$25 million of real property with \$5 million of personal property. Table 32 on page 30 shows the same for the nation's largest fifty cities and Table 37 on page 39 shows the property taxes for commercial properties in a rural area in each state.

Table 7 below provides a snapshot of payable 2013 urban commercial property tax burdens by Census region. On average, these burdens are highest in the Midwest with New England in second place; the lowest burdens are found in the West. In some cases ETRs rise as property value rises – this is because exemptions are generally fixed at a certain amount and so the effect of any exemption diminishes as total parcel value increases.

Table 7: Urban Commercial Property Taxes by Census Region and Real Property Value, Pay 2013

	\$100,000		\$1,000,000		\$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	\$3,271	2.726%	\$32,714	2.726%	\$817,850	2.726%
Mid-Atlantic	\$2,946	2.455%	\$29,456	2.455%	\$765,839	2.553%
South	\$2,192	1.826%	\$22,184	1.849%	\$555,514	1.852%
Midwest	\$3,311	2.759%	\$33,863	2.822%	\$849,677	2.832%
Southwest	\$2,263	1.886%	\$23,153	1.929%	\$604,279	2.014%
West	\$1,698	1.415%	\$17,402	1.450%	\$439,762	1.466%
U.S. Average	\$2,591	2.159%	\$26,282	2.190%	\$664,801	2.216%

Table 8 below provides the same information for rural municipalities. On average, these burdens are highest in the Midwest with ETRs around 2.4%-2.6%; the lowest burdens are found in the West where the ETR ranges between 1.142% and 1.183%, depending on value. As with urban areas, ETRs rise with property value because of the diminishing effect of property tax exemptions.

Table 8: Rural Commercial Property Taxes by Census Region and Real Property Value, Pay 2013

	\$100,000		\$1,000,000		\$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	\$2,463	2.053%	\$24,631	2.053%	\$615,769	2.053%
Mid-Atlantic	\$2,236	1.865%	\$22,376	1.865%	\$559,396	1.865%
South	\$1,684	1.403%	\$17,175	1.431%	\$430,525	1.435%
Midwest	\$2,962	2.468%	\$30,530	2.544%	\$767,050	2.557%
Southwest	\$1,567	1.306%	\$16,070	1.339%	\$421,018	1.403%
West	\$1,370	1.142%	\$14,036	1.170%	\$354,890	1.183%
U.S. Average	\$2,061	1.718%	\$21,016	1.751%	\$529,007	1.763%

Highest and Lowest Commercial Taxes – Urban

The urban cities with the highest and lowest commercial tax rankings are shown in Table 9. Locations with high rankings have relatively high tax rates and/or impose the tax on a relatively large amount of the commercial parcel's market value. Locations ranking near the bottom tend to do so because of low property tax rates and/or fractional assessment ratios – for instance in Nevada property is assessed at 35% of value and in Honolulu the tax rate on commercial real property is 12.4 mills. In Honolulu, business personal property is exempt from taxation, providing an additional competitive edge.

Table 9: Urban Cities with Highest and Lowest Commercial Property Taxes, Payable 2013

Rank (of 53)	\$100,000		\$1,000,000		\$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Detroit, MI	\$4,895	Detroit, MI	\$48,951	Detroit, MI	\$1,223,773
2	Des Moines, IA	\$4,689	Des Moines, IA	\$46,894	Des Moines, IA	\$1,172,352
3	Philadelphia, PA	\$4,626	Philadelphia, PA	\$46,262	Philadelphia, PA	\$1,156,550
4	Providence, RI	\$4,519	Providence, RI	\$45,191	Providence, RI	\$1,129,763
5	Bridgeport, CT	\$4,301	Minneapolis, MN	\$43,434	Minneapolis, MN	\$1,124,380
49	Las Vegas, NV	\$1,347	Las Vegas, NV	\$13,473	Las Vegas, NV	\$336,835
50	Virginia Beach, VA	\$1,288	Virginia Beach, VA	\$12,885	Virginia Beach, VA	\$322,124
51	Seattle, WA	\$1,145	Seattle, WA	\$11,452	Seattle, WA	\$286,290
52	Honolulu, HI	\$1,072	Honolulu, HI	\$10,725	Honolulu, HI	\$268,119
53	Cheyenne, WY	\$812	Cheyenne, WY	\$8,116	Cheyenne, WY	\$202,890

Highest and Lowest Commercial Taxes – Largest 50 Cities

The locations with the highest and lowest commercial property taxes in the nation’s fifty largest cities are listed below in Table 10. Cities rank highly because of high property tax rates and/or relatively high assessment ratios; cities generally rank near the bottom because of low assessment ratios and/or relatively low property tax rates.

Table 10: Highest and Lowest Commercial Property Taxes Among the 50 Largest U.S. Cities, Payable 2013

Rank (of 50)	\$100,000		\$1,000,000		\$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Detroit, MI	\$4,895	Detroit, MI	\$48,951	Detroit, MI	\$1,223,773
2	Philadelphia, PA	\$4,626	Philadelphia, PA	\$46,262	Philadelphia, PA	\$1,156,550
3	Chicago, IL	\$4,231	Minneapolis, MN	\$43,620	Minneapolis, MN	\$1,129,205
4	New York, NY	\$3,980	Chicago, IL	\$42,313	Chicago, IL	\$1,057,835
5	Wichita, KS	\$3,588	New York, NY	\$39,796	New York, NY	\$994,895
46	Las Vegas, NV	\$1,347	Las Vegas, NV	\$13,473	Las Vegas, NV	\$336,835
47	Long Beach, CA	\$1,327	Long Beach, CA	\$13,269	Long Beach, CA	\$331,714
48	Virginia Beach, VA	\$1,288	Virginia Beach, VA	\$12,885	Virginia Beach, VA	\$322,124
49	Raleigh, NC	\$1,185	Raleigh, NC	\$11,852	Raleigh, NC	\$296,291
50	Seattle, WA	\$1,145	Seattle, WA	\$11,452	Seattle, WA	\$286,290

Industrial Property Tax Rankings and Burdens – Urban and Rural Cities

We consider industrial (manufacturing) property separately from commercial property because they tend to have higher proportions of personal property – an important consideration since states vary significantly in their tax treatment of personal property. We use the same set of real value assumptions as for commercial property (\$100,000, \$1 million, and \$25 million). We calculate and rank tax burdens for two different personal property assumptions: where personal property comprises 50% of the total parcel value; and where personal property comprises 60% of the total parcel value. Table 11 provides a thumbnail sketch of the two assumptions.

Table 11: Industrial Parcel Value Assumptions

Pers. Property As Share of Total Parcel Value	Real	Mach. & Equip.	Inventories	Fixtures	Total
	(50% of Total)	\$100,000	\$50,000	\$40,000	\$10,000
\$1,000,000		\$500,000	\$400,000	\$100,000	\$2,000,000
\$25,000,000		\$12,500,000	\$10,000,000	\$2,500,000	\$50,000,000
(60% of Total)	\$100,000	\$75,000	\$60,000	\$15,000	\$250,000
	\$1,000,000	\$750,000	\$600,000	\$150,000	\$2,500,000
	\$25,000,000	\$18,750,000	\$15,000,000	\$3,750,000	\$62,500,000

See our Frequently Asked Questions and Methodology sections for more on this.

III. Findings

Our payable 2013 industrial tax burden findings can be found in the following sections of the report beginning with Table 26 on page 21 for urban cities; beginning with Table 33 on page 32 for the nation's largest fifty cities and Table 38 on page 41 for rural municipalities.

Table 12 on the next page provides a snapshot of payable 2013 urban industrial property tax burdens by Census region where 50% of the total parcel value is assumed to be personal property. On average, these burdens are highest in the Midwest followed by the South at the \$100,000 level and by the Southwest for the two higher valued parcels. The lowest tax burdens – by far – are found in the West. Compared to commercial properties of equal values, industrial properties generally have higher total taxes but lower effective tax rates. Usually, this is because industrial properties have more personal property than commercial parcels – which provides a bigger tax base – but a significant portion of that bigger tax base (the personal property) is oftentimes either not taxed or is taxed at lower rates than real property. As is the case with commercial properties, ETRs tend to rise as values rise – largely representing the diminishing effect of property tax exemptions as parcel values rise.

Table 12: Urban Industrial Property Taxes by Census Region and Real Property Value, Pay 2013

	\$100,000		\$1,000,000		\$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	\$3,097	1.549%	\$30,975	1.549%	\$774,374	1.549%
Mid-Atlantic	\$2,866	1.433%	\$30,479	1.524%	\$794,439	1.589%
South	\$3,419	1.710%	\$34,539	1.727%	\$864,406	1.729%
Midwest	\$3,842	1.921%	\$39,178	1.959%	\$982,558	1.965%
Southwest	\$3,293	1.646%	\$36,621	1.831%	\$940,990	1.882%
West	\$2,283	1.141%	\$23,924	1.196%	\$602,815	1.206%
U.S. Average	\$3,168	1.584%	\$32,691	1.635%	\$825,441	1.651%

Note: assumes 50% of total parcel value is personal property and 50% is real property.

Table 13 provides the same information for rural municipalities. By far, these burdens are highest on average in the Midwest with ETRs around 1.6%; the lowest burdens are found in the West where the ETR ranges from 0.904% to 0.959%, depending on parcel value. The comments above regarding the relationship between the tax burdens on urban commercial and industrial properties and the increase in effective tax rates as urban values rise also apply here.

Table 13: Rural Industrial Property Taxes by Census Region and Real Property Value, Pay 2013

	\$100,000		\$1,000,000		\$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	\$2,326	1.163%	\$23,263	1.163%	\$581,583	1.163%
Mid-Atlantic	\$2,161	1.080%	\$21,606	1.080%	\$540,146	1.080%
South	\$2,704	1.352%	\$27,466	1.373%	\$687,806	1.376%
Midwest	\$3,195	1.598%	\$32,865	1.643%	\$825,423	1.651%
Southwest	\$2,378	1.189%	\$26,576	1.329%	\$683,676	1.367%
West	\$1,807	0.904%	\$19,013	0.951%	\$479,301	0.959%
U.S. Average	\$2,499	1.249%	\$25,741	1.287%	\$647,120	1.294%

Note: assumes 50% of total parcel value is personal property and 50% is real property.

Highest and Lowest Industrial Taxes – Urban

The urban cities with payable 2013 industrial tax rankings in the top or bottom five where personal property comprises 50% of the parcel's value are shown in Table 14 on the next page. Locations with high rankings have relatively high tax rates and/or impose the tax on a relatively large amount of the commercial parcel's market value. For instance, by law South Carolina assesses industrial land and buildings at 10.5% of market value, compared to 4% for homesteads and 6% for commercial property. Locations ranking near the bottom tend to do so because of low property tax rates, assessment at some fraction of market value (Wilmington's sales ratio is 35.0% for industrial properties, for example), an exemption for business property (Fargo, Wilmington and Honolulu), or some combination of the three.

Table 14: Urban Cities with the Highest and Lowest Industrial Taxes, Payable 2013

Rank (of 53)	\$100,000		\$1,000,000		\$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Des Moines, IA	\$7,362	Des Moines, IA	\$73,624	Des Moines, IA	\$1,840,593
2	Columbia, SC	\$7,225	Columbia, SC	\$72,248	Columbia, SC	\$1,806,200
3	Detroit, MI	\$6,004	Detroit, MI	\$60,041	Detroit, MI	\$1,501,031
4	Memphis, TN	\$5,446	Memphis, TN	\$54,460	Memphis, TN	\$1,361,500
5	Jackson, MS	\$5,216	Jackson, MS	\$52,155	Jackson, MS	\$1,303,875
49	Fargo, ND	\$1,400	Fargo, ND	\$14,001	Fargo, ND	\$350,036
50	Wilmington, DE	\$1,368	Wilmington, DE	\$13,679	Wilmington, DE	\$341,963
51	Cheyenne, WY	\$1,294	Cheyenne, WY	\$12,942	Cheyenne, WY	\$323,559
52	Honolulu, HI	\$1,179	Honolulu, HI	\$11,789	Honolulu, HI	\$294,717
53	Virginia Beach, VA	\$1,140	Virginia Beach, VA	\$11,405	Virginia Beach, VA	\$285,124

Note: assumes 50% of total parcel value is personal property and 50% is real property.

Highest and Lowest Industrial Taxes – Largest 50 Cities

The locations with the highest and lowest industrial property taxes in the nation’s fifty largest cities are listed on the next page in Table 15. Three of the five highest ranked locations (and seven of the top ten) are located in Texas – reflecting in part Texas’ relatively high reliance on the property tax in its state and local finances and in part its policy of taxing all types of business personal property. Cities rank highly because of high property tax rates and/or relatively high assessment ratios; cities generally rank near the bottom because of low assessment ratios, relatively low property tax rates, and/or business personal property exemptions.

Table 15: Highest and Lowest Industrial Property Taxes Among the 50 Largest U.S. Cities, Payable 2013

Rank (of 50)	\$100,000		\$1,000,000		\$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Detroit, MI	\$6,004	Detroit, MI	\$60,041	Detroit, MI	\$1,501,031
2	Fort Worth, TX	\$5,637	Fort Worth, TX	\$56,368	Fort Worth, TX	\$1,409,199
3	Dallas, TX	\$5,466	Dallas, TX	\$54,658	Dallas, TX	\$1,366,443
4	Memphis, TN	\$5,446	Memphis, TN	\$54,460	Memphis, TN	\$1,361,500
5	San Antonio, TX	\$5,387	San Antonio, TX	\$53,867	San Antonio, TX	\$1,346,670
46	Washington, DC	\$1,640	Long Beach, CA	\$17,691	Long Beach, CA	\$442,285
47	Seattle, WA	\$1,554	Seattle, WA	\$15,542	Seattle, WA	\$388,551
48	Louisville, KY	\$1,554	Louisville, KY	\$15,540	Louisville, KY	\$388,503
49	Raleigh, NC	\$1,552	Raleigh, NC	\$15,518	Raleigh, NC	\$387,951
50	Virginia Beach, VA	\$1,140	Virginia Beach, VA	\$11,405	Virginia Beach, VA	\$285,124

Note: assumes 50% of total parcel value is personal property and 50% is real property.

Apartment Property Tax Rankings and Burdens – Urban and Rural Cities

We calculate property taxes on a \$600,000 unfurnished apartment building with \$30,000 of personal property. Complete findings are available for urban properties (Table 28 on page 25), top 50 cities (Table 35 on page 36), and rural municipalities (Table 40 on page 45). Table 16 shows payable 2013 apartment property tax burdens by Census region for both urban and rural cities. On average, tax burdens in both urban and rural areas are highest in the New England region with the Midwest and Mid-Atlantic very close behind and lowest by far in the West; although in rural areas burdens in the South and Southwest are much closer to the low burdens found in the West.

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Table 16: Urban and Rural Apartment Property Taxes by Census Region, Payable 2013

	Urban		Rural	
	Amount	ETR	Amount	ETR
New England	\$16,197	2.571%	\$13,302	2.111%
Mid-Atlantic	\$15,154	2.405%	\$12,733	2.021%
South	\$11,001	1.746%	\$8,558	1.358%
Midwest	\$15,411	2.446%	\$13,210	2.097%
Southwest	\$10,126	1.607%	\$8,331	1.322%
West	\$7,156	1.136%	\$5,949	0.944%
U.S. Average	\$12,355	1.961%	\$10,069	1.598%

Note: assumes \$600,000-valued property with \$30,000 in personal property.

Highest and Lowest Apartment Taxes – Urban

The urban cities with the highest and lowest apartment property taxes were:

Table 17: Urban Cities with the Highest and Lowest Apartment Taxes, Payable 2013

City, State	\$600,000	
	Tax	Rank (of 53)
Bridgeport, CT	\$28,862	1
Des Moines, IA	\$28,136	2
Detroit, MI	\$26,530	3
New York, NY	\$26,235	4
Aurora, IL	\$23,201	5
Salt Lake City, UT	\$5,820	49
Washington, DC	\$5,069	50
Denver, CO	\$4,711	51
Cheyenne, WY	\$3,966	52
Honolulu, HI	\$2,008	53

Locations with high rankings have relatively high tax rates and/or impose the tax on a relatively large amount of the commercial parcel's market value. Locations ranking near the bottom tend to do so because of low property tax rates, assessment ratios at some fraction of market value, substantial exemptions of value, or some combination of the three.

Highest and Lowest Apartment Taxes – Largest 50 Cities

The locations with the highest and lowest apartment property taxes in the nation's fifty largest cities are listed below in Table 18. Note that the two most highly ranked cities (Detroit and New York City) have apartment property taxes that are significantly higher than the third-ranked city (Memphis). Conversely, the city with the bottom ranking (Colorado Springs) has a burden that is substantially below the next-highest ranked city (Denver). Four of the top ten ranked locations are in Texas while the two lowest-ranked locations are situated in Colorado. As before, cities rank highly because of high property tax rates and/or relatively high assessment ratios; cities generally rank near the bottom because of low assessment ratios and/or relatively low property tax rates.

Table 18: Highest and Lowest Apartment Property Taxes Among the 50 Largest U.S. Cities, Payable 2013

City, State	\$600,000	
	Tax	Rank (of 50)
Detroit, MI	\$26,530	1
New York, NY	\$26,235	2
Memphis, TN	\$19,372	3
Cleveland, OH	\$19,259	4
Milwaukee, WI	\$18,006	5
Seattle, WA	\$5,951	46
Mesa, AZ	\$5,473	47
Washington, DC	\$5,069	48
Denver, CO	\$4,711	49
Colorado Springs, CO	\$3,282	50

III. Findings

Findings – Subsidization of Homeowners and Relationship to Property Tax Growth

Table 19 shows the ratio of the effective tax rate on a \$1 million commercial property to the effective tax rate on a median-value homestead property for each metropolitan area (real property only). This “classification ratio” provides a summary measure of the degree to which homeowner property taxes are subsidized by commercial property owners.

A ratio of 1.0 indicates that no classification is apparent (at least as it relates to the relationship between these two property types, which are typically the target of most classification systems). A ratio greater than 1.0 indicates some degree of classification, broadly defined, with higher values reflecting a greater degree of classification.⁵

Table 19: Commercial-Homestead Classification Ratios for Payable 2013, Urban Cities

State	City	Median Value (\$)	Ratio	Rank	State	City	Median Value (\$)	Ratio	Rank
New York	New York City	399,900	4.981	1	Arkansas	Little Rock	144,200	1.289	27
Massachusetts	Boston	382,200	3.871	2	South Dakota	Sioux Falls	158,300	1.288	28
South Carolina	Columbia	148,200	3.747	3	Ohio	Columbus	148,600	1.275	29
Colorado	Denver	286,500	3.621	4	Michigan	Detroit	65,167	1.253	30
Hawaii	Honolulu	660,100	3.563	5	Texas	Houston	189,000	1.249	31
Arizona	Phoenix	183,300	2.867	6	New Mexico	Albuquerque	171,600	1.150	32
Indiana	Indianapolis	139,700	2.831	7	Vermont	Burlington	280,900	1.107	33
Illinois	Chicago	201,300	2.617	8	Illinois	Aurora	201,300	1.086	34
Louisiana	New Orleans	177,200	2.580	9	Virginia	Virginia Beach	200,000	1.076	35
District of Columbia	Washington	403,000	2.389	10	Oklahoma	Oklahoma City	149,100	1.070	36
Kansas	Wichita	127,800	2.263	11	Alaska	Anchorage	346,374	1.067	37
West Virginia	Charleston	135,600	2.140	12	Maine	Portland	233,400	1.045	38
Alabama	Birmingham	173,700	2.092	13	Wyoming	Cheyenne	211,584	1.036	39
Minnesota*	Minneapolis	199,600	2.085	14	Wisconsin	Milwaukee	208,700	1.030	40
Idaho	Boise	168,500	2.068	15	North Dakota	Fargo	164,500	1.030	41
Iowa	Des Moines	172,700	1.979	16	Maryland	Baltimore	262,700	1.030	42
Rhode Island	Providence	233,900	1.909	17	Delaware	Wilmington	227,200	1.023	43
Missouri	Kansas City	159,600	1.831	18	California	Los Angeles	378,400	1.019	44
Utah	Salt Lake City	230,000	1.768	19	Nebraska	Omaha	151,300	1.000	45
U.S. Average			1.716	--	New Hampshire	Manchester	233,200	1.000	45
Mississippi	Jackson	149,600	1.696	20	New Jersey	Newark	398,100	1.000	45
U.S. Average (w/o NYC)			1.653	--	North Carolina	Charlotte	180,100	1.000	45
New York	Buffalo	132,000	1.617	21	Oregon	Portland	264,200	1.000	45
Tennessee	Memphis	136,200	1.600	22	Washington	Seattle	345,800	1.000	45
Pennsylvania	Philadelphia	227,200	1.564	23	Nevada	Las Vegas	171,800	0.988	51
Georgia	Atlanta	143,300	1.477	24	Kentucky	Louisville	146,200	0.979	52
Montana	Billings	228,643	1.462	25	Connecticut	Bridgeport	425,900	0.907	53
Florida	Jacksonville	166,500	1.311	26					

Ratio = \$1 million commercial ETR (real property only) divided by median value home ETR.
 * Local taxes only; including the statewide property tax changes the ratio to 2.734.

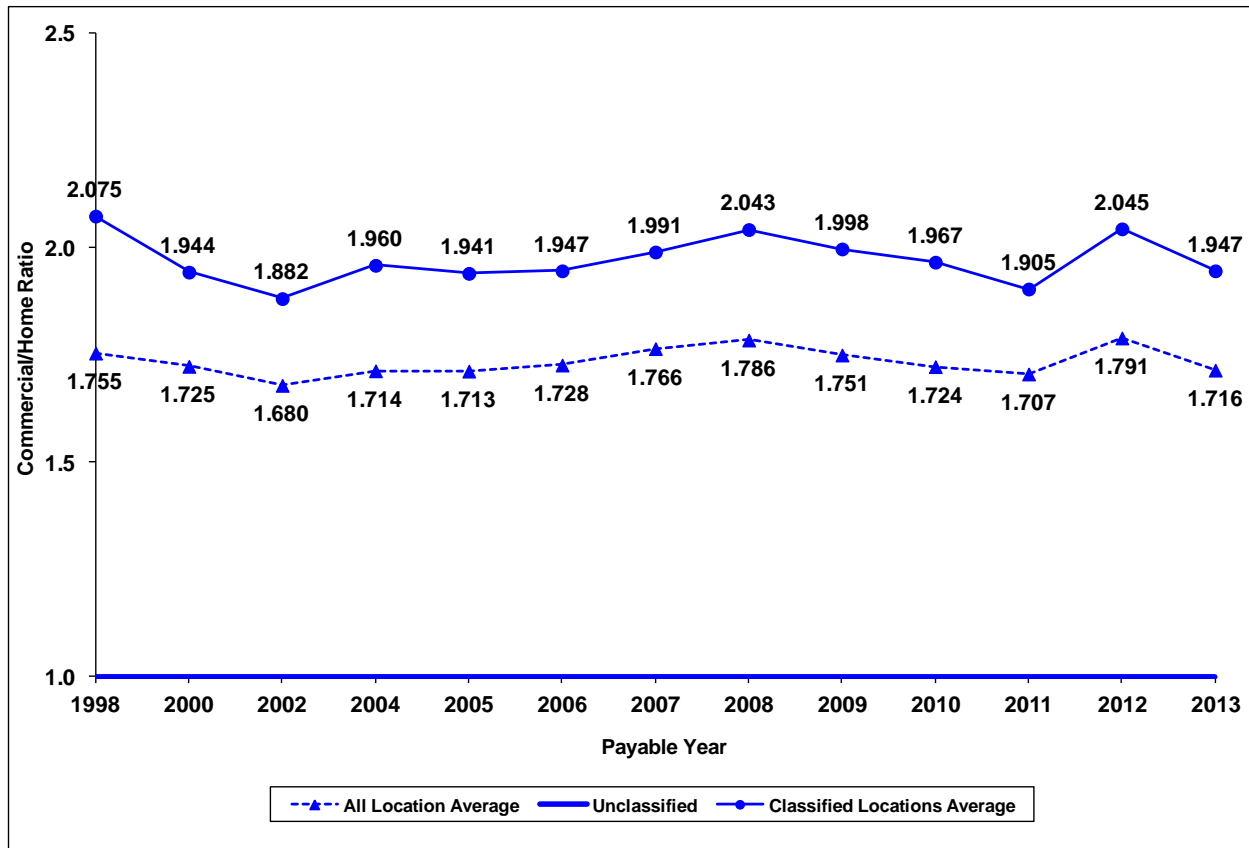
⁵ Three locations have a ratio below 1.0, meaning that their classification systems favor commercial properties over homesteads. This is simply a function of applying the sales ratio; commercial properties in these locations are underassessed when compared to homestead properties.

The ratios were calculated for real property only, after adjusting for differences in assessment practices. Differences in the quality of assessments among various classes of property can produce a de facto classification system even in the absence of statutory classification schemes.

Locations that rank near the top of this list do so because of extreme differences in classification ratios between these two types of property. For instance, in New York City, residential property is assessed at 6% of value while commercial property is assessed at 45% of value. In other cases differences in tax rates and/or homestead exemptions or credits account for the differences, such as in Boston; where 34% of the value of the median home is exempt from taxation, and the homestead tax rate is some 41% that of commercial and industrial properties.

On a national basis, tax disparities between commercial and homestead properties fell back to a more average level of 1.716 after jumping last year to an all-time high of 1.791 – meaning that the effective tax rate on \$1 million commercial properties nationwide is, on average, now 71.6% higher than the effective tax rate on median-valued homes. Tax disparities for “classified” locations⁶, where residential and commercial property are treated differently in statute, also fell considerably, to 1.947 – substantially lower than the 2.045 recorded for payable 2012 and at around an average level since 1998. The decrease in the classification ratio – 4.2% nationwide and 4.8% in the locations where residential preferences are written into law, indicates that states (and where allowed, local governments) are either providing fewer subsidies to homeowners or that the subsidies they provide are worth less on average than in payable 2012. Figure 1 shows the trend since 1998.

Figure 1: Commercial-Homestead Classification Ratio, Urban Cities, 1998 – 2013



⁶ Those locations where the classification ratio is 1.000 when no adjustments are made for the effects of assessment practices – i.e. when the sales ratio statistic is disregarded. The effect is to create a group of property tax systems where homestead property tax preferences are specifically written into law.

III. Findings

Similar analysis can be performed for other property types. Table 20 shows the classification ratio for apartments versus homes, which provides another use finding – the degree of subsidy provided to homeowners at the expense of renters.

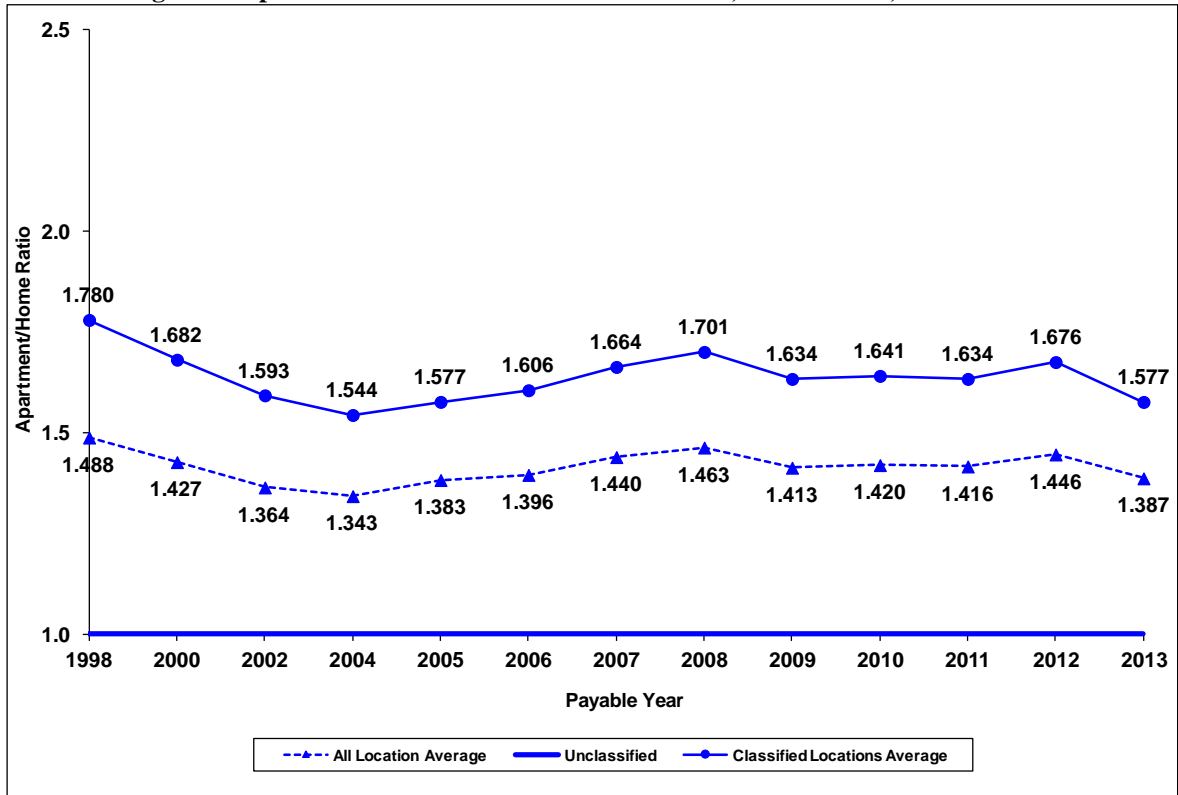
Table 20: Ratio of Apartment Effective Tax Rates (ETRs) to Homestead Rates, Urban Cities, Pay 2013

State	City	Median Value (\$)	Ratio	Rank	State	City	Median Value (\$)	Ratio	Rank
New York	New York City	399,900	5.473	1	Illinois	Aurora	201,300	1.086	27
South Carolina	Columbia	148,200	3.747	2	Virginia	Virginia Beach	200,000	1.076	28
West Virginia	Charleston	135,600	2.105	3	Oklahoma	Oklahoma City	149,100	1.070	29
Alabama	Birmingham	173,700	2.092	4	Alaska	Anchorage	346,374	1.067	30
Idaho	Boise	168,500	2.068	5	Vermont	Burlington	280,900	1.066	31
Iowa	Des Moines	172,700	1.979	6	Maine	Portland	233,400	1.045	32
Indiana	Indianapolis	139,700	1.882	7	New Mexico	Albuquerque	171,600	1.038	33
Louisiana	New Orleans	177,200	1.697	8	North Dakota	Fargo	164,500	1.030	34
Mississippi	Jackson	149,600	1.696	9	Maryland	Baltimore	262,700	1.030	35
Rhode Island	Providence	233,900	1.657	10	Wisconsin	Milwaukee	208,700	1.028	36
Massachusetts	Boston	382,200	1.628	11	Kansas	Wichita	127,800	1.021	37
New York	Buffalo	132,000	1.617	12	California	Los Angeles	378,400	1.019	38
Tennessee	Memphis	136,200	1.600	13	Delaware	Wilmington	227,200	1.000	39
Georgia	Atlanta	143,300	1.477	14	Missouri	Kansas City	159,600	1.000	39
Illinois	Chicago	201,300	1.445	15	Montana	Billings	228,643	1.000	39
U.S. Average			1.387	--	Nebraska	Omaha	151,300	1.000	39
Minnesota	Minneapolis	199,600	1.348	16	New Hampshire	Manchester	233,200	1.000	39
Arizona	Phoenix	183,300	1.345	17	New Jersey	Newark	398,100	1.000	39
Texas	Houston	189,000	1.331	18	North Carolina	Charlotte	180,100	1.000	39
Florida	Jacksonville	166,500	1.311	19	Oregon	Portland	264,200	1.000	39
U.S. Avg (w/o NYC)			1.310		Pennsylvania	Philadelphia	227,200	1.000	39
Arkansas	Little Rock	144,200	1.289	20	Washington	Seattle	345,800	1.000	39
South Dakota	Sioux Falls	158,300	1.288	21	Colorado	Denver	286,500	0.990	49
Ohio	Columbus	148,600	1.275	22	Nevada	Las Vegas	171,800	0.988	50
Michigan	Detroit	65,167	1.266	23	Kentucky	Louisville	146,200	0.979	51
District of Columbia	Washington	403,000	1.231	24	Utah	Salt Lake City	230,000	0.972	52
Connecticut	Bridgeport	425,900	1.139	25	Wyoming	Cheyenne	211,584	0.961	53
Hawaii	Honolulu	660,100	1.112	26					

Ratio = \$600,000 apartment ETR (real property only) divided by median value home ETR.

Overall, the U.S. average ratio fell 4.1% from the previous year; and by 3.3% if New York City is excluded, largely a reflection that effective tax rates for the average-valued median home increased faster than effective tax rates for apartment properties. This indicates that homeowners are being offered a lower relative level of subsidy, either because existing homestead exemptions are becoming less valuable, or because states have enacted policies to narrow the effective tax rate differential between homesteads and apartment properties. Figure 2 provides information on how this ratio has changed since 1998.

Figure 2: Apartment-Homestead Classification Ratio, Urban Cities, 1998 – 2013



Note: see page 9 for definition of “classified” locations.

Lower classification ratios mean that homeowners pay a larger share of the overall property tax burden. Nationally, greater homeowner sensitivity to property tax prices appears to play a role in retarding overall property tax growth. Eleven of the locations in our Urban set of cities have had classification ratios of 1.05 or less in at least nine of the eleven studies we have published since payable 1998. In two of those locations – Los Angeles, California and Portland, Oregon – assessment limitations have been in effect during this period which this study historically has not measured but which have offered substantial tax relief to homeowners. However, the nine remaining locations⁷ consistently offer little or no preferential treatment to homeowners. Census data indicates that property tax increases between 1998 and 2011, on both a per capita and per \$1,000 of income basis, have been lower in the nine states these locations represent that have offered little or no homeowner subsidy (Table 21).

Table 21: Property Tax Collections, FY 1998 and FY 2011, for States With No Homeowner-Specific Assessment Limitations and with Classification Ratios < 1.05 and Remaining States

Fiscal Year	States with no homeowner-specific assessment limitation provisions and Classification Ratio < 1.050 (n = 9)		Remaining States (n = 42)	
	Prop Tax Per Capita	Prop Tax per \$1,000 of Income	Prop Tax Per Capita	Prop Tax per \$1,000 of Income
FY 1998	\$772.36	\$31.41	\$860.69	\$33.42
FY 2011	\$1,215.68	\$31.66	\$1,447.84	\$35.27
Pct Chg	57.4%	0.8%	68.2%	5.5%

Property tax and population data from Department of the Census; income data from Bureau of Economic Analysis. Calculations by MCFE.

⁷ Wilmington, DE; Louisville, KY; Omaha, NE; Manchester, NH; Las Vegas, NV; Charlotte, NC; Seattle, WA; Milwaukee, WI; and Cheyenne, WY.

IV. Rankings Tables – Urban

IV. Rankings Tables – Urban

**Table 22: Urban Homestead Property Taxes
Payable 2013**

\$150,000 VALUED PROPERTY					\$150,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS				
Rank	State	City	Net Tax	ETR	Rank	State	City	Net Tax	ETR
1	Connecticut	Bridgeport	6,143	4.095%	1	Connecticut	Bridgeport	6,143	4.095%
2	Illinois	Aurora	5,182	3.455%	2	Illinois	Aurora	5,182	3.455%
3	Michigan	Detroit	4,988	3.325%	3	Michigan	Detroit	4,719	3.146%
4	Pennsylvania	Philadelphia	4,437	2.958%	4	Pennsylvania	Philadelphia	4,437	2.958%
5	Wisconsin	Milwaukee	4,113	2.742%	5	Wisconsin	Milwaukee	4,113	2.742%
6	New Hampshire	Manchester	3,652	2.435%	6	New Hampshire	Manchester	3,652	2.435%
7	Iowa	Des Moines	3,525	2.350%	7	Iowa	Des Moines	3,525	2.350%
8	Oregon	Portland	3,508	2.339%	8	Oregon	Portland	3,320	2.213%
9	Vermont	Burlington	3,311	2.207%	9	Vermont	Burlington	3,311	2.207%
10	New York	Buffalo	3,289	2.192%	10	New York	Buffalo	3,289	2.192%
11	New Jersey	Newark	3,279	2.186%	11	New Jersey	Newark	3,279	2.186%
12	Maryland	Baltimore	3,181	2.120%	12	Maryland	Baltimore	3,181	2.120%
13	Nebraska	Omaha	3,073	2.048%	13	Nebraska	Omaha	3,073	2.048%
14	Ohio	Columbus	3,011	2.008%	14	Ohio	Columbus	3,011	2.008%
15	Tennessee	Memphis	2,918	1.945%	15	Tennessee	Memphis	2,918	1.945%
16	Texas	Houston	2,843	1.896%	16	Texas	Houston	2,843	1.896%
17	Maine	Portland	2,717	1.812%	17	Maine	Portland	2,717	1.812%
18	Rhode Island	Providence	2,674	1.783%	18	Rhode Island	Providence	2,674	1.783%
19	Illinois	Chicago	2,311	1.541%	19	Illinois	Chicago	2,311	1.541%
20	Mississippi	Jackson	2,308	1.539%	20	Mississippi	Jackson	2,308	1.539%
21	Missouri	Kansas City	2,281	1.521%	21	Missouri	Kansas City	2,281	1.521%
	AVERAGE		2,262	1.508%		AVERAGE		2,244	1.496%
22	Minnesota	Minneapolis	2,237	1.491%	22	Minnesota	Minneapolis	2,237	1.491%
23	Florida	Jacksonville	2,078	1.385%	23	Florida	Jacksonville	2,078	1.385%
24	South Dakota	Sioux Falls	2,073	1.382%	24	South Dakota	Sioux Falls	2,073	1.382%
25	North Dakota	Fargo	2,038	1.359%	25	North Dakota	Fargo	2,038	1.359%
26	Delaware	Wilmington	2,007	1.338%	26	Delaware	Wilmington	2,007	1.338%
27	Kansas	Wichita	1,987	1.324%	27	Kansas	Wichita	1,987	1.324%
28	Kentucky	Louisville	1,946	1.298%	28	Kentucky	Louisville	1,946	1.298%
29	Alaska	Anchorage	1,944	1.296%	29	Alaska	Anchorage	1,944	1.296%
30	New Mexico	Albuquerque	1,928	1.285%	30	New Mexico	Albuquerque	1,928	1.285%
31	North Carolina	Charlotte	1,927	1.284%	31	North Carolina	Charlotte	1,927	1.284%
32	Oklahoma	Oklahoma City	1,800	1.200%	32	Oklahoma	Oklahoma City	1,800	1.200%
33	Georgia	Atlanta	1,782	1.188%	33	Georgia	Atlanta	1,782	1.188%
34	California	Los Angeles	1,751	1.167%	34	Nevada	Las Vegas	1,696	1.131%
35	Nevada	Las Vegas	1,696	1.131%	35	Arkansas	Little Rock	1,693	1.129%
36	Arkansas	Little Rock	1,693	1.129%	36	Montana	Billings	1,561	1.041%
37	Montana	Billings	1,561	1.041%	37	Indiana	Indianapolis	1,457	0.971%
38	Indiana	Indianapolis	1,496	0.997%	38	Washington	Seattle	1,411	0.941%
39	Arizona	Phoenix	1,438	0.959%	39	Virginia	Virginia Beach	1,383	0.922%
40	Washington	Seattle	1,411	0.941%	40	Arizona	Phoenix	1,372	0.915%
41	Virginia	Virginia Beach	1,383	0.922%	41	Utah	Salt Lake City	1,368	0.912%
42	Utah	Salt Lake City	1,368	0.912%	42	Idaho	Boise	1,347	0.898%
43	Idaho	Boise	1,347	0.898%	43	California	Los Angeles	1,255	0.837%
44	West Virginia	Charleston	1,132	0.755%	44	West Virginia	Charleston	1,132	0.755%
45	Louisiana	New Orleans	1,096	0.731%	45	Louisiana	New Orleans	1,096	0.731%
46	New York	New York City	1,087	0.724%	46	New York	New York City	1,087	0.724%
47	Colorado	Denver	1,005	0.670%	47	Colorado	Denver	1,005	0.670%
48	Alabama	Birmingham	985	0.657%	48	Alabama	Birmingham	985	0.657%
49	Wyoming	Cheyenne	979	0.653%	49	South Carolina	Columbia	982	0.655%
50	South Carolina	Columbia	915	0.610%	50	Wyoming	Cheyenne	979	0.653%
51	DC	Washington	661	0.441%	51	DC	Washington	661	0.441%
52	Hawaii	Honolulu	235	0.157%	52	Hawaii	Honolulu	235	0.157%
53	Massachusetts	Boston	175	0.117%	53	Massachusetts	Boston	175	0.117%

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Table 22 (cont'd.): Urban Homestead Property Taxes Payable 2013

\$300,000 VALUED PROPERTY					\$300,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS				
Rank	State	City	Net Tax	ETR	Rank	State	City	Net Tax	ETR
1	Connecticut	Bridgeport	12,285	4.095%	1	Connecticut	Bridgeport	12,285	4.095%
2	Illinois	Aurora	10,982	3.661%	2	Illinois	Aurora	10,982	3.661%
3	Michigan	Detroit	9,976	3.325%	3	Michigan	Detroit	9,437	3.146%
4	Pennsylvania	Philadelphia	8,874	2.958%	4	Pennsylvania	Philadelphia	8,874	2.958%
5	Wisconsin	Milwaukee	8,419	2.806%	5	Wisconsin	Milwaukee	8,419	2.806%
6	New Hampshire	Manchester	7,304	2.435%	6	New Hampshire	Manchester	7,304	2.435%
7	Iowa	Des Moines	7,277	2.426%	7	Iowa	Des Moines	7,277	2.426%
8	Oregon	Portland	7,016	2.339%	8	New York	Buffalo	6,757	2.252%
9	New York	Buffalo	6,757	2.252%	9	Oregon	Portland	6,640	2.213%
10	Vermont	Burlington	6,622	2.207%	10	Vermont	Burlington	6,622	2.207%
11	New Jersey	Newark	6,558	2.186%	11	New Jersey	Newark	6,558	2.186%
12	Maryland	Baltimore	6,361	2.120%	12	Maryland	Baltimore	6,361	2.120%
13	Nebraska	Omaha	6,145	2.048%	13	Nebraska	Omaha	6,145	2.048%
14	Ohio	Columbus	6,023	2.008%	14	Ohio	Columbus	6,023	2.008%
15	Tennessee	Memphis	5,835	1.945%	15	Tennessee	Memphis	5,835	1.945%
16	Texas	Houston	5,829	1.943%	16	Texas	Houston	5,829	1.943%
17	Maine	Portland	5,629	1.876%	17	Maine	Portland	5,629	1.876%
18	Rhode Island	Providence	5,348	1.783%	18	Rhode Island	Providence	5,348	1.783%
19	Illinois	Chicago	5,070	1.690%	19	Illinois	Chicago	5,070	1.690%
20	Minnesota	Minneapolis	5,061	1.687%	20	Minnesota	Minneapolis	5,061	1.687%
21	Mississippi	Jackson	4,916	1.639%	21	Mississippi	Jackson	4,916	1.639%
22	Florida	Jacksonville	4,900	1.633%	22	Florida	Jacksonville	4,900	1.633%
	AVERAGE		4,712	1.571%		AVERAGE		4,676	1.559%
23	Missouri	Kansas City	4,562	1.521%	23	Missouri	Kansas City	4,562	1.521%
24	Georgia	Atlanta	4,312	1.437%	24	Georgia	Atlanta	4,312	1.437%
25	South Dakota	Sioux Falls	4,146	1.382%	25	South Dakota	Sioux Falls	4,146	1.382%
26	North Dakota	Fargo	4,077	1.359%	26	North Dakota	Fargo	4,077	1.359%
27	Kansas	Wichita	4,019	1.340%	27	Kansas	Wichita	4,019	1.340%
28	Delaware	Wilmington	4,013	1.338%	28	Delaware	Wilmington	4,013	1.338%
29	Alaska	Anchorage	4,009	1.336%	29	Alaska	Anchorage	4,009	1.336%
30	New Mexico	Albuquerque	3,941	1.314%	30	New Mexico	Albuquerque	3,941	1.314%
31	Kentucky	Louisville	3,893	1.298%	31	Kentucky	Louisville	3,893	1.298%
32	Idaho	Boise	3,887	1.296%	32	Idaho	Boise	3,887	1.296%
33	North Carolina	Charlotte	3,853	1.284%	33	North Carolina	Charlotte	3,853	1.284%
34	Arkansas	Little Rock	3,736	1.245%	34	Arkansas	Little Rock	3,736	1.245%
35	Oklahoma	Oklahoma City	3,716	1.239%	35	Oklahoma	Oklahoma City	3,716	1.239%
36	California	Los Angeles	3,587	1.196%	36	Nevada	Las Vegas	3,393	1.131%
37	Nevada	Las Vegas	3,393	1.131%	37	Louisiana	New Orleans	3,226	1.075%
38	Louisiana	New Orleans	3,226	1.075%	38	Montana	Billings	3,122	1.041%
39	Montana	Billings	3,122	1.041%	39	Indiana	Indianapolis	2,991	0.997%
40	Indiana	Indianapolis	2,991	0.997%	40	Washington	Seattle	2,822	0.941%
41	Arizona	Phoenix	2,876	0.959%	41	Virginia	Virginia Beach	2,766	0.922%
42	Washington	Seattle	2,822	0.941%	42	Arizona	Phoenix	2,745	0.915%
43	Virginia	Virginia Beach	2,766	0.922%	43	Utah	Salt Lake City	2,736	0.912%
44	Utah	Salt Lake City	2,736	0.912%	44	California	Los Angeles	2,596	0.865%
45	New York	New York City	2,352	0.784%	45	New York	New York City	2,352	0.784%
46	West Virginia	Charleston	2,265	0.755%	46	West Virginia	Charleston	2,265	0.755%
47	Alabama	Birmingham	2,024	0.675%	47	Alabama	Birmingham	2,024	0.675%
48	Colorado	Denver	2,010	0.670%	48	Colorado	Denver	2,010	0.670%
49	Wyoming	Cheyenne	1,959	0.653%	49	South Carolina	Columbia	1,964	0.655%
50	DC	Washington	1,909	0.636%	50	Wyoming	Cheyenne	1,959	0.653%
51	South Carolina	Columbia	1,829	0.610%	51	DC	Washington	1,909	0.636%
52	Massachusetts	Boston	1,784	0.595%	52	Massachusetts	Boston	1,784	0.595%
53	Hawaii	Honolulu	750	0.250%	53	Hawaii	Honolulu	750	0.250%

IV. Rankings Tables – Urban

Table 23: Urban Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2013

State	City	2013 2nd Quarter Median Sales Price#	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
Connecticut	Bridgeport	425,900	17,441	1	4.095%	1
New Jersey	Newark	398,100	8,703	2	2.186%	10
Illinois	Aurora	201,300	7,166	3	3.560%	2
Pennsylvania	Philadelphia	227,200	6,721	4	2.958%	4
Vermont	Burlington	280,900	6,200	5	2.207%	9
Oregon	Portland	264,200	6,178	6	2.339%	8
Wisconsin	Milwaukee	208,700	5,798	7	2.778%	5
New Hampshire	Manchester	233,200	5,678	8	2.435%	6
Maryland	Baltimore	262,700	5,570	9	2.120%	12
Alaska*	Anchorage	346,374	4,676	10	1.350%	26
California	Los Angeles	378,400	4,547	11	1.202%	32
Maine	Portland	233,400	4,336	12	1.858%	17
Rhode Island	Providence	233,900	4,169	13	1.783%	18
Iowa	Des Moines	172,700	4,093	14	2.370%	7
Texas	Houston	189,000	3,620	15	1.915%	16
AVERAGE			3,350		1.539%	
Illinois	Chicago	201,300	3,255	16	1.617%	19
Washington	Seattle	345,800	3,253	17	0.941%	40
New York	New York City	399,900	3,195	18	0.799%	45
Minnesota	Minneapolis	199,600	3,171	19	1.588%	20
Nebraska	Omaha	151,300	3,099	20	2.048%	13
Delaware	Wilmington	227,200	3,039	21	1.338%	27
Ohio	Columbus	148,600	2,983	22	2.008%	14
New York	Buffalo	132,000	2,872	23	2.176%	11
DC	Washington	403,000	2,766	24	0.686%	48
Massachusetts	Boston	382,200	2,745	25	0.718%	47
Tennessee	Memphis	136,200	2,649	26	1.945%	15
Missouri	Kansas City	159,600	2,427	27	1.521%	22
Florida	Jacksonville	166,500	2,388	28	1.434%	23
Montana*	Billings	228,643	2,379	29	1.041%	37
North Carolina	Charlotte	180,100	2,313	30	1.284%	31
Mississippi	Jackson	149,600	2,301	31	1.538%	21
North Dakota	Fargo	164,500	2,236	32	1.359%	25
New Mexico	Albuquerque	171,600	2,218	33	1.292%	30
South Dakota	Sioux Falls	158,300	2,187	34	1.382%	24
Michigan*	Detroit	65,167	2,167	35	3.325%	3
Utah	Salt Lake City	230,000	2,097	36	0.912%	42
Hawaii	Honolulu	660,100	1,987	37	0.301%	53
Nevada	Las Vegas	171,800	1,943	38	1.131%	34
Colorado	Denver	286,500	1,919	39	0.670%	49
Kentucky	Louisville	146,200	1,897	40	1.298%	29
Virginia	Virginia Beach	200,000	1,844	41	0.922%	41
Oklahoma	Oklahoma City	149,100	1,789	42	1.200%	33
Arizona	Phoenix	183,300	1,757	43	0.959%	39
Kansas	Wichita	127,800	1,686	44	1.319%	28
Arkansas	Little Rock	144,200	1,614	45	1.119%	36
Georgia	Atlanta	143,300	1,612	46	1.125%	35
Idaho	Boise	168,500	1,525	47	0.905%	43
Louisiana	New Orleans	177,200	1,482	48	0.837%	44
Indiana	Indianapolis	139,700	1,393	49	0.997%	38
Wyoming*	Cheyenne	211,584	1,381	50	0.653%	51
Alabama	Birmingham	173,700	1,149	51	0.662%	50
West Virginia	Charleston	135,600	1,024	52	0.755%	46
South Carolina	Columbia	148,200	904	53	0.610%	52

Median Sales Price Sources: National Association of REALTORS® (www.realtor.org), except where *. For * locations, median home value data was derived from alternate sources.

Before calculating the tax, the median value was adjusted for differences in assessment practices using the area's reported median sales ratio.

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Table 24: Urban Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2013 – With Assessment Limitations

State	City	2013 2nd Quarter Median Sales Price#	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
Connecticut	Bridgeport	425,900	17,441	1	4.095%	1
New Jersey	Newark	398,100	8,703	2	2.186%	10
Illinois	Aurora	201,300	7,166	3	3.560%	2
Pennsylvania	Philadelphia	227,200	6,721	4	2.958%	4
Vermont	Burlington	280,900	6,200	5	2.207%	9
Oregon	Portland	264,200	5,847	6	2.213%	8
Wisconsin	Milwaukee	208,700	5,798	7	2.778%	5
New Hampshire	Manchester	233,200	5,678	8	2.435%	6
Maryland	Baltimore	262,700	5,570	9	2.120%	12
Alaska*	Anchorage	346,374	4,676	10	1.350%	26
Maine	Portland	233,400	4,336	11	1.858%	17
Rhode Island	Providence	233,900	4,169	12	1.783%	18
Iowa	Des Moines	172,700	4,093	13	2.370%	7
Texas	Houston	189,000	3,620	14	1.915%	16
AVERAGE			3,318		1.527%	
California	Los Angeles	378,400	3,296	15	0.871%	43
Illinois	Chicago	201,300	3,255	16	1.617%	19
Washington	Seattle	345,800	3,253	17	0.941%	38
New York	New York City	399,900	3,195	18	0.799%	45
Minnesota	Minneapolis	199,600	3,171	19	1.588%	20
Nebraska	Omaha	151,300	3,099	20	2.048%	13
Delaware	Wilmington	227,200	3,039	21	1.338%	27
Ohio	Columbus	148,600	2,983	22	2.008%	14
New York	Buffalo	132,000	2,872	23	2.176%	11
DC	Washington	403,000	2,766	24	0.686%	48
Massachusetts	Boston	382,200	2,745	25	0.718%	47
Tennessee	Memphis	136,200	2,649	26	1.945%	15
Missouri	Kansas City	159,600	2,427	27	1.521%	22
Florida	Jacksonville	166,500	2,388	28	1.434%	23
Montana*	Billings	228,643	2,379	29	1.041%	36
North Carolina	Charlotte	180,100	2,313	30	1.284%	31
Mississippi	Jackson	149,600	2,301	31	1.538%	21
North Dakota	Fargo	164,500	2,236	32	1.359%	25
New Mexico	Albuquerque	171,600	2,218	33	1.292%	30
South Dakota	Sioux Falls	158,300	2,187	34	1.382%	24
Utah	Salt Lake City	230,000	2,097	35	0.912%	41
Michigan*	Detroit	65,167	2,050	36	3.146%	3
Hawaii	Honolulu	660,100	1,987	37	0.301%	53
Nevada	Las Vegas	171,800	1,943	38	1.131%	33
Colorado	Denver	286,500	1,919	39	0.670%	49
Kentucky	Louisville	146,200	1,897	40	1.298%	29
Virginia	Virginia Beach	200,000	1,844	41	0.922%	39
Oklahoma	Oklahoma City	149,100	1,789	42	1.200%	32
Kansas	Wichita	127,800	1,686	43	1.319%	28
Arizona	Phoenix	183,300	1,677	44	0.915%	40
Arkansas	Little Rock	144,200	1,614	45	1.119%	35
Georgia	Atlanta	143,300	1,612	46	1.125%	34
Idaho	Boise	168,500	1,525	47	0.905%	42
Louisiana	New Orleans	177,200	1,482	48	0.837%	44
Indiana	Indianapolis	139,700	1,393	49	0.997%	37
Wyoming*	Cheyenne	211,584	1,381	50	0.653%	52
Alabama	Birmingham	173,700	1,149	51	0.662%	50
West Virginia	Charleston	135,600	1,024	52	0.755%	46
South Carolina	Columbia	148,200	970	53	0.655%	51

Median Sales Price Sources: National Association of REALTORS® (www.realtor.org), except where *. For * locations, median home value data was derived from alternate sources.

Before calculating the tax, the median value was adjusted for differences in assessment practices using the area's reported median sales ratio. Any applicable assessment limitation effects were then applied.

IV. Rankings Tables – Urban

**Table 25: Urban Commercial Property Taxes
Payable 2013**

\$100,000 VALUED PROPERTY

\$20,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	4,895	4.079%
2	Iowa	Des Moines	4,689	3.908%
3	Pennsylvania	Philadelphia	4,626	3.855%
4	Rhode Island	Providence	4,519	3.766%
5	Connecticut	Bridgeport	4,301	3.584%
6	Illinois	Chicago	4,231	3.526%
7	New York	New York City	3,980	3.316%
8	Illinois	Aurora	3,867	3.222%
9	Kansas	Wichita	3,588	2.990%
10	Tennessee	Memphis	3,579	2.982%
11	New York	Buffalo	3,518	2.932%
12	Minnesota	Minneapolis	3,434	2.861%
13	Indiana	Indianapolis	3,423	2.853%
14	Massachusetts	Boston	3,420	2.850%
15	Wisconsin	Milwaukee	3,364	2.804%
16	Missouri	Kansas City	3,319	2.766%
17	Maryland	Baltimore	3,301	2.751%
18	South Carolina	Columbia	3,295	2.746%
19	Mississippi	Jackson	3,129	2.608%
20	Colorado	Denver	2,913	2.428%
21	Texas	Houston	2,900	2.417%
22	Oregon	Portland	2,806	2.339%
23	Arizona	Phoenix	2,748	2.290%
24	Vermont	Burlington	2,625	2.188%
25	Louisiana	New Orleans	2,603	2.169%
AVERAGE			2,591	2.159%
26	Ohio	Columbus	2,560	2.133%
27	Nebraska	Omaha	2,488	2.074%
28	New Hampshire	Manchester	2,435	2.029%
29	Maine	Portland	2,329	1.941%
30	New Jersey	Newark	2,186	1.822%
31	Georgia	Atlanta	2,014	1.678%
32	Utah	Salt Lake City	1,946	1.621%
33	West Virginia	Charleston	1,934	1.611%
34	Florida	Jacksonville	1,881	1.568%
35	Idaho	Boise	1,872	1.560%
36	Montana	Billings	1,854	1.545%
37	New Mexico	Albuquerque	1,801	1.500%
38	South Dakota	Sioux Falls	1,780	1.484%
39	Arkansas	Little Rock	1,723	1.436%
40	Alabama	Birmingham	1,662	1.385%
41	Kentucky	Louisville	1,648	1.374%
42	DC	Washington	1,640	1.367%
43	Oklahoma	Oklahoma City	1,602	1.335%
44	North Carolina	Charlotte	1,541	1.284%
45	California	Los Angeles	1,469	1.224%
46	Alaska	Anchorage	1,440	1.200%
47	North Dakota	Fargo	1,400	1.167%
48	Delaware	Wilmington	1,368	1.140%
49	Nevada	Las Vegas	1,347	1.123%
50	Virginia	Virginia Beach	1,288	1.074%
51	Washington	Seattle	1,145	0.954%
52	Hawaii	Honolulu	1,072	0.894%
53	Wyoming	Cheyenne	812	0.676%

\$1 MILLION-VALUED PROPERTY

\$200,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	48,951	4.079%
2	Iowa	Des Moines	46,894	3.908%
3	Pennsylvania	Philadelphia	46,262	3.855%
4	Rhode Island	Providence	45,191	3.766%
5	Minnesota	Minneapolis	43,434	3.619%
6	Connecticut	Bridgeport	43,006	3.584%
7	Illinois	Chicago	42,313	3.526%
8	New York	New York City	39,796	3.316%
9	Illinois	Aurora	38,668	3.222%
10	Kansas	Wichita	35,879	2.990%
11	Tennessee	Memphis	35,788	2.982%
12	New York	Buffalo	35,180	2.932%
13	Wisconsin	Milwaukee	34,369	2.864%
14	Indiana	Indianapolis	34,230	2.853%
15	Massachusetts	Boston	34,197	2.850%
16	Missouri	Kansas City	33,191	2.766%
17	Maryland	Baltimore	33,015	2.751%
18	South Carolina	Columbia	32,948	2.746%
19	Mississippi	Jackson	31,293	2.608%
20	Arizona	Phoenix	29,581	2.465%
21	Colorado	Denver	29,135	2.428%
22	Texas	Houston	28,999	2.417%
23	Oregon	Portland	28,062	2.339%
AVERAGE			26,282	2.190%
24	Vermont	Burlington	26,251	2.188%
25	Louisiana	New Orleans	26,031	2.169%
26	Ohio	Columbus	25,596	2.133%
27	Nebraska	Omaha	24,884	2.074%
28	New Hampshire	Manchester	24,348	2.029%
29	Maine	Portland	23,292	1.941%
30	Florida	Jacksonville	22,036	1.836%
31	New Jersey	Newark	21,861	1.822%
32	Idaho	Boise	20,572	1.714%
33	Georgia	Atlanta	20,137	1.678%
34	Utah	Salt Lake City	19,455	1.621%
35	West Virginia	Charleston	19,337	1.611%
36	Montana	Billings	18,537	1.545%
37	New Mexico	Albuquerque	18,006	1.500%
38	South Dakota	Sioux Falls	17,804	1.484%
39	Arkansas	Little Rock	17,231	1.436%
40	Alaska	Anchorage	17,200	1.433%
41	Alabama	Birmingham	16,624	1.385%
42	Kentucky	Louisville	16,482	1.374%
43	DC	Washington	16,401	1.367%
44	Oklahoma	Oklahoma City	16,024	1.335%
45	North Carolina	Charlotte	15,413	1.284%
46	California	Los Angeles	14,691	1.224%
47	North Dakota	Fargo	14,001	1.167%
48	Delaware	Wilmington	13,679	1.140%
49	Nevada	Las Vegas	13,473	1.123%
50	Virginia	Virginia Beach	12,885	1.074%
51	Washington	Seattle	11,452	0.954%
52	Hawaii	Honolulu	10,725	0.894%
53	Wyoming	Cheyenne	8,116	0.676%

**Table 25 (cont'd.): Urban Commercial Property Taxes
Payable 2013**

\$25 MILLION-VALUED PROPERTY

\$5,000,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	1,223,773	4.079%
2	Iowa	Des Moines	1,172,352	3.908%
3	Pennsylvania	Philadelphia	1,156,550	3.855%
4	Rhode Island	Providence	1,129,763	3.766%
5	Minnesota	Minneapolis	1,124,380	3.748%
6	Connecticut	Bridgeport	1,075,150	3.584%
7	Illinois	Chicago	1,057,835	3.526%
8	New York	New York City	994,895	3.316%
9	Illinois	Aurora	966,691	3.222%
10	Kansas	Wichita	896,968	2.990%
11	Tennessee	Memphis	894,700	2.982%
12	New York	Buffalo	879,500	2.932%
13	Wisconsin	Milwaukee	861,168	2.871%
14	Indiana	Indianapolis	855,750	2.853%
15	Massachusetts	Boston	854,930	2.850%
16	Arizona	Phoenix	841,379	2.805%
17	Missouri	Kansas City	829,770	2.766%
18	Maryland	Baltimore	825,364	2.751%
19	South Carolina	Columbia	823,703	2.746%
20	Mississippi	Jackson	782,325	2.608%
21	Colorado	Denver	728,370	2.428%
22	Texas	Houston	724,979	2.417%
23	Oregon	Portland	701,554	2.339%
	AVERAGE		664,801	2.216%
24	Vermont	Burlington	656,266	2.188%
25	Louisiana	New Orleans	650,767	2.169%
26	Ohio	Columbus	639,893	2.133%
27	Nebraska	Omaha	622,092	2.074%
28	DC	Washington	616,075	2.054%
29	New Hampshire	Manchester	608,690	2.029%
30	Maine	Portland	582,300	1.941%
31	Florida	Jacksonville	561,962	1.873%
32	Idaho	Boise	558,779	1.863%
33	New Jersey	Newark	546,526	1.822%
34	Georgia	Atlanta	503,421	1.678%
35	Utah	Salt Lake City	486,381	1.621%
36	West Virginia	Charleston	483,421	1.611%
37	Montana	Billings	463,426	1.545%
38	New Mexico	Albuquerque	450,146	1.500%
39	South Dakota	Sioux Falls	445,095	1.484%
40	Alaska	Anchorage	437,469	1.458%
41	Arkansas	Little Rock	430,765	1.436%
42	Alabama	Birmingham	415,610	1.385%
43	Kentucky	Louisville	412,053	1.374%
44	Oklahoma	Oklahoma City	400,611	1.335%
45	North Carolina	Charlotte	385,320	1.284%
46	California	Los Angeles	367,270	1.224%
47	North Dakota	Fargo	350,036	1.167%
48	Delaware	Wilmington	341,963	1.140%
49	Nevada	Las Vegas	336,835	1.123%
50	Virginia	Virginia Beach	322,124	1.074%
51	Washington	Seattle	286,290	0.954%
52	Hawaii	Honolulu	268,119	0.894%
53	Wyoming	Cheyenne	202,890	0.676%

IV. Rankings Tables – Urban

**Table 26: Urban Industrial Property Taxes (50% Personal Property)
Payable 2013**

\$100,000 VALUED PROPERTY
\$50,000 Machinery and Equipment
\$40,000 Inventories
\$10,000 Fixtures

\$1 MILLION-VALUED PROPERTY
\$500,000 Machinery and Equipment
\$400,000 Inventories
\$100,000 Fixtures

Rank	State	City	Net Tax	ETR	Rank	State	City	Net Tax	ETR
1	Iowa	Des Moines	7,362	3.681%	1	Iowa	Des Moines	73,624	3.681%
2	South Carolina	Columbia	7,225	3.612%	2	South Carolina	Columbia	72,248	3.612%
3	Michigan	Detroit	6,004	3.002%	3	Michigan	Detroit	60,041	3.002%
4	Tennessee	Memphis	5,446	2.723%	4	Tennessee	Memphis	54,460	2.723%
5	Mississippi	Jackson	5,216	2.608%	5	Mississippi	Jackson	52,155	2.608%
6	Texas	Houston	5,118	2.559%	6	Texas	Houston	51,179	2.559%
7	Pennsylvania	Philadelphia	4,626	2.313%	7	Pennsylvania	Philadelphia	46,262	2.313%
8	Indiana	Indianapolis	4,500	2.250%	8	Indiana	Indianapolis	45,000	2.250%
9	Missouri	Kansas City	4,391	2.195%	9	Missouri	Kansas City	43,906	2.195%
10	Louisiana	New Orleans	4,382	2.191%	10	Louisiana	New Orleans	43,823	2.191%
11	Illinois	Chicago	4,303	2.152%	11	Minnesota	Minneapolis	43,434	2.172%
12	New York	New York City	3,980	1.990%	12	Illinois	Chicago	43,031	2.152%
13	Connecticut	Bridgeport	3,965	1.982%	13	Arizona	Phoenix	42,262	2.113%
14	Rhode Island	Providence	3,961	1.981%	14	New York	New York City	39,796	1.990%
15	Colorado	Denver	3,889	1.944%	15	Connecticut	Bridgeport	39,649	1.982%
16	Illinois	Aurora	3,867	1.933%	16	Rhode Island	Providence	39,611	1.981%
17	Oregon	Portland	3,742	1.871%	17	Colorado	Denver	38,887	1.944%
18	New York	Buffalo	3,518	1.759%	18	Illinois	Aurora	38,668	1.933%
19	Minnesota	Minneapolis	3,434	1.717%	19	Oregon	Portland	37,416	1.871%
20	Nebraska	Omaha	3,368	1.684%	20	New York	Buffalo	35,180	1.759%
21	Kansas	Wichita	3,286	1.643%	21	Nebraska	Omaha	33,683	1.684%
22	Georgia	Atlanta	3,220	1.610%	22	Kansas	Wichita	32,864	1.643%
23	West Virginia	Charleston	3,205	1.603%	AVERAGE			32,691	1.635%
24	Ohio	Columbus	3,176	1.588%	23	Georgia	Atlanta	32,203	1.610%
AVERAGE			3,168	1.584%	24	West Virginia	Charleston	32,051	1.603%
25	Massachusetts	Boston	3,132	1.566%	25	Ohio	Columbus	31,758	1.588%
26	Wisconsin	Milwaukee	3,077	1.539%	26	Wisconsin	Milwaukee	31,498	1.575%
27	Vermont	Burlington	2,957	1.479%	27	Massachusetts	Boston	31,321	1.566%
28	Oklahoma	Oklahoma City	2,875	1.438%	28	Alaska	Anchorage	29,648	1.482%
29	Arkansas	Little Rock	2,845	1.422%	29	Vermont	Burlington	29,571	1.479%
30	Arizona	Phoenix	2,748	1.374%	30	Florida	Jacksonville	29,406	1.470%
31	Maryland	Baltimore	2,742	1.371%	31	DC	Washington	29,151	1.458%
32	Alaska	Anchorage	2,685	1.342%	32	Oklahoma	Oklahoma City	28,751	1.438%
33	Utah	Salt Lake City	2,612	1.306%	33	Arkansas	Little Rock	28,447	1.422%
34	Florida	Jacksonville	2,526	1.263%	34	Idaho	Boise	27,984	1.399%
35	Montana	Billings	2,518	1.259%	35	Maryland	Baltimore	27,423	1.371%
36	New Hampshire	Manchester	2,435	1.217%	36	Utah	Salt Lake City	26,125	1.306%
37	New Mexico	Albuquerque	2,429	1.215%	37	Montana	Billings	25,177	1.259%
38	Alabama	Birmingham	2,218	1.109%	38	New Hampshire	Manchester	24,348	1.217%
39	New Jersey	Newark	2,186	1.093%	39	New Mexico	Albuquerque	24,292	1.215%
40	Maine	Portland	2,135	1.068%	40	Alabama	Birmingham	22,184	1.109%
41	North Carolina	Charlotte	2,055	1.028%	41	New Jersey	Newark	21,861	1.093%
42	California	Los Angeles	1,959	0.979%	42	Maine	Portland	21,351	1.068%
43	Idaho	Boise	1,872	0.936%	43	North Carolina	Charlotte	20,550	1.028%
44	Nevada	Las Vegas	1,806	0.903%	44	California	Los Angeles	19,588	0.979%
45	South Dakota	Sioux Falls	1,780	0.890%	45	Nevada	Las Vegas	18,063	0.903%
46	DC	Washington	1,640	0.820%	46	South Dakota	Sioux Falls	17,804	0.890%
47	Washington	Seattle	1,554	0.777%	47	Washington	Seattle	15,542	0.777%
48	Kentucky	Louisville	1,554	0.777%	48	Kentucky	Louisville	15,540	0.777%
49	North Dakota	Fargo	1,400	0.700%	49	North Dakota	Fargo	14,001	0.700%
50	Delaware	Wilmington	1,368	0.684%	50	Delaware	Wilmington	13,679	0.684%
51	Wyoming	Cheyenne	1,294	0.647%	51	Wyoming	Cheyenne	12,942	0.647%
52	Hawaii	Honolulu	1,179	0.589%	52	Hawaii	Honolulu	11,789	0.589%
53	Virginia	Virginia Beach	1,140	0.570%	53	Virginia	Virginia Beach	11,405	0.570%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

Table 26 (cont'd.): Urban Industrial Property Taxes (50% Personal Property)

Payable 2013				
\$25 MILLION-VALUED PROPERTY				
\$12,500,000 Machinery and Equipment				
\$10,000,000 Inventories				
\$2,500,000 Fixtures				
Rank	State	City	Net Tax	ETR
1	Iowa	Des Moines	1,840,593	3.681%
2	South Carolina	Columbia	1,806,200	3.612%
3	Michigan	Detroit	1,501,031	3.002%
4	Tennessee	Memphis	1,361,500	2.723%
5	Mississippi	Jackson	1,303,875	2.608%
6	Texas	Houston	1,279,481	2.559%
7	Arizona	Phoenix	1,158,389	2.317%
8	Pennsylvania	Philadelphia	1,156,550	2.313%
9	Indiana	Indianapolis	1,125,000	2.250%
10	Minnesota	Minneapolis	1,124,380	2.249%
11	Missouri	Kansas City	1,097,654	2.195%
12	Louisiana	New Orleans	1,095,577	2.191%
13	Illinois	Chicago	1,075,780	2.152%
14	New York	New York City	994,895	1.990%
15	Connecticut	Bridgeport	991,231	1.982%
16	Rhode Island	Providence	990,263	1.981%
17	Colorado	Denver	972,176	1.944%
18	Illinois	Aurora	966,691	1.933%
19	DC	Washington	956,075	1.912%
20	Oregon	Portland	935,406	1.871%
21	New York	Buffalo	879,500	1.759%
22	Nebraska	Omaha	842,066	1.684%
		AVERAGE	825,441	1.651%
23	Kansas	Wichita	821,592	1.643%
24	Georgia	Atlanta	805,065	1.610%
25	West Virginia	Charleston	801,286	1.603%
26	Ohio	Columbus	793,938	1.588%
27	Wisconsin	Milwaukee	789,398	1.579%
28	Massachusetts	Boston	783,020	1.566%
29	Alaska	Anchorage	748,669	1.497%
30	Florida	Jacksonville	746,212	1.492%
31	Idaho	Boise	744,067	1.488%
32	Vermont	Burlington	739,265	1.479%
33	Oklahoma	Oklahoma City	718,786	1.438%
34	Arkansas	Little Rock	711,165	1.422%
35	Maryland	Baltimore	685,567	1.371%
36	Utah	Salt Lake City	653,121	1.306%
37	Montana	Billings	629,434	1.259%
38	New Hampshire	Manchester	608,690	1.217%
39	New Mexico	Albuquerque	607,306	1.215%
40	Alabama	Birmingham	554,610	1.109%
41	New Jersey	Newark	546,526	1.093%
42	Maine	Portland	533,775	1.068%
43	North Carolina	Charlotte	513,760	1.028%
44	California	Los Angeles	489,694	0.979%
45	Nevada	Las Vegas	451,572	0.903%
46	South Dakota	Sioux Falls	445,095	0.890%
47	Washington	Seattle	388,551	0.777%
48	Kentucky	Louisville	388,503	0.777%
49	North Dakota	Fargo	350,036	0.700%
50	Delaware	Wilmington	341,963	0.684%
51	Wyoming	Cheyenne	323,559	0.647%
52	Hawaii	Honolulu	294,717	0.589%
53	Virginia	Virginia Beach	285,124	0.570%

IV. Rankings Tables – Urban

**Table 27: Urban Industrial Property Taxes (60% Personal Property)
Payable 2013**

\$100,000 VALUED PROPERTY
\$75,000 Machinery and Equipment
\$60,000 Inventories
\$15,000 Fixtures

\$1 MILLION-VALUED PROPERTY
\$750,000 Machinery and Equipment
\$600,000 Inventories
\$150,000 Fixtures

Rank	State	City	Net Tax	ETR	Rank	State	City	Net Tax	ETR
1	South Carolina	Columbia	8,740	3.496%	1	South Carolina	Columbia	87,399	3.496%
2	Iowa	Des Moines	7,362	2.945%	2	Iowa	Des Moines	73,624	2.945%
3	Michigan	Detroit	6,920	2.768%	3	Michigan	Detroit	69,202	2.768%
4	Tennessee	Memphis	6,613	2.645%	4	Tennessee	Memphis	66,130	2.645%
5	Mississippi	Jackson	6,519	2.608%	5	Mississippi	Jackson	65,194	2.608%
6	Texas	Houston	6,397	2.559%	6	Texas	Houston	63,974	2.559%
7	Louisiana	New Orleans	5,494	2.198%	7	Louisiana	New Orleans	54,943	2.198%
8	Indiana	Indianapolis	5,400	2.160%	8	Indiana	Indianapolis	54,000	2.160%
9	Missouri	Kansas City	5,194	2.078%	9	Missouri	Kansas City	51,943	2.078%
10	Pennsylvania	Philadelphia	4,626	1.850%	10	Arizona	Phoenix	51,772	2.071%
11	Colorado	Denver	4,620	1.848%	11	Pennsylvania	Philadelphia	46,262	1.850%
12	Oregon	Portland	4,443	1.777%	12	Colorado	Denver	46,201	1.848%
13	Illinois	Chicago	4,303	1.721%	13	Oregon	Portland	44,432	1.777%
14	Rhode Island	Providence	4,240	1.696%	14	Minnesota	Minneapolis	43,434	1.737%
15	Connecticut	Bridgeport	4,111	1.645%	15	Illinois	Chicago	43,031	1.721%
16	Nebraska	Omaha	4,028	1.611%	16	Rhode Island	Providence	42,401	1.696%
17	Georgia	Atlanta	4,000	1.600%	17	Connecticut	Bridgeport	41,114	1.645%
18	West Virginia	Charleston	4,000	1.600%	18	Nebraska	Omaha	40,282	1.611%
19	New York	New York City	3,980	1.592%	19	Georgia	Atlanta	40,000	1.600%
20	Illinois	Aurora	3,867	1.547%	20	West Virginia	Charleston	39,998	1.600%
21	Oklahoma	Oklahoma City	3,671	1.468%	21	New York	New York City	39,796	1.592%
	AVERAGE		3,560	1.424%	22	DC	Washington	39,351	1.574%
22	Arkansas	Little Rock	3,546	1.418%	23	Illinois	Aurora	38,668	1.547%
23	New York	Buffalo	3,518	1.407%	24	Alaska	Anchorage	37,428	1.497%
24	Alaska	Anchorage	3,463	1.385%		AVERAGE		37,087	1.424%
25	Kansas	Wichita	3,437	1.375%	25	Oklahoma	Oklahoma City	36,706	1.468%
26	Minnesota	Minneapolis	3,434	1.373%	26	Arkansas	Little Rock	35,457	1.418%
27	Massachusetts	Boston	3,292	1.317%	27	New York	Buffalo	35,180	1.407%
28	Vermont	Burlington	3,230	1.292%	28	Florida	Jacksonville	34,934	1.397%
29	Wisconsin	Milwaukee	3,221	1.288%	29	Kansas	Wichita	34,371	1.375%
30	Ohio	Columbus	3,176	1.270%	30	Idaho	Boise	33,543	1.342%
31	Utah	Salt Lake City	3,113	1.245%	31	Wisconsin	Milwaukee	32,934	1.317%
32	Florida	Jacksonville	3,079	1.232%	32	Massachusetts	Boston	32,919	1.317%
33	Maryland	Baltimore	3,022	1.209%	33	Vermont	Burlington	32,301	1.292%
34	Montana	Billings	3,016	1.206%	34	Ohio	Columbus	31,758	1.270%
35	New Mexico	Albuquerque	2,901	1.160%	35	Utah	Salt Lake City	31,127	1.245%
36	Arizona	Phoenix	2,748	1.099%	36	Maryland	Baltimore	30,219	1.209%
37	Alabama	Birmingham	2,635	1.054%	37	Montana	Billings	30,158	1.206%
38	North Carolina	Charlotte	2,440	0.976%	38	New Mexico	Albuquerque	29,007	1.160%
39	New Hampshire	Manchester	2,435	0.974%	39	Alabama	Birmingham	26,354	1.054%
40	California	Los Angeles	2,326	0.930%	40	North Carolina	Charlotte	24,404	0.976%
41	Maine	Portland	2,232	0.893%	41	New Hampshire	Manchester	24,348	0.974%
42	New Jersey	Newark	2,186	0.874%	42	California	Los Angeles	23,260	0.930%
43	Nevada	Las Vegas	2,150	0.860%	43	Maine	Portland	22,322	0.893%
44	Idaho	Boise	1,872	0.749%	44	New Jersey	Newark	21,861	0.874%
45	Washington	Seattle	1,861	0.744%	45	Nevada	Las Vegas	21,505	0.860%
46	South Dakota	Sioux Falls	1,780	0.712%	46	Washington	Seattle	18,610	0.744%
47	Kentucky	Louisville	1,696	0.678%	47	South Dakota	Sioux Falls	17,804	0.712%
48	DC	Washington	1,640	0.656%	48	Kentucky	Louisville	16,961	0.678%
49	Wyoming	Cheyenne	1,539	0.616%	49	Wyoming	Cheyenne	15,392	0.616%
50	North Dakota	Fargo	1,400	0.560%	50	North Dakota	Fargo	14,001	0.560%
51	Delaware	Wilmington	1,368	0.547%	51	Delaware	Wilmington	13,679	0.547%
52	Virginia	Virginia Beach	1,214	0.486%	52	Virginia	Virginia Beach	12,145	0.486%
53	Hawaii	Honolulu	1,179	0.472%	53	Hawaii	Honolulu	11,789	0.472%

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Table 27 (cont'd.): Urban Industrial Property Taxes (60% Personal Property)

Payable 2013				
<u>\$25 MILLION-VALUED PROPERTY</u>				
\$18,750,000 Machinery and Equipment				
\$15,000,000 Inventories				
\$3,750,000 Fixtures				
Rank	State	City	Net Tax	ETR
1	South Carolina	Columbia	2,184,980	3.496%
2	Iowa	Des Moines	1,840,593	2.945%
3	Michigan	Detroit	1,730,044	2.768%
4	Tennessee	Memphis	1,653,250	2.645%
5	Mississippi	Jackson	1,629,844	2.608%
6	Texas	Houston	1,599,351	2.559%
7	Arizona	Phoenix	1,396,146	2.234%
8	Louisiana	New Orleans	1,373,583	2.198%
9	Indiana	Indianapolis	1,350,000	2.160%
10	Missouri	Kansas City	1,298,566	2.078%
11	DC	Washington	1,211,075	1.938%
12	Pennsylvania	Philadelphia	1,156,550	1.850%
13	Colorado	Denver	1,155,030	1.848%
14	Minnesota	Minneapolis	1,124,380	1.799%
15	Oregon	Portland	1,110,795	1.777%
16	Illinois	Chicago	1,075,780	1.721%
17	Rhode Island	Providence	1,060,013	1.696%
18	Connecticut	Bridgeport	1,027,854	1.645%
19	Nebraska	Omaha	1,007,046	1.611%
20	Georgia	Atlanta	1,000,008	1.600%
21	West Virginia	Charleston	999,952	1.600%
22	New York	New York City	994,895	1.592%
23	Illinois	Aurora	966,691	1.547%
24	Alaska	Anchorage	943,169	1.509%
	AVERAGE		935,343	1.497%
25	Oklahoma	Oklahoma City	917,646	1.468%
26	Arkansas	Little Rock	886,415	1.418%
27	Florida	Jacksonville	884,400	1.415%
28	Idaho	Boise	883,032	1.413%
29	New York	Buffalo	879,500	1.407%
30	Kansas	Wichita	859,280	1.375%
31	Wisconsin	Milwaukee	825,283	1.320%
32	Massachusetts	Boston	822,970	1.317%
33	Vermont	Burlington	807,521	1.292%
34	Ohio	Columbus	793,938	1.270%
35	Utah	Salt Lake City	778,176	1.245%
36	Maryland	Baltimore	755,466	1.209%
37	Montana	Billings	753,939	1.206%
38	New Mexico	Albuquerque	725,176	1.160%
39	Alabama	Birmingham	658,860	1.054%
40	North Carolina	Charlotte	610,090	0.976%
41	New Hampshire	Manchester	608,690	0.974%
42	California	Los Angeles	581,511	0.930%
43	Maine	Portland	558,038	0.893%
44	New Jersey	Newark	546,526	0.874%
45	Nevada	Las Vegas	537,625	0.860%
46	Washington	Seattle	465,247	0.744%
47	South Dakota	Sioux Falls	445,095	0.712%
48	Kentucky	Louisville	424,028	0.678%
49	Wyoming	Cheyenne	384,796	0.616%
50	North Dakota	Fargo	350,036	0.560%
51	Delaware	Wilmington	341,963	0.547%
52	Virginia	Virginia Beach	303,625	0.486%
53	Hawaii	Honolulu	294,717	0.472%

IV. Rankings Tables – Urban

**Table 28: Urban Apartment Property Taxes
Payable 2013**

<u>\$600,000 VALUED PROPERTY</u>				
<u>\$30,000 Fixtures</u>				
Rank	State	City	Net Tax	ETR
1	Connecticut	Bridgeport	28,862	4.581%
2	Iowa	Des Moines	28,136	4.466%
3	Michigan	Detroit	26,530	4.211%
4	New York	New York City	26,235	4.164%
5	Illinois	Aurora	23,201	3.683%
6	New York	Buffalo	21,108	3.350%
7	Rhode Island	Providence	19,392	3.078%
8	Tennessee	Memphis	19,372	3.075%
9	Wisconsin	Milwaukee	18,006	2.858%
10	Pennsylvania	Philadelphia	17,749	2.817%
11	Mississippi	Jackson	16,429	2.608%
12	Texas	Houston	16,062	2.549%
13	Ohio	Columbus	15,357	2.438%
14	South Carolina	Columbia	15,224	2.416%
15	Maryland	Baltimore	14,776	2.345%
16	Oregon	Portland	14,733	2.339%
17	New Hampshire	Manchester	14,609	2.319%
18	Vermont	Burlington	14,118	2.241%
19	Illinois	Chicago	14,018	2.225%
20	New Jersey	Newark	13,117	2.082%
21	Nebraska	Omaha	12,950	2.056%
22	Minnesota	Minneapolis	12,850	2.040%
	AVERAGE		12,355	1.961%
23	Maine	Portland	12,228	1.941%
24	Florida	Jacksonville	11,379	1.806%
25	Indiana	Indianapolis	11,292	1.792%
26	Idaho	Boise	11,232	1.783%
27	South Dakota	Sioux Falls	10,682	1.696%
28	Georgia	Atlanta	10,494	1.666%
29	West Virginia	Charleston	10,013	1.589%
30	Missouri	Kansas City	9,927	1.576%
31	Louisiana	New Orleans	9,186	1.458%
32	Arkansas	Little Rock	9,077	1.441%
33	Kansas	Wichita	8,989	1.427%
34	Alaska	Anchorage	8,795	1.396%
35	Alabama	Birmingham	8,724	1.385%
36	New Mexico	Albuquerque	8,523	1.353%
37	North Dakota	Fargo	8,401	1.333%
38	Oklahoma	Oklahoma City	8,183	1.299%
39	North Carolina	Charlotte	8,092	1.284%
40	Delaware	Wilmington	8,026	1.274%
41	Massachusetts	Boston	7,976	1.266%
42	Arizona	Phoenix	7,735	1.228%
43	California	Los Angeles	7,713	1.224%
44	Kentucky	Louisville	7,619	1.209%
45	Nevada	Las Vegas	7,051	1.119%
46	Montana	Billings	6,741	1.070%
47	Virginia	Virginia Beach	6,399	1.016%
48	Washington	Seattle	5,951	0.945%
49	Utah	Salt Lake City	5,820	0.924%
50	DC	Washington	5,069	0.805%
51	Colorado	Denver	4,711	0.748%
52	Wyoming	Cheyenne	3,966	0.630%
53	Hawaii	Honolulu	2,008	0.319%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

V. Rankings Tables – Largest 50 U.S. Cities

**Table 29: Top 50 Homestead Property Taxes
Payable 2013**

<u>\$150,000 VALUED PROPERTY</u>					<u>\$150,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS</u>				
<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>	<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>
1	Michigan	Detroit	4,988	3.325%	1	Michigan	Detroit	4,719	3.146%
2	Pennsylvania	Philadelphia	4,437	2.958%	2	Pennsylvania	Philadelphia	4,437	2.958%
3	Wisconsin	Milwaukee	4,113	2.742%	3	Wisconsin	Milwaukee	4,113	2.742%
4	Ohio	Cleveland	4,024	2.682%	4	Ohio	Cleveland	4,024	2.682%
5	Texas	San Antonio	3,953	2.635%	5	Texas	San Antonio	3,953	2.635%
6	Texas	Fort Worth	3,678	2.452%	6	Texas	Fort Worth	3,678	2.452%
7	Texas	El Paso	3,670	2.446%	7	Texas	El Paso	3,670	2.446%
8	Oregon	Portland	3,508	2.339%	8	Texas	Arlington	3,436	2.291%
9	Texas	Arlington	3,436	2.291%	9	Texas	Dallas	3,322	2.215%
10	Texas	Dallas	3,322	2.215%	10	Oregon	Portland	3,320	2.213%
11	Texas	Austin	3,261	2.174%	11	Texas	Austin	3,261	2.174%
12	Maryland	Baltimore	3,181	2.120%	12	Maryland	Baltimore	3,181	2.120%
13	Nebraska	Omaha	3,073	2.048%	13	Nebraska	Omaha	3,073	2.048%
14	Ohio	Columbus	3,011	2.008%	14	Ohio	Columbus	3,011	2.008%
15	Tennessee	Memphis	2,918	1.945%	15	Tennessee	Memphis	2,918	1.945%
16	Texas	Houston	2,843	1.896%	16	Texas	Houston	2,843	1.896%
17	Illinois	Chicago	2,311	1.541%	17	Illinois	Chicago	2,311	1.541%
18	Missouri	Kansas City	2,281	1.521%	18	Missouri	Kansas City	2,281	1.521%
	AVERAGE		2,260	1.507%	19	Minnesota	Minneapolis	2,237	1.498%
19	Florida	Miami	2,242	1.495%		AVERAGE		2,205	1.470%
20	Minnesota	Minneapolis	2,237	1.491%	20	Florida	Jacksonville	2,078	1.385%
21	Florida	Jacksonville	2,078	1.385%	21	Florida	Miami	2,077	1.385%
22	California	Oakland	2,060	1.373%	22	Kansas	Wichita	1,987	1.324%
23	Kansas	Wichita	1,987	1.324%	23	Oklahoma	Tulsa	1,983	1.322%
24	Oklahoma	Tulsa	1,983	1.322%	24	Kentucky	Louisville	1,946	1.298%
25	Kentucky	Louisville	1,946	1.298%	25	New Mexico	Albuquerque	1,928	1.285%
26	New Mexico	Albuquerque	1,928	1.285%	26	North Carolina	Charlotte	1,927	1.284%
27	North Carolina	Charlotte	1,927	1.284%	27	California	Oakland	1,925	1.283%
28	California	San Jose	1,856	1.237%	28	Oklahoma	Oklahoma City	1,800	1.200%
29	Oklahoma	Oklahoma City	1,800	1.200%	29	Georgia	Atlanta	1,782	1.188%
30	Georgia	Atlanta	1,782	1.188%	30	California	San Jose	1,708	1.139%
31	California	Fresno	1,760	1.173%	31	Nevada	Las Vegas	1,696	1.131%
32	California	Los Angeles	1,751	1.167%	32	Tennessee	Nashville	1,694	1.129%
33	California	San Francisco	1,699	1.133%	33	California	Fresno	1,682	1.121%
34	Nevada	Las Vegas	1,696	1.131%	34	Arizona	Tucson	1,658	1.105%
35	Tennessee	Nashville	1,694	1.129%	35	California	San Diego	1,564	1.043%
36	California	San Diego	1,691	1.128%	36	California	Sacramento	1,533	1.022%
37	Arizona	Tucson	1,658	1.105%	37	North Carolina	Raleigh	1,503	1.002%
38	California	Sacramento	1,631	1.087%	38	Indiana	Indianapolis	1,496	0.997%
39	California	Long Beach	1,581	1.054%	39	Washington	Seattle	1,411	0.941%
40	North Carolina	Raleigh	1,503	1.002%	40	Virginia	Virginia Beach	1,383	0.922%
41	Indiana	Indianapolis	1,496	0.997%	41	Arizona	Phoenix	1,372	0.915%
42	Arizona	Phoenix	1,438	0.959%	42	California	San Francisco	1,299	0.866%
43	Washington	Seattle	1,411	0.941%	43	California	Los Angeles	1,255	0.837%
44	Virginia	Virginia Beach	1,383	0.922%	44	Arizona	Mesa	1,092	0.728%
45	Arizona	Mesa	1,145	0.763%	45	New York	New York City	1,087	0.724%
46	New York	New York City	1,087	0.724%	46	California	Long Beach	1,057	0.705%
47	Colorado	Denver	1,005	0.670%	47	Colorado	Denver	1,005	0.670%
48	Colorado	Colorado Springs	706	0.471%	48	Colorado	Colorado Springs	706	0.471%
49	DC	Washington	661	0.441%	49	DC	Washington	661	0.441%
50	Massachusetts	Boston	175	0.117%	50	Massachusetts	Boston	175	0.117%

V. Rankings Tables – Largest 50 Cities

Table 29 (cont'd.): Top 50 Homestead Property Taxes Payable 2013

\$300,000 PROPERTY					\$300,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS				
Rank	State	City	Net Tax	ETR	Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	9,976	3.325%	1	Michigan	Detroit	9,437	3.146%
2	Pennsylvania	Philadelphia	8,874	2.958%	2	Pennsylvania	Philadelphia	8,874	2.958%
3	Wisconsin	Milwaukee	8,419	2.806%	3	Wisconsin	Milwaukee	8,419	2.806%
4	Texas	San Antonio	8,111	2.704%	4	Texas	San Antonio	8,111	2.704%
5	Ohio	Cleveland	8,047	2.682%	5	Ohio	Cleveland	8,047	2.682%
6	Texas	El Paso	7,580	2.527%	6	Texas	El Paso	7,580	2.527%
7	Texas	Fort Worth	7,555	2.518%	7	Texas	Fort Worth	7,555	2.518%
8	Texas	Arlington	7,066	2.355%	8	Texas	Arlington	7,066	2.355%
9	Oregon	Portland	7,016	2.339%	9	Texas	Dallas	6,817	2.272%
10	Texas	Dallas	6,817	2.272%	10	Texas	Austin	6,714	2.238%
11	Texas	Austin	6,714	2.238%	11	Oregon	Portland	6,640	2.213%
12	Maryland	Baltimore	6,361	2.120%	12	Maryland	Baltimore	6,361	2.120%
13	Nebraska	Omaha	6,145	2.048%	13	Nebraska	Omaha	6,145	2.048%
14	Ohio	Columbus	6,023	2.008%	14	Ohio	Columbus	6,023	2.008%
15	Tennessee	Memphis	5,835	1.945%	15	Tennessee	Memphis	5,835	1.945%
16	Texas	Houston	5,829	1.943%	16	Texas	Houston	5,829	1.943%
17	Florida	Miami	5,380	1.793%	17	Illinois	Chicago	5,070	1.690%
18	Illinois	Chicago	5,070	1.690%	18	Minnesota	Minneapolis	5,061	1.687%
19	Minnesota	Minneapolis	5,061	1.687%	19	Florida	Miami	5,050	1.683%
20	Florida	Jacksonville	4,900	1.633%	20	Florida	Jacksonville	4,900	1.633%
	AVERAGE		4,684	1.561%		AVERAGE		4,575	1.525%
21	Missouri	Kansas City	4,562	1.521%	21	Missouri	Kansas City	4,562	1.521%
22	Georgia	Atlanta	4,312	1.437%	22	Georgia	Atlanta	4,312	1.437%
23	California	Oakland	4,220	1.407%	23	Oklahoma	Tulsa	4,093	1.364%
24	Oklahoma	Tulsa	4,093	1.364%	24	Kansas	Wichita	4,019	1.340%
25	Kansas	Wichita	4,019	1.340%	25	California	Oakland	3,950	1.317%
26	New Mexico	Albuquerque	3,941	1.314%	26	New Mexico	Albuquerque	3,941	1.314%
27	Kentucky	Louisville	3,893	1.298%	27	Kentucky	Louisville	3,893	1.298%
28	North Carolina	Charlotte	3,853	1.284%	28	North Carolina	Charlotte	3,853	1.284%
29	California	San Jose	3,803	1.268%	29	Oklahoma	Oklahoma City	3,716	1.239%
30	Oklahoma	Oklahoma City	3,716	1.239%	30	California	San Jose	3,507	1.169%
31	California	Fresno	3,606	1.202%	31	California	Fresno	3,450	1.150%
32	California	Los Angeles	3,587	1.196%	32	Nevada	Las Vegas	3,393	1.131%
33	California	San Francisco	3,481	1.160%	33	Tennessee	Nashville	3,387	1.129%
34	California	San Diego	3,466	1.155%	34	Arizona	Tucson	3,315	1.105%
35	Nevada	Las Vegas	3,393	1.131%	35	California	San Diego	3,210	1.070%
36	Tennessee	Nashville	3,387	1.129%	36	California	Sacramento	3,145	1.048%
37	California	Sacramento	3,342	1.114%	37	North Carolina	Raleigh	3,006	1.002%
38	Arizona	Tucson	3,315	1.105%	38	Indiana	Indianapolis	2,991	0.997%
39	California	Long Beach	3,240	1.080%	39	Washington	Seattle	2,822	0.941%
40	North Carolina	Raleigh	3,006	1.002%	40	Virginia	Virginia Beach	2,766	0.922%
41	Indiana	Indianapolis	2,991	0.997%	41	Arizona	Phoenix	2,745	0.915%
42	Arizona	Phoenix	2,876	0.959%	42	California	San Francisco	2,681	0.894%
43	Washington	Seattle	2,822	0.941%	43	California	Los Angeles	2,596	0.865%
44	Virginia	Virginia Beach	2,766	0.922%	44	New York	New York City	2,352	0.784%
45	New York	New York City	2,352	0.784%	45	California	Long Beach	2,192	0.731%
46	Arizona	Mesa	2,289	0.763%	46	Arizona	Mesa	2,184	0.728%
47	Colorado	Denver	2,010	0.670%	47	Colorado	Denver	2,010	0.670%
48	DC	Washington	1,909	0.636%	48	DC	Washington	1,909	0.636%
49	Massachusetts	Boston	1,784	0.595%	49	Massachusetts	Boston	1,784	0.595%
50	Colorado	Colorado Springs	1,412	0.471%	50	Colorado	Colorado Springs	1,412	0.471%

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Table 30: Top 50 Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2013

State	City	2013 2nd Quarter Median Sales Price*	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
California	San Jose	808,500	10,403	1	1.287%	27
California	Oakland	706,300	10,072	2	1.426%	22
California	San Francisco	706,300	8,308	3	1.176%	32
Pennsylvania	Philadelphia	227,200	6,721	4	2.958%	2
Oregon	Portland	264,200	6,178	5	2.339%	8
Wisconsin	Milwaukee	208,700	5,798	6	2.778%	3
Maryland	Baltimore	262,700	5,570	7	2.120%	12
California	San Diego	469,000	5,464	8	1.165%	33
Texas	Austin	231,000	5,125	9	2.219%	11
Texas	San Antonio	175,500	4,659	10	2.655%	5
California	Los Angeles	378,400	4,547	11	1.202%	29
Texas	Fort Worth	181,800	4,500	12	2.475%	6
Florida	Miami	251,000	4,355	13	1.735%	17
Texas	Arlington	181,800	4,205	14	2.313%	9
California	Long Beach	378,400	4,107	15	1.085%	39
Texas	Dallas	181,800	4,063	16	2.235%	10
Texas	Houston	189,000	3,620	17	1.915%	16
AVERAGE			3,474		1.542%	
Texas	El Paso	138,600	3,372	18	2.433%	7
Ohio	Cleveland	122,700	3,291	19	2.682%	4
Illinois	Chicago	201,300	3,255	20	1.617%	18
Washington	Seattle	345,800	3,253	21	0.941%	43
New York	New York City	399,900	3,195	22	0.799%	45
Minnesota	Minneapolis	199,600	3,171	23	1.588%	19
Nebraska	Omaha	151,300	3,099	24	2.048%	13
Ohio	Columbus	148,600	2,983	25	2.008%	14
DC	Washington	403,000	2,766	26	0.686%	48
Massachusetts	Boston	382,200	2,745	27	0.718%	47
Tennessee	Memphis	136,200	2,649	28	1.945%	15
California	Sacramento	237,000	2,623	29	1.107%	37
Missouri	Kansas City	159,600	2,427	30	1.521%	20
Florida	Jacksonville	166,500	2,388	31	1.434%	21
North Carolina	Charlotte	180,100	2,313	32	1.284%	28
New Mexico	Albuquerque	171,600	2,218	33	1.292%	26
Michigan	Detroit	65,167	2,167	34	3.325%	1
California	Fresno	171,950	2,030	35	1.181%	31
North Carolina	Raleigh	198,800	1,992	36	1.002%	40
Tennessee	Nashville	175,500	1,981	37	1.129%	35
Nevada	Las Vegas	171,800	1,943	38	1.131%	34
Oklahoma	Tulsa	146,900	1,939	39	1.320%	23
Colorado	Denver	286,500	1,919	40	0.670%	49
Arizona	Tucson	171,700	1,897	41	1.105%	38
Kentucky	Louisville	146,200	1,897	42	1.298%	25
Virginia	Virginia Beach	200,000	1,844	43	0.922%	44
Oklahoma	Oklahoma City	149,100	1,789	44	1.200%	30
Arizona	Phoenix	183,300	1,757	45	0.959%	42
Kansas	Wichita	127,800	1,686	46	1.319%	24
Georgia	Atlanta	143,300	1,612	47	1.125%	36
Arizona	Mesa	183,300	1,399	48	0.763%	46
Indiana	Indianapolis	139,700	1,393	49	0.997%	41
Colorado	Colorado Springs	219,400	1,033	50	0.471%	50

Median Sales Price Sources: National Association of REALTORS

*Before calculating the tax, the median value was adjusted for differences in assessment practices using the area's reported median sales ratio.

V. Rankings Tables – Largest 50 Cities

Table 31: Top 50 Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2013 – With Assessment Limitations

State	City	2013 2nd Quarter Median Sales Price, Adjusted for Assessment Limitations*	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
California	San Jose	808,500	9,606	1	1.188%	29
California	Oakland	706,300	9,436	2	1.336%	22
Pennsylvania	Philadelphia	227,200	6,721	3	2.958%	2
California	San Francisco	706,300	6,425	4	0.910%	42
Oregon	Portland	264,200	5,847	5	2.213%	11
Wisconsin	Milwaukee	208,700	5,798	6	2.778%	3
Maryland	Baltimore	262,700	5,570	7	2.120%	12
Texas	Austin	231,000	5,125	8	2.219%	10
California	San Diego	469,000	5,066	9	1.080%	35
Texas	San Antonio	175,500	4,659	10	2.655%	5
Texas	Fort Worth	181,800	4,500	11	2.475%	6
Texas	Arlington	181,800	4,205	12	2.313%	8
Florida	Miami	251,000	4,079	13	1.625%	17
Texas	Dallas	181,800	4,063	14	2.235%	9
Texas	Houston	189,000	3,620	15	1.915%	16
Texas	El Paso	138,600	3,372	16	2.433%	7
AVERAGE			3,326		1.505%	
California	Los Angeles	378,400	3,296	17	0.871%	43
Ohio	Cleveland	122,700	3,291	18	2.682%	4
Illinois	Chicago	201,300	3,255	19	1.617%	18
Washington	Seattle	345,800	3,253	20	0.941%	39
New York	New York City	399,900	3,195	21	0.799%	44
Minnesota	Minneapolis	199,600	3,171	22	1.588%	19
Nebraska	Omaha	151,300	3,099	23	2.048%	13
Ohio	Columbus	148,600	2,983	24	2.008%	14
California	Long Beach	378,400	2,784	25	0.736%	45
DC	Washington	403,000	2,766	26	0.686%	48
Massachusetts	Boston	382,200	2,745	27	0.718%	47
Tennessee	Memphis	136,200	2,649	28	1.945%	15
California	Sacramento	237,000	2,468	29	1.041%	36
Missouri	Kansas City	159,600	2,427	30	1.521%	20
Florida	Jacksonville	166,500	2,388	31	1.434%	21
North Carolina	Charlotte	180,100	2,313	32	1.284%	27
New Mexico	Albuquerque	171,600	2,218	33	1.292%	26
Michigan	Detroit	65,167	2,050	34	3.146%	1
North Carolina	Raleigh	198,800	1,992	35	1.002%	37
Tennessee	Nashville	175,500	1,981	36	1.129%	31
Nevada	Las Vegas	171,800	1,943	37	1.131%	30
California	Fresno	171,950	1,941	38	1.129%	32
Oklahoma	Tulsa	146,900	1,939	39	1.320%	23
Colorado	Denver	286,500	1,919	40	0.670%	49
Arizona	Tucson	171,700	1,897	41	1.105%	34
Kentucky	Louisville	146,200	1,897	42	1.298%	25
Virginia	Virginia Beach	200,000	1,844	43	0.922%	40
Oklahoma	Oklahoma City	149,100	1,789	44	1.200%	28
Kansas	Wichita	127,800	1,686	45	1.319%	24
Arizona	Phoenix	183,300	1,677	46	0.915%	41
Georgia	Atlanta	143,300	1,612	47	1.125%	33
Indiana	Indianapolis	139,700	1,393	48	0.997%	38
Arizona	Mesa	183,300	1,335	49	0.728%	46
Colorado	Colorado Springs	219,400	1,033	50	0.471%	50

Median Sales Price Sources: National Association of REALTORS

*Before calculating the tax, the median value was adjusted for differences in assessment practices using the area's reported median sales ratio. Any applicable assessment limitation effects were then applied.

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

**Table 32: Top 50 Commercial Property Taxes
Payable 2013**

<u>\$100,000 VALUED PROPERTY</u>				<u>\$1 MILLION-VALUED PROPERTY</u>			
\$20,000 Fixtures				\$200,000 Fixtures			
Rank	State	City	Net Tax ETR	Rank	State	City	Net Tax ETR
1	Michigan	Detroit	4,895 4.079%	1	Michigan	Detroit	48,951 4.079%
2	Pennsylvania	Philadelphia	4,626 3.855%	2	Pennsylvania	Philadelphia	46,262 3.855%
3	Illinois	Chicago	4,231 3.526%	3	Minnesota	Minneapolis	43,620 3.635%
4	New York	New York City	3,980 3.316%	4	Illinois	Chicago	42,313 3.526%
5	Kansas	Wichita	3,588 2.990%	5	New York	New York City	39,796 3.316%
6	Tennessee	Memphis	3,579 2.982%	6	Kansas	Wichita	35,879 2.990%
7	Minnesota	Minneapolis	3,448 2.873%	7	Tennessee	Memphis	35,788 2.982%
8	Massachusetts	Boston	3,420 2.850%	8	Wisconsin	Milwaukee	34,369 2.864%
9	Wisconsin	Milwaukee	3,364 2.804%	9	Massachusetts	Boston	34,197 2.850%
10	Missouri	Kansas City	3,319 2.766%	10	Missouri	Kansas City	33,191 2.766%
11	Maryland	Baltimore	3,301 2.751%	11	Maryland	Baltimore	33,015 2.751%
12	Ohio	Cleveland	3,210 2.675%	12	Ohio	Cleveland	32,099 2.675%
13	Texas	Dallas	3,182 2.652%	13	Texas	Dallas	31,822 2.652%
14	Texas	Fort Worth	3,178 2.648%	14	Texas	Fort Worth	31,782 2.648%
15	Texas	San Antonio	3,089 2.574%	15	Texas	San Antonio	30,890 2.574%
16	Colorado	Denver	2,913 2.428%	16	Arizona	Tucson	30,870 2.573%
17	Texas	Houston	2,900 2.417%	17	Arizona	Phoenix	29,581 2.465%
18	Arizona	Tucson	2,881 2.401%	18	Colorado	Denver	29,135 2.428%
19	Texas	Arlington	2,844 2.370%	19	Texas	Houston	28,999 2.417%
20	Texas	El Paso	2,827 2.356%	20	Texas	Arlington	28,444 2.370%
21	Oregon	Portland	2,806 2.339%	21	Texas	El Paso	28,272 2.356%
22	Texas	Austin	2,792 2.327%	22	Oregon	Portland	28,062 2.339%
23	Arizona	Phoenix	2,748 2.290%	23	Texas	Austin	27,922 2.327%
24	Ohio	Columbus	2,560 2.133%	24	OHIO	Columbus	25,596 2.133%
25	Nebraska	Omaha	2,488 2.074%	AVERAGE	25,124 2.094%		
	AVERAGE	2,467 2.050%		25	Nebraska	Omaha	24,884 2.074%
26	Indiana	Indianapolis	2,282 1.902%	26	Florida	Miami	24,725 2.060%
27	Arizona	Mesa	2,181 1.818%	27	Arizona	Mesa	23,388 1.949%
28	Florida	Miami	2,092 1.743%	28	Indiana	Indianapolis	22,820 1.902%
29	Tennessee	Nashville	2,077 1.731%	29	Florida	Jacksonville	22,036 1.836%
30	Colorado	Colorado Springs	2,024 1.687%	30	Tennessee	Nashville	20,774 1.731%
31	Georgia	Atlanta	2,014 1.678%	31	Colorado	Colorado Springs	20,243 1.687%
32	Florida	Jacksonville	1,881 1.568%	32	Georgia	Atlanta	20,137 1.678%
33	New Mexico	Albuquerque	1,801 1.500%	33	New Mexico	Albuquerque	18,006 1.500%
34	California	Oakland	1,728 1.440%	34	California	Oakland	17,284 1.440%
35	Oklahoma	Tulsa	1,663 1.386%	35	Oklahoma	Tulsa	16,630 1.386%
36	Kentucky	Louisville	1,648 1.374%	36	Kentucky	Louisville	16,482 1.374%
37	DC	Washington	1,640 1.367%	37	DC	Washington	16,401 1.367%
38	Oklahoma	Oklahoma City	1,602 1.335%	38	Oklahoma	Oklahoma City	16,024 1.335%
39	California	San Jose	1,558 1.298%	39	California	San Jose	15,576 1.298%
40	North Carolina	Charlotte	1,541 1.284%	40	North Carolina	Charlotte	15,413 1.284%
41	California	Fresno	1,477 1.231%	41	California	Fresno	14,770 1.231%
42	California	Los Angeles	1,469 1.224%	42	California	Los Angeles	14,691 1.224%
43	California	San Francisco	1,426 1.188%	43	California	San Francisco	14,256 1.188%
44	California	San Diego	1,419 1.183%	44	California	San Diego	14,193 1.183%
45	California	Sacramento	1,369 1.141%	45	California	Sacramento	13,687 1.141%
46	Nevada	Las Vegas	1,347 1.123%	46	Nevada	Las Vegas	13,473 1.123%
47	California	Long Beach	1,327 1.106%	47	California	Long Beach	13,269 1.106%
48	Virginia	Virginia Beach	1,288 1.074%	48	Virginia	Virginia Beach	12,885 1.074%
49	North Carolina	Raleigh	1,185 0.988%	49	North Carolina	Raleigh	11,852 0.988%
50	Washington	Seattle	1,145 0.954%	50	Washington	Seattle	11,452 0.954%

V. Rankings Tables – Largest 50 Cities

**Table 32 (cont'd.): Top 50 Commercial Property Taxes
Payable 2013**

\$25 MILLION-VALUED PROPERTY

\$5,000,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	1,223,773	4.079%
2	Pennsylvania	Philadelphia	1,156,550	3.855%
3	Minnesota	Minneapolis	1,129,205	3.764%
4	Illinois	Chicago	1,057,835	3.526%
5	New York	New York City	994,895	3.316%
6	Kansas	Wichita	896,968	2.990%
7	Tennessee	Memphis	894,700	2.982%
8	Arizona	Tucson	871,933	2.906%
9	Wisconsin	Milwaukee	861,168	2.871%
10	Massachusetts	Boston	854,930	2.850%
11	Arizona	Phoenix	841,379	2.805%
12	Missouri	Kansas City	829,770	2.766%
13	Maryland	Baltimore	825,364	2.751%
14	Ohio	Cleveland	802,473	2.675%
15	Texas	Dallas	795,556	2.652%
16	Texas	Fort Worth	794,548	2.648%
17	Texas	San Antonio	772,248	2.574%
18	Colorado	Denver	728,370	2.428%
19	Texas	Houston	724,979	2.417%
20	Texas	Arlington	711,106	2.370%
21	Texas	El Paso	706,807	2.356%
22	Oregon	Portland	701,554	2.339%
23	Texas	Austin	698,059	2.327%
24	Arizona	Mesa	661,195	2.204%
25	Ohio	Columbus	639,893	2.133%
		AVERAGE	639,089	2.130%
26	Florida	Miami	631,161	2.104%
27	Nebraska	Omaha	622,092	2.074%
28	DC	Washington	616,075	2.054%
29	Indiana	Indianapolis	570,500	1.902%
30	Florida	Jacksonville	561,962	1.873%
31	Tennessee	Nashville	519,340	1.731%
32	Colorado	Colorado Springs	506,072	1.687%
33	Georgia	Atlanta	503,421	1.678%
34	New Mexico	Albuquerque	450,146	1.500%
35	California	Oakland	432,090	1.440%
36	Oklahoma	Tulsa	415,740	1.386%
37	Kentucky	Louisville	412,053	1.374%
38	Oklahoma	Oklahoma City	400,611	1.335%
39	California	San Jose	389,400	1.298%
40	North Carolina	Charlotte	385,320	1.284%
41	California	Fresno	369,262	1.231%
42	California	Los Angeles	367,270	1.224%
43	California	San Francisco	356,400	1.188%
44	California	San Diego	354,831	1.183%
45	California	Sacramento	342,180	1.141%
46	Nevada	Las Vegas	336,835	1.123%
47	California	Long Beach	331,714	1.106%
48	Virginia	Virginia Beach	322,124	1.074%
49	North Carolina	Raleigh	296,291	0.988%
50	Washington	Seattle	286,290	0.954%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

**Table 33: Top 50 Industrial Property Taxes (50% Personal Property)
Payable 2013**

<u>\$100,000 VALUED PROPERTY</u>				<u>\$1 MILLION-VALUED PROPERTY</u>					
\$50,000 Machinery and Equipment				\$500,000 Machinery and Equipment					
\$40,000 Inventories				\$400,000 Inventories					
\$10,000 Fixtures				\$100,000 Fixtures					
<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>	<u>Rank</u>	<u>State</u>	<u>Net Tax</u>	<u>ETR</u>	
1	Michigan	Detroit	6,004	3.002%	1	Michigan	60,041	3.002%	
2	Texas	Fort Worth	5,637	2.818%	2	Texas	56,368	2.818%	
3	Texas	Dallas	5,466	2.733%	3	Texas	54,658	2.733%	
4	Tennessee	Memphis	5,446	2.723%	4	Tennessee	54,460	2.723%	
5	Texas	San Antonio	5,387	2.693%	5	Texas	53,867	2.693%	
6	Texas	El Paso	5,217	2.609%	6	Texas	52,174	2.609%	
7	Texas	Arlington	5,163	2.582%	7	Texas	51,631	2.582%	
8	Texas	Houston	5,118	2.559%	8	Texas	51,179	2.559%	
9	Texas	Austin	4,926	2.463%	9	Texas	49,264	2.463%	
10	Pennsylvania	Philadelphia	4,626	2.313%	10	Pennsylvania	46,262	2.313%	
11	Indiana	Indianapolis	4,500	2.250%	11	Indiana	45,000	2.250%	
12	Missouri	Kansas City	4,391	2.195%	12	Missouri	43,906	2.195%	
13	Illinois	Chicago	4,303	2.152%	13	Minnesota	43,620	2.181%	
14	New York	New York City	3,980	1.990%	14	Arizona	43,342	2.167%	
15	Colorado	Denver	3,889	1.944%	15	Illinois	43,031	2.152%	
16	Oregon	Portland	3,742	1.871%	16	Arizona	42,262	2.113%	
17	Minnesota	Minneapolis	3,448	1.724%	17	New York	39,796	1.990%	
18	Nebraska	Omaha	3,368	1.684%	18	Colorado	38,887	1.944%	
19	Kansas	Wichita	3,286	1.643%	19	Oregon	37,416	1.871%	
20	Georgia	Atlanta	3,220	1.610%	20	Nebraska	33,683	1.684%	
AVERAGE			3,199	1.599%	AVERAGE			33,430	1.672%
21	Ohio	Columbus	3,176	1.588%	21	Florida	33,423	1.671%	
22	Tennessee	Nashville	3,161	1.581%	22	Arizona	32,913	1.646%	
23	Massachusetts	Boston	3,132	1.566%	23	Kansas	32,864	1.643%	
24	Wisconsin	Milwaukee	3,077	1.539%	24	Georgia	32,203	1.610%	
25	Arizona	Tucson	2,881	1.440%	25	Ohio	31,758	1.588%	
26	Oklahoma	Oklahoma City	2,875	1.438%	26	Tennessee	31,612	1.581%	
27	Florida	Miami	2,853	1.427%	27	Wisconsin	31,498	1.575%	
28	Arizona	Phoenix	2,748	1.374%	28	Massachusetts	31,321	1.566%	
29	Maryland	Baltimore	2,742	1.371%	29	Florida	29,406	1.470%	
30	Colorado	Colorado Springs	2,724	1.362%	30	DC	29,151	1.458%	
31	Oklahoma	Tulsa	2,686	1.343%	31	Oklahoma	28,751	1.438%	
32	Ohio	Cleveland	2,637	1.319%	32	Maryland	27,423	1.371%	
33	Florida	Jacksonville	2,526	1.263%	33	Colorado	27,241	1.362%	
34	New Mexico	Albuquerque	2,429	1.215%	34	Oklahoma	26,863	1.343%	
35	California	Oakland	2,304	1.152%	35	Ohio	26,371	1.319%	
36	Arizona	Mesa	2,181	1.091%	36	New Mexico	24,292	1.215%	
37	California	San Jose	2,077	1.038%	37	California	23,045	1.152%	
38	North Carolina	Charlotte	2,055	1.028%	38	California	20,768	1.038%	
39	California	Fresno	1,969	0.985%	39	North Carolina	20,550	1.028%	
40	California	Los Angeles	1,959	0.979%	40	California	19,694	0.985%	
41	California	San Francisco	1,901	0.950%	41	California	19,588	0.979%	
42	California	San Diego	1,892	0.946%	42	California	19,008	0.950%	
43	California	Sacramento	1,825	0.912%	43	California	18,924	0.946%	
44	Nevada	Las Vegas	1,806	0.903%	44	California	18,250	0.912%	
45	California	Long Beach	1,769	0.885%	45	Nevada	18,063	0.903%	
46	DC	Washington	1,640	0.820%	46	California	17,691	0.885%	
47	Washington	Seattle	1,554	0.777%	47	Washington	15,542	0.777%	
48	Kentucky	Louisville	1,554	0.777%	48	Kentucky	15,540	0.777%	
49	North Carolina	Raleigh	1,552	0.776%	49	North Carolina	15,518	0.776%	
50	Virginia	Virginia Beach	1,140	0.570%	50	Virginia	11,405	0.570%	

V. Rankings Tables – Largest 50 Cities

**Table 33 (cont'd.): Top 50 Industrial Property Taxes (50% Personal Property)
Payable 2013**

<u>\$25 MILLION-VALUED PROPERTY</u>				
\$12,500,000 Machinery and Equipment				
\$10,000,000 Inventories				
\$2,500,000 Fixtures				
Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	1,501,031	3.002%
2	Texas	Fort Worth	1,409,199	2.818%
3	Texas	Dallas	1,366,443	2.733%
4	Tennessee	Memphis	1,361,500	2.723%
5	Texas	San Antonio	1,346,670	2.693%
6	Texas	El Paso	1,304,362	2.609%
7	Texas	Arlington	1,290,784	2.582%
8	Texas	Houston	1,279,481	2.559%
9	Texas	Austin	1,231,600	2.463%
10	Arizona	Tucson	1,183,714	2.367%
11	Arizona	Phoenix	1,158,389	2.317%
12	Pennsylvania	Philadelphia	1,156,550	2.313%
13	Minnesota	Minneapolis	1,129,205	2.258%
14	Indiana	Indianapolis	1,125,000	2.250%
15	Missouri	Kansas City	1,097,654	2.195%
16	Illinois	Chicago	1,075,780	2.152%
17	New York	New York City	994,895	1.990%
18	Colorado	Denver	972,176	1.944%
19	DC	Washington	956,075	1.912%
20	Oregon	Portland	935,406	1.871%
21	Arizona	Mesa	899,325	1.799%
22	Florida	Miami	848,616	1.697%
		AVERAGE	847,173	1.694%
23	Nebraska	Omaha	842,066	1.684%
24	Kansas	Wichita	821,592	1.643%
25	Georgia	Atlanta	805,065	1.610%
26	Ohio	Columbus	793,938	1.588%
27	Tennessee	Nashville	790,300	1.581%
28	Wisconsin	Milwaukee	789,398	1.579%
29	Massachusetts	Boston	783,020	1.566%
30	Florida	Jacksonville	746,212	1.492%
31	Oklahoma	Oklahoma City	718,786	1.438%
32	Maryland	Baltimore	685,567	1.371%
33	Colorado	Colorado Springs	681,031	1.362%
34	Oklahoma	Tulsa	671,580	1.343%
35	Ohio	Cleveland	659,287	1.319%
36	New Mexico	Albuquerque	607,306	1.215%
37	California	Oakland	576,120	1.152%
38	California	San Jose	519,200	1.038%
39	North Carolina	Charlotte	513,760	1.028%
40	California	Fresno	492,350	0.985%
41	California	Los Angeles	489,694	0.979%
42	California	San Francisco	475,200	0.950%
43	California	San Diego	473,108	0.946%
44	California	Sacramento	456,240	0.912%
45	Nevada	Las Vegas	451,572	0.903%
46	California	Long Beach	442,285	0.885%
47	Washington	Seattle	388,551	0.777%
48	Kentucky	Louisville	388,503	0.777%
49	North Carolina	Raleigh	387,951	0.776%
50	Virginia	Virginia Beach	285,124	0.570%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

**Table 34: Top 50 Industrial Property Taxes (60% Personal Property)
Payable 2013**

<u>\$100,000 VALUED PROPERTY</u>				<u>\$1 MILLION-VALUED PROPERTY</u>					
\$75,000 Machinery and Equipment				\$750,000 Machinery and Equipment					
\$60,000 Inventories				\$600,000 Inventories					
\$15,000 Fixtures				\$150,000 Fixtures					
<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>	<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>
1	Texas	Fort Worth	7,046	2.818%	1	Texas	Fort Worth	70,460	2.818%
2	Michigan	Detroit	6,920	2.768%	2	Michigan	Detroit	69,202	2.768%
3	Texas	Dallas	6,832	2.733%	3	Texas	Dallas	68,322	2.733%
4	Texas	San Antonio	6,733	2.693%	4	Texas	San Antonio	67,333	2.693%
5	Tennessee	Memphis	6,613	2.645%	5	Tennessee	Memphis	66,130	2.645%
6	Texas	El Paso	6,522	2.609%	6	Texas	El Paso	65,218	2.609%
7	Texas	Arlington	6,454	2.582%	7	Texas	Arlington	64,539	2.582%
8	Texas	Houston	6,397	2.559%	8	Texas	Houston	63,974	2.559%
9	Texas	Austin	6,158	2.463%	9	Texas	Austin	61,580	2.463%
10	Indiana	Indianapolis	5,400	2.160%	10	Indiana	Indianapolis	54,000	2.160%
11	Missouri	Kansas City	5,194	2.078%	11	Arizona	Tucson	52,695	2.108%
12	Pennsylvania	Philadelphia	4,626	1.850%	12	Missouri	Kansas City	51,943	2.078%
13	Colorado	Denver	4,620	1.848%	13	Arizona	Phoenix	51,772	2.071%
14	Oregon	Portland	4,443	1.777%	14	Pennsylvania	Philadelphia	46,262	1.850%
15	Illinois	Chicago	4,303	1.721%	15	Colorado	Denver	46,201	1.848%
16	Nebraska	Omaha	4,028	1.611%	16	Oregon	Portland	44,432	1.777%
17	Georgia	Atlanta	4,000	1.600%	17	Minnesota	Minneapolis	43,620	1.745%
18	New York	New York City	3,980	1.592%	18	Illinois	Chicago	43,031	1.721%
19	Tennessee	Nashville	3,839	1.535%	19	Nebraska	Omaha	40,282	1.611%
	AVERAGE		3,707	1.483%	20	Arizona	Mesa	40,057	1.602%
20	Oklahoma	Oklahoma City	3,671	1.468%	21	Georgia	Atlanta	40,000	1.600%
21	Florida	Miami	3,505	1.402%	22	Florida	Miami	39,946	1.598%
22	Minnesota	Minneapolis	3,448	1.379%	23	New York	New York City	39,796	1.592%
23	Kansas	Wichita	3,437	1.375%	24	DC	Washington	39,351	1.574%
24	Oklahoma	Tulsa	3,326	1.330%		AVERAGE		39,236	1.569%
25	Massachusetts	Boston	3,292	1.317%	25	Tennessee	Nashville	38,386	1.535%
26	Colorado	Colorado Springs	3,249	1.300%	26	Oklahoma	Oklahoma City	36,706	1.468%
27	Wisconsin	Milwaukee	3,221	1.288%	27	Florida	Jacksonville	34,934	1.397%
28	Ohio	Columbus	3,176	1.270%	28	Kansas	Wichita	34,371	1.375%
29	Florida	Jacksonville	3,079	1.232%	29	Oklahoma	Tulsa	33,259	1.330%
30	Maryland	Baltimore	3,022	1.209%	30	Wisconsin	Milwaukee	32,934	1.317%
31	New Mexico	Albuquerque	2,901	1.160%	31	Massachusetts	Boston	32,919	1.317%
32	Arizona	Tucson	2,881	1.152%	32	Colorado	Colorado Springs	32,490	1.300%
33	Arizona	Phoenix	2,748	1.099%	33	Ohio	Columbus	31,758	1.270%
34	California	Oakland	2,737	1.095%	34	Maryland	Baltimore	30,219	1.209%
35	Ohio	Cleveland	2,637	1.055%	35	New Mexico	Albuquerque	29,007	1.160%
36	California	San Jose	2,466	0.986%	36	California	Oakland	27,366	1.095%
37	North Carolina	Charlotte	2,440	0.976%	37	Ohio	Cleveland	26,371	1.055%
38	California	Fresno	2,339	0.935%	38	California	San Jose	24,662	0.986%
39	California	Los Angeles	2,326	0.930%	39	North Carolina	Charlotte	24,404	0.976%
40	California	San Francisco	2,257	0.903%	40	California	Fresno	23,387	0.935%
41	California	San Diego	2,247	0.899%	41	California	Los Angeles	23,260	0.930%
42	Arizona	Mesa	2,181	0.873%	42	California	San Francisco	22,572	0.903%
43	California	Sacramento	2,167	0.867%	43	California	San Diego	22,473	0.899%
44	Nevada	Las Vegas	2,150	0.860%	44	California	Sacramento	21,671	0.867%
45	California	Long Beach	2,101	0.840%	45	Nevada	Las Vegas	21,505	0.860%
46	Washington	Seattle	1,861	0.744%	46	California	Long Beach	21,009	0.840%
47	North Carolina	Raleigh	1,827	0.731%	47	Washington	Seattle	18,610	0.744%
48	Kentucky	Louisville	1,696	0.678%	48	North Carolina	Raleigh	18,268	0.731%
49	DC	Washington	1,640	0.656%	49	Kentucky	Louisville	16,961	0.678%
50	Virginia	Virginia Beach	1,214	0.486%	50	Virginia	Virginia Beach	12,145	0.486%

V. Rankings Tables – Largest 50 Cities

**Table 34 (cont'd.): Top 50 Industrial Property Taxes (60% Personal Property)
Payable 2013**

\$25 MILLION-VALUED PROPERTY

\$18,750,000 Machinery and Equipment

\$15,000,000 Inventories

\$3,750,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Texas	Fort Worth	1,761,498	2.818%
2	Michigan	Detroit	1,730,044	2.768%
3	Texas	Dallas	1,708,053	2.733%
4	Texas	San Antonio	1,683,337	2.693%
5	Tennessee	Memphis	1,653,250	2.645%
6	Texas	El Paso	1,630,452	2.609%
7	Texas	Arlington	1,613,479	2.582%
8	Texas	Houston	1,599,351	2.559%
9	Texas	Austin	1,539,500	2.463%
10	Arizona	Tucson	1,417,550	2.268%
11	Arizona	Phoenix	1,396,146	2.234%
12	Indiana	Indianapolis	1,350,000	2.160%
13	Missouri	Kansas City	1,298,566	2.078%
14	DC	Washington	1,211,075	1.938%
15	Pennsylvania	Philadelphia	1,156,550	1.850%
16	Colorado	Denver	1,155,030	1.848%
17	Minnesota	Minneapolis	1,129,205	1.807%
18	Oregon	Portland	1,110,795	1.777%
19	Arizona	Mesa	1,077,923	1.725%
20	Illinois	Chicago	1,075,780	1.721%
21	Florida	Miami	1,011,707	1.619%
22	Nebraska	Omaha	1,007,046	1.611%
23	Georgia	Atlanta	1,000,008	1.600%
24	New York	New York City	994,895	1.592%
	AVERAGE		992,307	1.588%
25	Tennessee	Nashville	959,650	1.535%
26	Oklahoma	Oklahoma City	917,646	1.468%
27	Florida	Jacksonville	884,400	1.415%
28	Kansas	Wichita	859,280	1.375%
29	Oklahoma	Tulsa	831,480	1.330%
30	Wisconsin	Milwaukee	825,283	1.320%
31	Massachusetts	Boston	822,970	1.317%
32	Colorado	Colorado Springs	812,251	1.300%
33	Ohio	Columbus	793,938	1.270%
34	Maryland	Baltimore	755,466	1.209%
35	New Mexico	Albuquerque	725,176	1.160%
36	California	Oakland	684,143	1.095%
37	Ohio	Cleveland	659,287	1.055%
38	California	San Jose	616,550	0.986%
39	North Carolina	Charlotte	610,090	0.976%
40	California	Fresno	584,665	0.935%
41	California	Los Angeles	581,511	0.930%
42	California	San Francisco	564,300	0.903%
43	California	San Diego	561,816	0.899%
44	California	Sacramento	541,785	0.867%
45	Nevada	Las Vegas	537,625	0.860%
46	California	Long Beach	525,213	0.840%
47	Washington	Seattle	465,247	0.744%
48	North Carolina	Raleigh	456,696	0.731%
49	Kentucky	Louisville	424,028	0.678%
50	Virginia	Virginia Beach	303,625	0.486%

**Table 35: Top 50 Apartment Property Taxes
Payable 2013**

\$600,000 VALUED PROPERTY

\$30,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	26,530	4.211%
2	New York	New York City	26,235	4.164%
3	Tennessee	Memphis	19,372	3.075%
4	Ohio	Cleveland	19,259	3.057%
5	Wisconsin	Milwaukee	18,006	2.858%
6	Pennsylvania	Philadelphia	17,749	2.817%
7	Texas	San Antonio	17,049	2.706%
8	Texas	Houston	16,062	2.549%
9	Texas	Fort Worth	15,823	2.512%
10	Texas	Dallas	15,404	2.445%
11	Ohio	Columbus	15,357	2.438%
12	Texas	El Paso	15,250	2.421%
13	Texas	Austin	14,869	2.360%
14	Texas	Arlington	14,782	2.346%
15	Maryland	Baltimore	14,776	2.345%
16	Oregon	Portland	14,733	2.339%
17	Illinois	Chicago	14,018	2.225%
18	Nebraska	Omaha	12,950	2.056%
19	Minnesota	Minneapolis	12,850	2.040%
20	Florida	Miami	12,660	2.010%
21	Florida	Jacksonville	11,379	1.806%
	AVERAGE		11,358	1.803%
22	Indiana	Indianapolis	11,292	1.792%
23	Tennessee	Nashville	11,245	1.785%
24	Georgia	Atlanta	10,494	1.666%
25	Missouri	Kansas City	9,927	1.576%
26	California	Oakland	9,074	1.440%
27	Kansas	Wichita	8,989	1.427%
28	Oklahoma	Tulsa	8,826	1.401%
29	New Mexico	Albuquerque	8,523	1.353%
30	Oklahoma	Oklahoma City	8,183	1.299%
31	California	San Jose	8,177	1.298%
32	North Carolina	Charlotte	8,092	1.284%
33	Massachusetts	Boston	7,976	1.266%
34	Arizona	Tucson	7,866	1.249%
35	California	Fresno	7,755	1.231%
36	Arizona	Phoenix	7,735	1.228%
37	California	Los Angeles	7,713	1.224%
38	Kentucky	Louisville	7,619	1.209%
39	California	San Francisco	7,484	1.188%
40	California	San Diego	7,451	1.183%
41	California	Sacramento	7,186	1.141%
42	Nevada	Las Vegas	7,051	1.119%
43	California	Long Beach	6,966	1.106%
44	Virginia	Virginia Beach	6,399	1.016%
45	North Carolina	Raleigh	6,286	0.998%
46	Washington	Seattle	5,951	0.945%
47	Arizona	Mesa	5,473	0.869%
48	DC	Washington	5,069	0.805%
49	Colorado	Denver	4,711	0.748%
50	Colorado	Colorado Springs	3,282	0.521%

VI. Rankings Tables – Rural

VI. Rankings Tables – Rural

Table 36: Rural Homestead Property Taxes
Payable 2013

<u>\$70,000 VALUED PROPERTY</u>				<u>\$150,000 VALUED PROPERTY</u>					
<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>	<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>
1	New Hampshire	Lancaster	2,118	3.026%	1	New York	Warsaw	4,665	3.110%
2	Vermont	Newport	1,838	2.625%	2	New Hampshire	Lancaster	4,539	3.026%
3	New York	Warsaw	1,829	2.614%	3	Vermont	Newport	3,938	2.625%
4	Pennsylvania	Ridgway	1,677	2.395%	4	Pennsylvania	Ridgway	3,731	2.487%
5	New Jersey	Maurice River Township	1,564	2.234%	5	Illinois	Clinton	3,578	2.385%
6	Nebraska	Sidney	1,533	2.190%	6	Wisconsin	Rice Lake	3,369	2.246%
7	Wisconsin	Rice Lake	1,490	2.129%	7	New Jersey	Maurice River Township	3,351	2.234%
8	Michigan	Manistique	1,452	2.074%	8	Nebraska	Sidney	3,285	2.190%
9	Kansas	Iola	1,435	2.050%	9	Kansas	Iola	3,127	2.085%
10	Illinois	Clinton	1,409	2.014%	10	Michigan	Manistique	3,111	2.074%
11	Rhode Island	Hopkinton	1,341	1.916%	11	Iowa	Hampton	2,940	1.960%
12	Iowa	Hampton	1,275	1.822%	12	Rhode Island	Hopkinton	2,874	1.916%
13	Connecticut	Litchfield	1,275	1.821%	13	Maine	Rockland	2,733	1.822%
14	Massachusetts	Adams	1,214	1.734%	14	Connecticut	Litchfield	2,732	1.821%
15	Maine	Rockland	1,171	1.673%	15	Florida	Moore Haven	2,688	1.792%
16	Texas	Fort Stockton	1,157	1.652%	16	Texas	Fort Stockton	2,685	1.790%
17	South Dakota	Madison	1,132	1.618%	17	Massachusetts	Adams	2,601	1.734%
18	Maryland	Denton	1,083	1.548%	18	Minnesota	Glencoe	2,458	1.638%
19	Ohio	Bryan	951	1.359%	19	South Dakota	Madison	2,427	1.618%
20	Mississippi	Aberdeen	945	1.351%	20	Mississippi	Aberdeen	2,326	1.551%
21	Georgia	Fitzgerald	936	1.337%	21	Maryland	Denton	2,321	1.548%
AVERAGE			893	1.275%	22	Georgia	Fitzgerald	2,218	1.479%
22	Nevada	Fallon	871	1.245%	AVERAGE			2,044	1.363%
23	Minnesota	Glencoe	846	1.208%	23	Ohio	Bryan	2,038	1.359%
24	Oregon	Tillamook	841	1.201%	24	Nevada	Fallon	1,867	1.245%
25	North Dakota	Devils Lake	786	1.123%	25	Oregon	Tillamook	1,801	1.201%
26	North Carolina	Edenton	774	1.106%	26	North Dakota	Devils Lake	1,685	1.123%
27	Missouri	Boonville	769	1.098%	27	North Carolina	Edenton	1,659	1.106%
28	Alaska	Ketchikan	769	1.098%	28	Missouri	Boonville	1,648	1.098%
29	Florida	Moore Haven	715	1.022%	29	Alaska	Ketchikan	1,647	1.098%
30	New Mexico	Santa Rosa	679	0.971%	30	New Mexico	Santa Rosa	1,519	1.013%
31	Kentucky	London	662	0.946%	31	California	Yreka	1,480	0.987%
32	California	Yreka	652	0.932%	32	Indiana	North Vernon	1,455	0.970%
33	Washington	Colville	620	0.885%	33	Kentucky	London	1,419	0.946%
34	Montana	Glasgow	589	0.842%	34	Washington	Colville	1,328	0.885%
35	Arizona	Safford	583	0.833%	35	Oklahoma	Mangum	1,265	0.843%
36	South Carolina	Mullins	573	0.818%	36	Montana	Glasgow	1,263	0.842%
37	Oklahoma	Mangum	551	0.787%	37	Arizona	Safford	1,249	0.833%
38	Indiana	North Vernon	536	0.766%	38	South Carolina	Mullins	1,227	0.818%
39	Idaho	Saint Anthony	532	0.760%	39	Idaho	Saint Anthony	1,139	0.760%
40	Wyoming	Worland	497	0.710%	40	Wyoming	Worland	1,065	0.710%
41	Delaware	Georgetown	446	0.637%	41	Delaware	Georgetown	956	0.637%
42	Tennessee	Savannah	442	0.632%	42	Tennessee	Savannah	948	0.632%
43	Colorado	Walsenburg	430	0.614%	43	Colorado	Walsenburg	920	0.614%
44	West Virginia	Elkins	420	0.600%	44	West Virginia	Elkins	900	0.600%
45	Utah	Richfield	414	0.591%	45	Utah	Richfield	886	0.591%
46	Virginia	Wise	358	0.512%	46	Virginia	Wise	767	0.512%
47	Alabama	Monroeville	246	0.352%	47	Louisiana	Natchitoches	683	0.455%
48	Arkansas	Pocahontas	118	0.169%	48	Arkansas	Pocahontas	653	0.435%
49	Hawaii	Kauai	96	0.137%	49	Alabama	Monroeville	577	0.385%
50	Louisiana	Natchitoches	0	0.000%	50	Hawaii	Kauai	446	0.297%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

**Table 36 (cont'd.): Rural Homestead Property Taxes
Payable 2013**

<u>\$300,000 VALUED PROPERTY</u>				
<u>Rank</u>	<u>State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>
1	New York	Warsaw	9,982	3.327%
2	New Hampshire	Lancaster	9,078	3.026%
3	Vermont	Newport	7,876	2.625%
4	Illinois	Clinton	7,644	2.548%
5	Pennsylvania	Ridgway	7,583	2.528%
6	Wisconsin	Rice Lake	6,891	2.297%
7	New Jersey	Maurice River Township	6,703	2.234%
8	Nebraska	Sidney	6,569	2.190%
9	Florida	Moore Haven	6,387	2.129%
10	Kansas	Iola	6,301	2.100%
11	Michigan	Manistique	6,223	2.074%
12	Iowa	Hampton	6,063	2.021%
13	Rhode Island	Hopkinton	5,747	1.916%
14	Maine	Rockland	5,661	1.887%
15	Texas	Fort Stockton	5,551	1.850%
16	Minnesota	Glencoe	5,505	1.835%
17	Connecticut	Litchfield	5,463	1.821%
18	Massachusetts	Adams	5,201	1.734%
19	Mississippi	Aberdeen	4,952	1.651%
20	South Dakota	Madison	4,854	1.618%
21	Maryland	Denton	4,643	1.548%
22	Georgia	Fitzgerald	4,623	1.541%
	AVERAGE		4,221	1.407%
23	Ohio	Bryan	4,077	1.359%
24	Nevada	Fallon	3,735	1.245%
25	Oregon	Tillamook	3,603	1.201%
26	North Dakota	Devils Lake	3,370	1.123%
27	Idaho	Saint Anthony	3,325	1.108%
28	North Carolina	Edenton	3,318	1.106%
29	Missouri	Boonville	3,295	1.098%
30	Alaska	Ketchikan	3,294	1.098%
31	New Mexico	Santa Rosa	3,093	1.031%
32	California	Yreka	3,033	1.011%
33	Indiana	North Vernon	2,910	0.970%
34	Kentucky	London	2,838	0.946%
35	Washington	Colville	2,656	0.885%
36	Oklahoma	Mangum	2,604	0.868%
37	Montana	Glasgow	2,525	0.842%
38	Arizona	Safford	2,498	0.833%
39	South Carolina	Mullins	2,455	0.818%
40	Wyoming	Worland	2,129	0.710%
41	Louisiana	Natchitoches	2,097	0.699%
42	Delaware	Georgetown	1,912	0.637%
43	Tennessee	Savannah	1,896	0.632%
44	Colorado	Walsenburg	1,841	0.614%
45	West Virginia	Elkins	1,800	0.600%
46	Utah	Richfield	1,773	0.591%
47	Arkansas	Pocahontas	1,656	0.552%
48	Virginia	Wise	1,535	0.512%
49	Alabama	Monroeville	1,198	0.399%
50	Hawaii	Kauai	1,101	0.367%

VI. Rankings Tables – Rural

Table 37: Rural Commercial Property Taxes
Payable 2013

<u>\$100,000 VALUED PROPERTY</u>				<u>\$1 MILLION-VALUED PROPERTY</u>			
\$20,000 Fixtures				\$200,000 Fixtures			
Rank	State	City	Net Tax ETR	Rank	State	City	Net Tax ETR
1	Kansas	Iola	5,446 4.538%	1	Kansas	Iola	54,455 4.538%
2	Minnesota	Glencoe	3,878 3.232%	2	Minnesota	Glencoe	49,147 4.096%
3	New York	Warsaw	3,545 2.954%	3	New York	Warsaw	35,446 2.954%
4	Michigan	Manistique	3,449 2.874%	4	Michigan	Manistique	34,491 2.874%
5	Indiana	North Vernon	3,390 2.825%	5	Indiana	North Vernon	33,900 2.825%
6	Iowa	Hampton	3,378 2.815%	6	Iowa	Hampton	33,782 2.815%
7	South Carolina	Mullins	3,244 2.703%	7	South Carolina	Mullins	32,440 2.703%
8	Mississippi	Aberdeen	3,151 2.626%	8	Mississippi	Aberdeen	31,513 2.626%
9	New Hampshire	Lancaster	3,026 2.522%	9	New Hampshire	Lancaster	30,262 2.522%
10	Texas	Fort Stockton	2,885 2.404%	10	Texas	Fort Stockton	28,849 2.404%
11	Wisconsin	Rice Lake	2,754 2.295%	11	Florida	Moore Haven	28,683 2.390%
12	Vermont	Newport	2,718 2.265%	12	Wisconsin	Rice Lake	28,116 2.343%
13	Illinois	Clinton	2,710 2.259%	13	Vermont	Newport	27,181 2.265%
14	Nebraska	Sidney	2,654 2.212%	14	Illinois	Clinton	27,105 2.259%
15	Colorado	Walsenburg	2,587 2.156%	15	Nebraska	Sidney	26,544 2.212%
16	Pennsylvania	Ridgway	2,568 2.140%	16	Colorado	Walsenburg	25,868 2.156%
17	Massachusetts	Adams	2,492 2.077%	17	Pennsylvania	Ridgway	25,682 2.140%
18	Missouri	Boonville	2,472 2.060%	18	Massachusetts	Adams	24,921 2.077%
19	Florida	Moore Haven	2,466 2.055%	19	Missouri	Boonville	24,723 2.060%
20	Maine	Rockland	2,342 1.952%	20	Maine	Rockland	23,424 1.952%
21	South Dakota	Madison	2,320 1.933%	21	South Dakota	Madison	23,200 1.933%
22	Rhode Island	Hopkinton	2,311 1.926%	22	Rhode Island	Hopkinton	23,111 1.926%
23	New Jersey	Maurice River Township	2,234 1.862%	23	New Jersey	Maurice River Township	22,343 1.862%
24	Maryland	Denton	2,204 1.836%	24	Maryland	Denton	22,036 1.836%
AVERAGE				AVERAGE			
25	Georgia	Fitzgerald	1,928 1.607%	25	Georgia	Fitzgerald	19,278 1.607%
26	Connecticut	Litchfield	1,889 1.574%	26	Connecticut	Litchfield	18,887 1.574%
27	Ohio	Bryan	1,842 1.535%	27	Ohio	Bryan	18,421 1.535%
28	Montana	Glasgow	1,655 1.379%	28	Idaho	Saint Anthony	16,743 1.395%
29	Louisiana	Natchitoches	1,633 1.361%	29	Montana	Glasgow	16,549 1.379%
30	Nevada	Fallon	1,576 1.313%	30	Louisiana	Natchitoches	16,333 1.361%
31	Idaho	Saint Anthony	1,522 1.268%	31	Nevada	Fallon	15,761 1.313%
32	West Virginia	Elkins	1,457 1.214%	32	West Virginia	Elkins	14,570 1.214%
33	Oregon	Tillamook	1,441 1.201%	33	Oregon	Tillamook	14,411 1.201%
34	New Mexico	Santa Rosa	1,431 1.192%	34	New Mexico	Santa Rosa	14,310 1.192%
35	Utah	Richfield	1,409 1.174%	35	Utah	Richfield	14,092 1.174%
36	North Carolina	Edenton	1,301 1.084%	36	Alaska	Ketchikan	13,116 1.093%
37	North Dakota	Devils Lake	1,248 1.040%	37	North Carolina	Edenton	13,010 1.084%
38	California	Yreka	1,242 1.035%	38	North Dakota	Devils Lake	12,483 1.040%
39	Tennessee	Savannah	1,163 0.969%	39	California	Yreka	12,422 1.035%
40	Kentucky	London	1,158 0.965%	40	Tennessee	Savannah	11,631 0.969%
41	Oklahoma	Mangum	1,116 0.930%	41	Kentucky	London	11,575 0.965%
42	Alaska	Ketchikan	1,098 0.915%	42	Oklahoma	Mangum	11,162 0.930%
43	Washington	Colville	1,049 0.874%	43	Washington	Colville	10,488 0.874%
44	Alabama	Monroeville	991 0.826%	44	Arizona	Safford	9,959 0.830%
45	Virginia	Wise	896 0.746%	45	Alabama	Monroeville	9,914 0.826%
46	Arizona	Safford	837 0.698%	46	Virginia	Wise	8,956 0.746%
47	Arkansas	Pocahontas	820 0.683%	47	Arkansas	Pocahontas	8,196 0.683%
48	Hawaii	Kauai	770 0.642%	48	Hawaii	Kauai	7,700 0.642%
49	Wyoming	Worland	725 0.604%	49	Wyoming	Worland	7,247 0.604%
50	Delaware	Georgetown	637 0.531%	50	Delaware	Georgetown	6,372 0.531%

Table 37 (cont'd.): Rural Commercial Property Taxes
Payable 2013

\$25 MILLION-VALUED PROPERTY

\$5,000,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Kansas	Iola	1,361,378	4.538%
2	Minnesota	Glencoe	1,272,580	4.242%
3	New York	Warsaw	886,153	2.954%
4	Michigan	Manistique	862,274	2.874%
5	Indiana	North Vernon	847,500	2.825%
6	Iowa	Hampton	844,540	2.815%
7	South Carolina	Mullins	810,995	2.703%
8	Mississippi	Aberdeen	787,815	2.626%
9	New Hampshire	Lancaster	756,540	2.522%
10	Florida	Moore Haven	730,877	2.436%
11	Texas	Fort Stockton	721,230	2.404%
12	Wisconsin	Rice Lake	704,441	2.348%
13	Vermont	Newport	679,513	2.265%
14	Illinois	Clinton	677,624	2.259%
15	Nebraska	Sidney	663,598	2.212%
16	Colorado	Walsenburg	646,697	2.156%
17	Pennsylvania	Ridgway	642,042	2.140%
18	Massachusetts	Adams	623,013	2.077%
19	Missouri	Boonville	618,071	2.060%
20	Maine	Rockland	585,600	1.952%
21	South Dakota	Madison	580,000	1.933%
22	Rhode Island	Hopkinton	577,778	1.926%
23	New Jersey	Maurice River Township	558,567	1.862%
24	Maryland	Denton	550,910	1.836%
	AVERAGE		529,007	1.763%
25	Georgia	Fitzgerald	481,962	1.607%
26	Connecticut	Litchfield	472,171	1.574%
27	Ohio	Bryan	460,526	1.535%
28	Idaho	Saint Anthony	455,117	1.517%
29	Montana	Glasgow	413,724	1.379%
30	Louisiana	Natchitoches	408,334	1.361%
31	Nevada	Fallon	394,030	1.313%
32	West Virginia	Elkins	364,252	1.214%
33	Oregon	Tillamook	360,275	1.201%
34	New Mexico	Santa Rosa	357,740	1.192%
35	Utah	Richfield	352,290	1.174%
36	Alaska	Ketchikan	335,226	1.117%
37	Arizona	Safford	326,063	1.087%
38	North Carolina	Edenton	325,260	1.084%
39	North Dakota	Devils Lake	312,068	1.040%
40	California	Yreka	310,560	1.035%
41	Tennessee	Savannah	290,766	0.969%
42	Kentucky	London	289,386	0.965%
43	Oklahoma	Mangum	279,038	0.930%
44	Washington	Colville	262,210	0.874%
45	Alabama	Monroeville	247,845	0.826%
46	Virginia	Wise	223,911	0.746%
47	Arkansas	Pocahontas	204,896	0.683%
48	Hawaii	Kauai	192,500	0.642%
49	Wyoming	Worland	181,165	0.604%
50	Delaware	Georgetown	159,310	0.531%

VI. Rankings Tables – Rural

**Table 38: Rural Industrial Property Taxes (50% Personal Property)
Payable 2013**

<u>\$100,000 VALUED PROPERTY</u>				<u>\$1 MILLION-VALUED PROPERTY</u>					
\$50,000 Machinery and Equipment				\$500,000 Machinery and Equipment					
\$40,000 Inventories				\$400,000 Inventories					
\$10,000 Fixtures				\$100,000 Fixtures					
<u>Rank State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>	<u>Rank State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>		
1	South Carolina	Mullins	7,030	3.515%	1	South Carolina	Mullins	70,304	3.515%
2	Mississippi	Aberdeen	5,252	2.626%	2	Mississippi	Aberdeen	52,521	2.626%
3	Kansas	Iola	4,986	2.493%	3	Kansas	Iola	49,856	2.493%
4	Texas	Fort Stockton	4,808	2.404%	4	Minnesota	Glencoe	49,147	2.457%
5	Indiana	North Vernon	4,590	2.295%	5	Texas	Fort Stockton	48,082	2.404%
6	Michigan	Manistique	4,039	2.019%	6	Indiana	North Vernon	45,900	2.295%
7	Minnesota	Glencoe	3,878	1.939%	7	Michigan	Manistique	40,388	2.019%
8	Nebraska	Sidney	3,584	1.792%	8	Florida	Moore Haven	37,877	1.894%
9	New York	Warsaw	3,545	1.772%	9	Nebraska	Sidney	35,838	1.792%
10	Colorado	Walsenburg	3,449	1.725%	10	New York	Warsaw	35,446	1.772%
11	Missouri	Boonville	3,306	1.653%	11	Colorado	Walsenburg	34,491	1.725%
12	Iowa	Hampton	3,303	1.652%	12	Missouri	Boonville	33,058	1.653%
13	Florida	Moore Haven	3,271	1.635%	13	Iowa	Hampton	33,031	1.652%
14	New Hampshire	Lancaster	3,026	1.513%	14	New Hampshire	Lancaster	30,262	1.513%
15	Georgia	Fitzgerald	2,832	1.416%	15	Georgia	Fitzgerald	28,321	1.416%
16	Louisiana	Natchitoches	2,803	1.401%	16	Louisiana	Natchitoches	28,030	1.401%
17	Vermont	Newport	2,718	1.359%	17	Vermont	Newport	27,181	1.359%
18	Illinois	Clinton	2,710	1.355%	18	Illinois	Clinton	27,105	1.355%
19	Pennsylvania	Ridgway	2,568	1.284%	19	Wisconsin	Rice Lake	25,768	1.288%
20	Wisconsin	Rice Lake	2,519	1.259%		AVERAGE	25,741	1.287%	
21	Montana	Glasgow	2,503	1.251%	20	Pennsylvania	Ridgway	25,682	1.284%
	AVERAGE	2,499	1.261%	21	Montana	Glasgow	25,029	1.251%	
22	West Virginia	Elkins	2,485	1.243%	22	West Virginia	Elkins	24,855	1.243%
23	South Dakota	Madison	2,320	1.160%	23	South Dakota	Madison	23,200	1.160%
24	Massachusetts	Adams	2,275	1.138%	24	Idaho	Saint Anthony	22,832	1.142%
25	New Jersey	Maurice River Township	2,234	1.117%	25	Massachusetts	Adams	22,754	1.138%
26	Maine	Rockland	2,147	1.074%	26	New Jersey	Maurice River Township	22,343	1.117%
27	Rhode Island	Hopkinton	2,113	1.057%	27	Maine	Rockland	21,472	1.074%
28	Nevada	Fallon	2,086	1.043%	28	Rhode Island	Hopkinton	21,134	1.057%
29	Oklahoma	Mangum	2,009	1.005%	29	Nevada	Fallon	20,857	1.043%
30	Oregon	Tillamook	1,921	0.961%	30	Oklahoma	Mangum	20,091	1.005%
31	Utah	Richfield	1,879	0.939%	31	Arizona	Safford	19,556	0.978%
32	Ohio	Bryan	1,861	0.931%	32	Oregon	Tillamook	19,215	0.961%
33	New Mexico	Santa Rosa	1,858	0.929%	33	Utah	Richfield	18,789	0.939%
34	Maryland	Denton	1,819	0.909%	34	Ohio	Bryan	18,612	0.931%
35	Tennessee	Savannah	1,770	0.885%	35	New Mexico	Santa Rosa	18,577	0.929%
36	North Carolina	Edenton	1,691	0.846%	36	Maryland	Denton	18,186	0.909%
37	Connecticut	Litchfield	1,678	0.839%	37	Alaska	Ketchikan	17,996	0.900%
38	California	Yreka	1,656	0.828%	38	Tennessee	Savannah	17,699	0.885%
39	Alaska	Ketchikan	1,525	0.763%	39	North Carolina	Edenton	16,910	0.846%
40	Idaho	Saint Anthony	1,522	0.761%	40	Connecticut	Litchfield	16,778	0.839%
41	Virginia	Wise	1,492	0.746%	41	California	Yreka	16,563	0.828%
42	Arkansas	Pocahontas	1,381	0.690%	42	Virginia	Wise	14,916	0.746%
43	Washington	Colville	1,376	0.688%	43	Arkansas	Pocahontas	13,807	0.690%
44	Alabama	Monroeville	1,319	0.660%	44	Washington	Colville	13,760	0.688%
45	North Dakota	Devils Lake	1,248	0.624%	45	Alabama	Monroeville	13,194	0.660%
46	Wyoming	Worland	1,191	0.595%	46	North Dakota	Devils Lake	12,483	0.624%
47	Kentucky	London	1,116	0.558%	47	Wyoming	Worland	11,906	0.595%
48	Arizona	Safford	837	0.419%	48	Kentucky	London	11,161	0.558%
49	Hawaii	Kauai	770	0.385%	49	Hawaii	Kauai	7,700	0.385%
50	Delaware	Georgetown	637	0.319%	50	Delaware	Georgetown	6,372	0.319%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

**Table 38 (cont'd.): Rural Industrial Property Taxes (50% Personal Property)
Payable 2013**

<u>\$25 MILLION-VALUED PROPERTY</u>				
\$12,500,000 Machinery and Equipment				
\$10,000,000 Inventories				
\$2,500,000 Fixtures				
Rank	State	City	Net Tax	ETR
1	South Carolina	Mullins	1,757,589	3.515%
2	Mississippi	Aberdeen	1,313,025	2.626%
3	Minnesota	Glencoe	1,272,580	2.545%
4	Kansas	Iola	1,246,397	2.493%
5	Texas	Fort Stockton	1,202,050	2.404%
6	Indiana	North Vernon	1,147,500	2.295%
7	Michigan	Manistique	1,009,698	2.019%
8	Florida	Moore Haven	960,712	1.921%
9	Nebraska	Sidney	895,939	1.792%
10	New York	Warsaw	886,153	1.772%
11	Colorado	Walsenburg	862,263	1.725%
12	Missouri	Boonville	826,457	1.653%
13	Iowa	Hampton	825,772	1.652%
14	New Hampshire	Lancaster	756,540	1.513%
15	Georgia	Fitzgerald	708,034	1.416%
16	Louisiana	Natchitoches	700,744	1.401%
17	Vermont	Newport	679,513	1.359%
18	Illinois	Clinton	677,624	1.355%
	AVERAGE		647,120	1.294%
19	Wisconsin	Rice Lake	645,732	1.291%
20	Pennsylvania	Ridgway	642,042	1.284%
21	Montana	Glasgow	625,729	1.251%
22	West Virginia	Elkins	621,371	1.243%
23	Idaho	Saint Anthony	607,330	1.215%
24	South Dakota	Madison	580,000	1.160%
25	Massachusetts	Adams	568,838	1.138%
26	Arizona	Safford	565,971	1.132%
27	New Jersey	Maurice River Township	558,567	1.117%
28	Maine	Rockland	536,800	1.074%
29	Rhode Island	Hopkinton	528,353	1.057%
30	Nevada	Fallon	521,430	1.043%
31	Oklahoma	Mangum	502,268	1.005%
32	Oregon	Tillamook	480,367	0.961%
33	Utah	Richfield	469,720	0.939%
34	Ohio	Bryan	465,312	0.931%
35	New Mexico	Santa Rosa	464,417	0.929%
36	Alaska	Ketchikan	457,226	0.914%
37	Maryland	Denton	454,660	0.909%
38	Tennessee	Savannah	442,470	0.885%
39	North Carolina	Edenton	422,760	0.846%
40	Connecticut	Litchfield	419,456	0.839%
41	California	Yreka	414,080	0.828%
42	Virginia	Wise	372,911	0.746%
43	Arkansas	Pocahontas	345,176	0.690%
44	Washington	Colville	344,005	0.688%
45	Alabama	Monroeville	329,845	0.660%
46	North Dakota	Devils Lake	312,068	0.624%
47	Wyoming	Worland	297,659	0.595%
48	Kentucky	London	279,036	0.558%
49	Hawaii	Kauai	192,500	0.385%
50	Delaware	Georgetown	159,310	0.319%

VI. Rankings Tables – Rural

**Table 39: Rural Industrial Property Taxes (60% Personal Property)
Payable 2013**

<u>\$100,000 VALUED PROPERTY</u>				<u>\$1 MILLION-VALUED PROPERTY</u>					
\$75,000 Machinery and Equipment				\$750,000 Machinery and Equipment					
\$60,000 Inventories				\$600,000 Inventories					
\$15,000 Fixtures				\$150,000 Fixtures					
<u>Rank State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>	<u>Rank State</u>	<u>City</u>	<u>Net Tax</u>	<u>ETR</u>		
1	South Carolina	Mullins	8,386	3.354%	1	South Carolina	Mullins	83,857	3.354%
2	Mississippi	Aberdeen	6,565	2.626%	2	Mississippi	Aberdeen	65,651	2.626%
3	Texas	Fort Stockton	6,010	2.404%	3	Texas	Fort Stockton	60,103	2.404%
4	Indiana	North Vernon	5,490	2.196%	4	Indiana	North Vernon	54,900	2.196%
5	Kansas	Iola	5,216	2.086%	5	Kansas	Iola	52,155	2.086%
6	Michigan	Manistique	4,571	1.828%	6	Minnesota	Glencoe	49,147	1.966%
7	Nebraska	Sidney	4,281	1.712%	7	Michigan	Manistique	45,711	1.828%
8	Colorado	Walsenburg	4,096	1.638%	8	Florida	Moore Haven	44,772	1.791%
9	Florida	Moore Haven	3,960	1.584%	9	Nebraska	Sidney	42,808	1.712%
10	Missouri	Boonville	3,931	1.572%	10	Colorado	Walsenburg	40,957	1.638%
11	Minnesota	Glencoe	3,878	1.551%	11	Missouri	Boonville	39,310	1.572%
12	New York	Warsaw	3,545	1.418%	12	New York	Warsaw	35,446	1.418%
13	Louisiana	Natchitoches	3,534	1.414%	13	Louisiana	Natchitoches	35,340	1.414%
14	Georgia	Fitzgerald	3,447	1.379%	14	Georgia	Fitzgerald	34,468	1.379%
15	Iowa	Hampton	3,303	1.321%	15	Iowa	Hampton	33,031	1.321%
16	Montana	Glasgow	3,139	1.256%	16	Montana	Glasgow	31,389	1.256%
17	West Virginia	Elkins	3,128	1.251%	17	West Virginia	Elkins	31,283	1.251%
	AVERAGE		2,829	1.131%	18	New Hampshire	Lancaster	30,262	1.210%
18	Vermont	Newport	2,718	1.087%		AVERAGE		29,276	1.171%
19	Vermont	Newport	2,718	1.087%	19	Idaho	Saint Anthony	27,398	1.096%
20	Illinois	Clinton	2,710	1.084%	20	Vermont	Newport	27,181	1.087%
21	Wisconsin	Rice Lake	2,636	1.055%	21	Illinois	Clinton	27,105	1.084%
22	Pennsylvania	Ridgway	2,568	1.027%	22	Wisconsin	Rice Lake	26,942	1.078%
23	Oklahoma	Mangum	2,567	1.027%	23	Arizona	Safford	26,753	1.070%
24	Nevada	Fallon	2,468	0.987%	24	Pennsylvania	Ridgway	25,682	1.027%
25	Massachusetts	Adams	2,384	0.953%	25	Oklahoma	Mangum	25,671	1.027%
26	South Dakota	Madison	2,320	0.928%	26	Nevada	Fallon	24,679	0.987%
27	Oregon	Tillamook	2,282	0.913%	27	Massachusetts	Adams	23,837	0.953%
28	Maine	Rockland	2,245	0.898%	28	South Dakota	Madison	23,200	0.928%
29	New Jersey	Maurice River Township	2,234	0.894%	29	Oregon	Tillamook	22,817	0.913%
30	Utah	Richfield	2,231	0.892%	30	Maine	Rockland	22,448	0.898%
31	Rhode Island	Hopkinton	2,212	0.885%	31	New Jersey	Maurice River Township	22,343	0.894%
32	New Mexico	Santa Rosa	2,178	0.871%	32	Utah	Richfield	22,312	0.892%
33	Tennessee	Savannah	2,149	0.860%	33	Rhode Island	Hopkinton	22,123	0.885%
34	Maryland	Denton	2,011	0.804%	34	New Mexico	Santa Rosa	21,777	0.871%
35	North Carolina	Edenton	1,984	0.793%	35	Alaska	Ketchikan	21,656	0.866%
36	California	Yreka	1,967	0.787%	36	Tennessee	Savannah	21,491	0.860%
37	Virginia	Wise	1,939	0.775%	37	Maryland	Denton	20,111	0.804%
38	Alaska	Ketchikan	1,891	0.756%	38	North Carolina	Edenton	19,835	0.793%
39	Ohio	Bryan	1,861	0.744%	39	California	Yreka	19,669	0.787%
40	Connecticut	Litchfield	1,757	0.703%	40	Virginia	Wise	19,386	0.775%
41	Arkansas	Pocahontas	1,731	0.693%	41	Ohio	Bryan	18,612	0.744%
42	Washington	Colville	1,621	0.649%	42	Connecticut	Litchfield	17,569	0.703%
43	Alabama	Monroeville	1,565	0.626%	43	Arkansas	Pocahontas	17,314	0.693%
44	Idaho	Saint Anthony	1,522	0.609%	44	Washington	Colville	16,214	0.649%
45	Wyoming	Worland	1,453	0.581%	45	Alabama	Monroeville	15,654	0.626%
46	North Dakota	Devils Lake	1,248	0.499%	46	Wyoming	Worland	14,534	0.581%
47	Kentucky	London	1,232	0.493%	47	North Dakota	Devils Lake	12,483	0.499%
48	Arizona	Safford	837	0.335%	48	Kentucky	London	12,318	0.493%
49	Hawaii	Kauai	770	0.308%	49	Hawaii	Kauai	7,700	0.308%
50	Delaware	Georgetown	637	0.255%	50	Delaware	Georgetown	6,372	0.255%

Minnesota Center for Fiscal Excellence 50 State Property Tax Study 2013

Table 38 (cont'd.): Rural Industrial Property Taxes (60% Personal Property)

Payable 2013				
\$25 MILLION-VALUED PROPERTY				
\$18,750,000 Machinery and Equipment				
\$15,000,000 Inventories				
\$3,750,000 Fixtures				
Rank	State	City	Net Tax	ETR
1	South Carolina	Mullins	2,096,416	3.354%
2	Mississippi	Aberdeen	1,641,281	2.626%
3	Texas	Fort Stockton	1,502,563	2.404%
4	Indiana	North Vernon	1,372,500	2.196%
5	Kansas	Iola	1,303,887	2.086%
6	Minnesota	Glencoe	1,272,580	2.036%
7	Michigan	Manistique	1,142,766	1.828%
8	Florida	Moore Haven	1,133,089	1.813%
9	Nebraska	Sidney	1,070,194	1.712%
10	Colorado	Walsenburg	1,023,937	1.638%
11	Missouri	Boonville	982,747	1.572%
12	New York	Warsaw	886,153	1.418%
13	Louisiana	Natchitoches	883,501	1.414%
14	Georgia	Fitzgerald	861,699	1.379%
15	Iowa	Hampton	825,772	1.321%
16	Montana	Glasgow	784,732	1.256%
17	West Virginia	Elkins	782,071	1.251%
18	New Hampshire	Lancaster	756,540	1.210%
19	Arizona	Safford	745,903	1.193%
		AVERAGE	735,492	1.177%
20	Idaho	Saint Anthony	721,490	1.154%
21	Vermont	Newport	679,513	1.087%
22	Illinois	Clinton	677,624	1.084%
23	Wisconsin	Rice Lake	675,086	1.080%
24	Pennsylvania	Ridgway	642,042	1.027%
25	Oklahoma	Mangum	641,786	1.027%
26	Nevada	Fallon	616,980	0.987%
27	Massachusetts	Adams	595,925	0.953%
28	South Dakota	Madison	580,000	0.928%
29	Oregon	Tillamook	570,436	0.913%
30	Maine	Rockland	561,200	0.898%
31	New Jersey	Maurice River Township	558,567	0.894%
32	Utah	Richfield	557,793	0.892%
33	Rhode Island	Hopkinton	553,066	0.885%
34	Alaska	Ketchikan	548,726	0.878%
35	New Mexico	Santa Rosa	544,424	0.871%
36	Tennessee	Savannah	537,285	0.860%
37	Maryland	Denton	502,785	0.804%
38	North Carolina	Edenton	495,885	0.793%
39	California	Yreka	491,720	0.787%
40	Virginia	Wise	484,661	0.775%
41	Ohio	Bryan	465,312	0.744%
42	Connecticut	Litchfield	439,231	0.703%
43	Arkansas	Pocahontas	432,851	0.693%
44	Washington	Colville	405,351	0.649%
45	Alabama	Monroeville	391,345	0.626%
46	Wyoming	Worland	363,338	0.581%
47	North Dakota	Devils Lake	312,068	0.499%
48	Kentucky	London	307,961	0.493%
49	Hawaii	Kauai	192,500	0.308%
50	Delaware	Georgetown	159,310	0.255%

VI. Rankings Tables – Rural

**Table 40: Rural Apartment Property Taxes
Payable 2013**

\$600,000 VALUED PROPERTY

\$30,000 Fixtures

Rank	State	City	Net Tax	ETR
1	New York	Warsaw	21,268	3.376%
2	Iowa	Hampton	20,269	3.217%
3	Michigan	Manistique	18,738	2.974%
4	New Hampshire	Lancaster	18,157	2.882%
5	Mississippi	Aberdeen	16,544	2.626%
6	Vermont	Newport	16,308	2.589%
7	Illinois	Clinton	16,263	2.581%
8	Pennsylvania	Ridgway	15,409	2.446%
9	South Carolina	Mullins	15,398	2.444%
10	Texas	Fort Stockton	15,146	2.404%
11	Florida	Moore Haven	14,912	2.367%
12	Wisconsin	Rice Lake	14,730	2.338%
13	Kansas	Iola	14,028	2.227%
14	South Dakota	Madison	13,920	2.210%
15	Nebraska	Sidney	13,835	2.196%
16	New Jersey	Maurice River Township	13,406	2.128%
17	Maine	Rockland	12,298	1.952%
18	Rhode Island	Hopkinton	12,087	1.919%
19	Indiana	North Vernon	11,160	1.771%
20	Ohio	Bryan	11,053	1.754%
21	Massachusetts	Adams	11,053	1.754%
22	Minnesota	Glencoe	10,446	1.658%
23	Georgia	Fitzgerald	10,104	1.604%
	AVERAGE		10,069	1.598%
24	Connecticut	Litchfield	9,908	1.573%
25	Maryland	Denton	9,757	1.549%
26	Idaho	Saint Anthony	9,133	1.450%
27	Nevada	Fallon	7,764	1.232%
28	West Virginia	Elkins	7,585	1.204%
29	Oregon	Tillamook	7,566	1.201%
30	North Dakota	Devils Lake	7,490	1.189%
31	North Carolina	Edenton	6,929	1.100%
32	Alaska	Ketchikan	6,650	1.056%
33	New Mexico	Santa Rosa	6,617	1.050%
34	Missouri	Boonville	6,590	1.046%
35	California	Yreka	6,522	1.035%
36	Tennessee	Savannah	6,296	0.999%
37	Louisiana	Natchitoches	6,095	0.967%
38	Arizona	Safford	5,869	0.932%
39	Oklahoma	Mangum	5,692	0.904%
40	Montana	Glasgow	5,686	0.903%
41	Washington	Colville	5,557	0.882%
42	Kentucky	London	5,308	0.843%
43	Alabama	Monroeville	5,210	0.827%
44	Hawaii	Kauai	4,620	0.733%
45	Arkansas	Pocahontas	4,286	0.680%
46	Utah	Richfield	4,227	0.671%
47	Colorado	Walsenburg	4,197	0.666%
48	Virginia	Wise	4,033	0.640%
49	Delaware	Georgetown	3,823	0.607%
50	Wyoming	Worland	3,514	0.558%

VII. Appendix: Methodology and Assumptions

This study updates the *50-State Property Tax Comparison Study: Payable Year 2012*. It examines four distinct classes of property using a standard set of assumptions about their “true” market values and the split between real and personal property. The tax was calculated for variously-valued parcels in three sets of cities:

- the largest urban area of each state and the District of Columbia along with Aurora, Illinois and Buffalo, New York;
- the largest fifty cities in the United States; and
- a rural area in each state.

More specific details about key assumptions are provided in the sections below.

Data Collection

Data for property tax calculations was collected in one of two ways. Where possible, we collect property tax data directly from various state and local websites. Where information is not available through this media, we collect data using a contact-verification approach in which we ask state and local tax experts to provide information. In both cases, this information served as the basis for calculations by the Minnesota Center for Fiscal Excellence. Those calculations were, in turn, subject to local verification when necessary.

Selection of Additional Urban Cities

In Cook County (Chicago) and in New York City, the property tax system (notably, the assessment ratios) is substantially different than the system used in the remainder of Illinois and New York, respectively. We include the second-largest cities in those states (Buffalo and Aurora) to represent the property tax structures in the remainder of those states. In essence, our Urban analysis is a comparison of 53 different property tax structures.

Selection of Rural Cities

Prior to payable 2008, our methodology for selecting rural cities for this study was to rely on the expertise of local contacts to provide a rural city with a population of between 2,500 and 10,000 with an “average rural tax rate” for inclusion in the study. Unfortunately, in some instances our local contacts provided cities that did not meet these criteria. We have modified our methodology for rural city selection by choosing rural cities based on the rural-urban continuum codes developed by the federal Department of Agriculture. This provides measurable eligibility criteria, removes subjectivity in city choice, and creates a more heterogeneous set of cities with regard to population and geographic relationship to urban areas.

In most instances, the cities selected for inclusion are county seats in counties coded “6” (a nonmetro county with an urban population of 2,500 to 19,999, adjacent to a metro area) or “7” (a nonmetro county with an urban population of 2,500 to 19,999, not adjacent to a metro area). In five states (Connecticut, Delaware, Hawaii, New Jersey, and Rhode Island), there were no counties coded 6 or 7. In the case of Massachusetts, the only code 6 or 7 county included Nantucket Island, which we did not include since it did not seem to be comparable to rural counties in other states. In those cases, we selected the county seat in the most rural county available for inclusion in the study. Wherever possible, we also included only cities with a population of 2,500 to 10,000.

Components of the Property Tax Calculation

As an aid in reviewing the remaining assumptions of this study, it is helpful to think of the property tax calculation as having five distinct components: (1) a “true” market value (TMV), (2) a local sales ratio (SR), (3) a statutory classification system (classification rate) or other

VII. Appendix: Methodology and Assumptions

provisions that effectively determine the proportion of the assessor's estimated market value that is taxable (CR), (4) the total local property tax rate (TR), and (5) applicable property tax credits (C). Accordingly, the net local property tax for a given parcel of property is written:

$$\text{Net Property Tax} = \text{TMV} \times \text{SR} \times \text{CR} \times \text{TR} - \text{C}$$

Assumptions about each component are discussed in the sections below.

True Market Value (TMV)

It is important to note that the calculations for this study start with an assumption about the true market value of the four classes of property. This is the market value of a parcel of property as determined in the local real estate market consisting of arm-length transactions between willing buyers and sellers. This is in contrast to "assessed value" or "estimated market value," which, in most states is the starting point for the tax calculation.

This study assumes the true market value of each property type is the same for each state. For example, the ranking of property taxes on a residential homestead parcel with a true market value of \$150,000 assumes that the parcel is actually worth \$150,000 in the local real estate market in each location in each state, regardless of what the local assessor may think the property is worth.

In the cases of some locations the assumed true market value may be very atypical (a \$150,000 home in Boston, for example). Nevertheless, this study assumes the property exists there. Essentially the goal of this study is to compare the effects of property tax structures. By fixing values we are able to observe the isolated effects of tax structures. That is, we are comparing property taxes, not local real estate markets. However, we have added a table showing median values for single-family homes in the largest urban area of each state.

The specific market value assumed for each class of property in this report is described below in the section on property classes.

Sales Ratios (SR)

A unique aspect of this study is the inclusion of the effects of assessment practices on relative tax burdens across the country. It would have been much simpler to start the calculations by fixing the assessor's "estimated market value" for each property. This would have resulted in a comparison of only the statutory property tax structure. However, in every state, the quality of property tax assessments is a significant aspect of the local property tax scene. Omission of this aspect of the property tax calculation would have made this study much less useful.

Sales ratios are simply a measure of the accuracy of assessments. The sales ratio is determined by comparing assessments to actual sales. If a sales ratio is: above 100%, the property has sold for more than its assessed value, below 100%, the property has sold for less than its assessed value, is 100%, assessments and market values are equal. If the sales ratios are at 100% that generally indicates that reassessments have just occurred. In some states, sales ratios are used to adjust assessor's values for use in state aid formulas that use local property wealth as a measure of local fiscal capacity. Sales ratios are generally not used in calculating an individual's actual property tax bill; however, some states use an equalization factor for calculating property tax bills, a factor that equalizes assessment values to market values.

In order for the tax liabilities to represent the actual experience of property owners, and to compare "effective" property tax rates across the states, it was important to use the true market value as a point of reference.

We attempt to adjust the assumed true market value of our sample properties with the use of sales ratios applicable to the location and type of property being studied. These are normally county-level sales ratios for the specific classes of property. Where location and class specific ratios were not available, we tried to use the ratio most applicable to the property (either a statewide ratio for the class, or in some cases, a county ratio applicable to all property classes).

By applying sales ratios, this study recognizes that our \$150,000 residential homestead may be “on the books” at \$155,000 in one location, and \$140,000 in another, and that the actual tax on the property will be based on these “estimates” of market value. In this study, if the relevant sales ratio in a given location is 93%, we convert the \$150,000 true market value to \$139,500 ($\$150,000 \times .93$) before applying the provisions of the local property tax.

It is important that we use sales ratios in this study because our fixed reference point for all calculations is an assumed true market value.

In the case of personal property, sales ratios are generally not used. Many states do not have sales ratios for personal property or assume they are 100%. Where states report personal property sales ratios, we include them in this study.

Classification Rates (CR)

The third component of the property tax calculation involves subjecting the assessor’s estimated market value to provisions designed to affect the distribution of property tax levies, namely statutory classification or differential assessment schemes.

In the absence of classification or differential assessments, the distribution of property tax burdens by class of property will reflect the distribution of the assessor’s estimated market values, assuming the properties are located in the same set of taxing jurisdictions. That is, a home assessed at \$100,000 and a business with the same assessment would pay identical property taxes and their effective tax rates (tax as a percent of assessed value) would be the same.

In most states, classification schemes are set by state legislatures. In a few states classification is partly determined by local governments.

Because of the wide variation in the quality of assessments across the states, particularly across classes of property, many states that appear to have no classification scheme may in fact have significant classification via uneven assessments across classes of property, in some cases, perhaps, in violation of state constitution uniformity provision. Some states, like Minnesota, enforces strict standards of assessment quality (sales ratio studies, state orders adjusting values, state certification of assessors, etc.) and put their classification policy in statute.

Total Local Tax Rate (TR)

Tax rates requested were state and local, payable 2013 applicable to the greatest number of parcels in the largest urban area of each state. “Payable 2013 tax rate” was defined as the tax rate used to calculate the property taxes with a lien date originating in 2013, regardless of the date(s) on which payments are due. In any one city, there may be many different taxing jurisdictions, essentially intersections of city, county, school district, and special taxing district. We asked for the local tax rates for the intersection with the largest number of properties.

We were careful to include the tax rate for all taxing jurisdictions that “normally” levy against real and personal property (namely, cities, counties, school districts, and special taxing districts). We exclude special assessments from this study since they are more in the nature of user charges, do not affect a majority of parcels, and are usually not sources of general revenue.

Credits (C)

The final step in the tax calculation is to recognize any general deductions from the gross property tax calculations (credits). Certain states provide credits based on early payment; we assume in the study that taxpayers take advantage of the credit by making the early payment. Any other credits that apply to a majority of parcels of the specified type were included in our calculations.

Property Classes and True Market Values

The four hypothetical properties studied in this report are (1) residential homesteads, (2) commercial property, (3) industrial property, and (4) apartments.

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We selected these classes of property to provide information about certain recurring property tax reform themes in Minnesota, namely the tax on homesteads relative to those on business and apartment property. Other classes of property were omitted either because of their complexity (public utilities, farms), or because the need for information about them was less urgent, at least in Minnesota. The four classes of property studied comprise over 70% of all the market value of real and personal property in Minnesota.

For the homestead property, we assumed two different values of real property, a low value and a high value. Apartment property consists of only one value. This updated study added a third value of \$25 million for commercial and industrial property. All classes of property contained a corresponding set of assumptions about personal property. While this may seem an unnecessary complication to many readers, note that the Minnesota property tax system includes “tiered” classifications based on value (similar to income tax brackets). In Minnesota, the first \$500,000 of estimated market value of a residential home is taxed at 80% the rate applicable to the value over \$500,000. Business value over \$150,000 is taxed about 1.4 times more heavily than value under \$150,000.

Taxes were calculated for the four classes of property in the largest urban area of each state and the District of Columbia, plus the additional cities added when a state’s largest urban area has a property tax structure markedly different from the remainder of the state. The following table summarizes the property classes and assumed true market values (and assessed value of personal property) used for each class.

PROPERTY CLASSES AND TRUE MARKET VALUES					
Class	Values of Property				Total
	Real	Mach. & Equip.	Inventories	Fixtures	
Homestead	\$150,000	\$0	\$0	\$0	\$150,000
	\$300,000	\$0	\$0	\$0	\$300,000
Apartments	\$600,000	\$0	\$0	\$30,000	\$630,000
Commercial	\$100,000	\$0	\$0	\$20,000	\$120,000
	\$1,000,000	\$0	\$0	\$200,000	\$1,200,000
Industrial	\$25,000,000	\$0	\$0	\$5,000,000	\$30,000,000
	\$100,000	\$50,000	\$40,000	\$10,000	\$200,000
(50% Personal)	\$1,000,000	\$500,000	\$400,000	\$100,000	\$2,000,000
	\$25,000,000	\$12,500,000	\$10,000,000	\$2,500,000	\$50,000,000
Industrial	\$100,000	\$75,000	\$60,000	\$15,000	\$250,000
	\$1,000,000	\$750,000	\$600,000	\$150,000	\$2,500,000
(60% Personal)	\$25,000,000	\$18,750,000	\$15,000,000	\$3,750,000	\$62,500,000

Real and Personal Property

The treatment of personal property is a significant part of the property tax in every state. To get an appropriate ranking of the property taxes on all classes of property, and particularly personal property, it is important to make specific assumptions about the amount of personal property associated with each example. In the body of this report, we present industrial rankings based on a 50% - 50% and 40% - 60% mix of real and personal property value, respectively.

The specific mix of real and personal property obviously varies by industry and location. Since some states tax most personal property and other states exempt some or all personal property, the tax rankings, particularly for industrial parcels, are sensitive to the assumed mix of values.

This study does not include intangibles such as bank balances or financial securities in the property tax calculations.

We define the types of property as follows:

Real Property

Property consisting of land and buildings not classified as personal property for tax purposes.

Personal Property – Machinery and Equipment

This includes large and ponderous equipment, generally not portable and often mounted on special foundations. It would include such items as large printing presses and assembly robots.

Personal Property – Inventories

This includes raw materials, unfinished products, supplies and similar items.

Personal Property – Fixtures

Fixtures include such items as office furnishings, display racks, tools and similar items, but not motor vehicles. In the case of apartments, it would include such things as stoves, refrigerators, garbage disposals, air conditioners, drapes, and lawn care equipment.

Property Classes and True Market Values

With the permission of the Minnesota Department of Revenue’s Research Division, we have borrowed the methodology they use to determine shares of real and personal business property in their biennial *Tax Incidence Study*. Using that methodology, we have calculated state-specific real property, machinery and equipment, fixtures, and inventory shares for industrial parcels. The findings this model generate indicate that our assumptions regarding industrial personal property are very reasonable; according to the model, average split for industrial parcels nationwide is 43.5% land and buildings (real property) and 56.5% personal property. Overall, the shares of personal property range from 52.1% (Oregon) to 60.7% (Montana) with corresponding shares of real property value.

In some previous editions of this study we measured tax burdens and rankings for industrial parcels where we allowed the shares of personal property to vary from state to state. We discontinued this analysis beginning with our payable 2011 report to focus resources on other study-related initiatives.

Effective Tax Rates (ETRs)

Repeated reference has already been made to the concept of effective tax rates. In contrast to statutory tax rates that apply to taxable values, in this study effective tax rates are used to express the relationship between net property taxes and the true market value of the property. By including the effects of all statutory tax provisions as well as the effects of local assessment practices, effective tax rates have the virtue of allowing more meaningful comparisons across states and property types.

The comparison tables included in this report show actual dollar taxes and effective tax rates ranked from highest to lowest as well as alphabetically.

Estimates of Assessment Limitation Effects

Beginning with our report for taxes payable 2012, we estimate the effect that provisions that deliver property tax relief for homeowners by limiting increases in home value or property taxes at the parcel level. Generally, the value of parcel-specific assessment limitations results from a combination of the length of homeowner tenure and changes in the market value of the parcel relative to the provisions of the applicable limitation. We use data from the Census Bureau’s *American Community Survey* to estimate that average length of homeowner tenure for locations where assessment limitation provisions are in effect. We use data from the Federal Housing Finance Agency’s *House Price Index for All Transactions* to estimate the average change in residential property value in locations where assessment limitation provisions are in effect. We then model the average change in residential property value over the average length of homeowner tenure in each of these locations and compare that change to the allowable growth in homestead value and/or taxes during that period to determine the amount of excluded value or property tax relief these provisions afford.

One final key assumption: the model represents the experience of a homeowner with an “average” length of tenure. Therefore, if the model returns no excluded value, then we assume that the provision does not apply to half or more of homeowners and therefore does not apply.

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We prepared a working paper for the Lincoln Institute of Land Policy on this subject where there is considerably more detailed information on the methodology underlying this analysis. It is available at: https://www.lincolninst.edu/pubs/2033_Property-Assessment-Limits--Effects-on-Homestead-Property-Tax-Burdens-and-National-Property-Tax-Rankings- .

Special Property Tax Provisions

This study excludes all “special property tax provisions.” These are defined as provisions that, in practice, apply to less than half of all taxpayers for a given class of property. Special provisions are normally triggered by special circumstances or attributes of the taxpayer or property. Examples include senior tax deferrals, and special valuation exclusions based on age, health or special use.

The goal of this study is to compare the actual tax experience of the largest number of taxpayers in the selected jurisdictions.

What Do Rankings Mean?

Property tax rankings must be evaluated in the broader context of each state’s fiscal system. The level of property taxes in each state reflects the level of local spending there, intergovernmental aids paid to local governments, the relative use of non-property tax sources of financing public services such as local income or sales taxes and fees, for selected classes of property, state and local policies that affect the distribution of the property tax burden across properties.

