50-State Property Tax Comparison Study

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About the Minnesota Minnesota Center for Fiscal Excellence

The Minnesota Center for Fiscal Excellence, formerly known as the Minnesota Taxpayers Association, was founded in 1926 to promote sound tax policy, efficient spending, and accountable government.

We pursue this mission by

- educating and informing Minnesotans about sound fiscal policy;
- providing state and local policy makers with objective, non-partisan research about the impacts of tax and spending policies
- advocating for the adoption of policies reflecting principles of fiscal excellence.

MCFE generally defers from taking positions on levels of government taxation and spending believing that citizens, through their elected officials, are responsible for determining the level of government they are willing to support with their tax dollars. Instead, MCFE seeks to ensure that revenues raised to support government adhere to good tax policy principles and that the spending supported by these revenues accomplishes its purpose in an efficient, transparent, and accountable manner.

The Center is a non-profit, non-partisan group supported by membership dues. For information about membership, call (651) 224-7477, or visit our web site at www.fiscalexcellence.org

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I. Introduction

This is MCFE's[1] twelfth 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 studies[2]. 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 51.3% (Oregon) to 59.5% (Oregon). 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] Formerly known as the Minnesota Taxpayers Association.

[2] Previous studies are available for taxes payable 1995, 1998, 2000, 2002, and 2004 through 2011.

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.

Some cities have changed from the payable 2011 edition of this study. Our set of urban and fifty largest cities have not changed; however, our set of rural cities has changed as follows:

State	Pay 11 Study	Pay 12 Study
SD	Sisseton	Madison

This report is organized as follows:

Secton 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 states[3] and the District of Columbia, as well as Buffalo, New York and Aurora, Illinois (Urban analysis);
- The largest fifty cities in the United States[4] (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 codes[5] 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 continutity in the set of rural cities from one study to the next.

Subtituting this metholodogy 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:

Net Property Tax = ((TMV x SR) - EX) x CR x TR - C

[3] As estimated by the U.S. Census Bureau as of July 1, 2011.
[4] Also as of July 1, 2011.
[5] http://www.ers.usda.gov/briefing/rurality/ruralurbcon/

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 2012 that apply to the largest number of properties in each of our study locations. We defined "payable 2012 property taxes" as those taxes where the lien affixes to the property in 2012, 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 this study (for payable 2012), we have 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 $1/6^{th}$ 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 44.3% land and buildings (real property) and 55.7% personal property. Overall, the shares of personal property range from 51.3% (Oregon) to 59.5% (Oklahoma), 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 $2,528, 6.4% 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 6.4% 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 14 shows the payable 2012 property tax on two differently valued residential homesteads for the largest city in each state, Table 29 on page 25 shows the same for the nation's largest fifty cities, and Table 36 on page 36 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 2012 homestead property tax burdens by Census region. Residential property tax burdens in urban areas are highest, on average, in the Midwest and lowest in the West. Such burdens in rural areas were highest in New England, followed closely by the Mid-Atlantic region; burdens were lowest in the West and the South. Note that effective tax rates (ETR) rise as property value rises – this generally 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 2012

	Urban				Rural			
	$150,000		$300,000		$150,000		$300,000	
	Amount	ETR	Amount	ETR	Amount	ETR	Amount	ETR
New England	$2,663	1.775%	$5,606	1.869%	$3,007	2.005%	$6,046	2.015%
Mid-Atlantic	$2,384	1.589%	$4,902	1.634%	$2,865	1.910%	$5,864	1.955%
South	$1,656	1.104%	$3,570	1.190%	$1,291	0.861%	$2,798	0.933%
Midwest	$2,853	1.902%	$5,853	1.951%	$2,626	1.751%	$5,372	1.791%
Southwest	$1,936	1.291%	$3,958	1.319%	$1,556	1.037%	$3,188	1.063%
West	$1,498	0.998%	$3,158	1.053%	$1,207	0.805%	$2,522	0.841%
U.S. Average	**$2,148**	**1.432%**	**$4,480**	**1.493%**	**$1,978**	**1.318%**	**$4,083**	**1.361%**

Highest and Lowest Homestead Taxes – Urban

The urban cities with payable 2012 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; New York City offered a homestead exemption of $1,670 of assessed value from school taxes; 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 2012

Rank (of 53)	$150,000		$300,000	
	City, State	Tax	City, State	Tax
1	Detroit, MI	$5,001	Detroit, MI	$10,001
2	Bridgeport, CT	$4,317	Bridgeport, CT	$8,633
3	Aurora, IL	$4,176	Aurora, IL	$8,899
4	Milwaukee, WI	$3,846	Milwaukee, WI	$7,876
5	Des Moines, IA	$3,535	Des Moines, IA	$7,297
49	New York, NY	$854	New York, NY	$1,897
50	Denver, CO	$851	Columbia, SC	$1,860
51	Washington, DC	$669	Boston, MA	$1,837
52	Honolulu, HI	$240	Denver, CO	$1,703
53	Boston, MA	$174	Honolulu, HI	$760

Table 3 presents the highest and lowest taxes on median-valued homes. When residential values vary from city to city, Burlington and Aurora continue to impose top five burdens but Detroit, Milwaukee, and Des Moines are replaced by higher-valued Newark, Philadelphia, 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 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 2012

Rank (of 53)	Median-Valued Home			
	City, State	Tax	Value	ETR
1	Bridgeport, CT	$10,788	$374,900	2.878%
2	Newark, NJ	$9,058	$385,700	2.348%
3	Aurora, IL	$5,363	$187,700	2.857%
4	Philadelphia, PA	$5,138	$266,400	2.352%
5	Burlington, VT	$5,138	$233,900	1.929%
49	Cheyenne, WY	$1,058	$160,729	0.658%
50	Birmingham, AL	$1,014	$154,100	0.658%
51	Charleston, WV	$966	$126,700	0.762%
52	Columbia, SC	$889	$143,400	0.620%
53	Atlanta, GA	$721	$103,200	0.698%

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 2012 property taxes for the $150,000-valued and $300,000-valued homesteads. Three Texas cities are in the Top Five, reflecting in part the fact that Texas has no state income tax and relies more heavily on property taxes than many other states. As with our urban set of cities, most of these locations rank at or near the bottom because of low property tax rates and/or sizable homestead exemptions. 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 2012

Rank (of 50)	$150,000		$300,000	
	City, State	Tax	City, State	Tax
1	Detroit, MI	$5,001	Detroit, MI	$10,001
2	San Antonio, TX	$3,916	San Antonio, TX	$8,038
3	Milwaukee, WI	$3,848	Milwaukee, WI	$7,877
4	El Paso, TX	$3,685	El Paso, TX	$7,609
5	Fort Worth, TX	$3,678	Fort Worth, TX	$7,553
46	New York, NY	$854	Washington, DC	$1,913
47	Denver, CO	$851	New York, NY	$1,897
48	Colorado Springs, CO	$669	Boston, MA	$1,837
49	Washington, DC	$240	Denver, CO	$1,703
50	Boston, MA	$174	Colorado Springs, CO	$1,406

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

Beginning with this edition, this study includes analysis of 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 14 and for the fifty largest U.S. cities on Table 29 and Table 31, starting on page 25.

The sharp decline in home values since the beginning of the Great Recession has eliminated much of the homestead market value excluded under these types of provisions. Our modeling indicates assessment limitations would affect homeowners with average ownership tenure in only five cities in our Urban set[6] and five cities of the nation's largest fifty.[7] Table 5 shows how assessment limitations affect homeowners in those cities. Three of the locations – Portland, Los Angeles, and New York – have relatively stringent assessment limits. In the other two locations – Little Rock and Columbia – 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

	Effects - $150,000 Home		Effects - $300,000 Home	
	Change in Rank	Change in Tax Burden	Change in Rank	Change in Tax Burden
Portland, OR	-1	-$108	--	-$96
Los Angeles, CA	-8	-$489	-9	-$977
Little Rock, AR	+2	+$62	+1	+$125
Columbia, SC	--	+$39	+2	+$77
New York, NY	-1	-$84	-2	-$167

Table 6 shows assessment limitations affect homeowners in the nation's fifty largest cities. In this set of cities, all of the locations have relatively stringent assessment limits; although in the case of San Diego the rank moves up instead of down because the drop in property tax is less than that realized in Los Angeles and Long Beach.

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
Portland, OR	-2	-$108	-1	-$96
Los Angeles, CA	-12	-$489	-13	-$977
Long Beach, CA	-8	-$443	-8	-$887
San Diego, CA	+1	-$76	+2	-$154
New York, NY	-1	-$84	-1	-$167

Commercial Property Tax Rankings and Burdens – Urban and Rural Cities

Table 25 on page 17 shows the payable 2012 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 personal property; and $25 million of real property with $5 million of personal property. Table 32 on page 29 shows the same for the nation's largest fifty cities and Table 37 on page 38 shows the property taxes for commercial properties in a rural area in each state.

Table 7 below provides a snapshot of payable 2012 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

[6] Little Rock, AR; Los Angeles, CA; New York City, NY; Portland, OR; and Columbia, SC.
[7] Long Beach, CA; Los Angeles, CA: San Diego, CA; New York City, NY; and Portland, OR.

value rises – exemptions are generally fixed at a certain amount; 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 2012

	$100,000		$1,000,000		$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	$3,108	2.590%	$31,076	2.590%	$776,900	2.590%
Mid-Atlantic	$2,803	2.336%	$28,759	2.397%	$730,972	2.437%
South	$2,135	1.779%	$21,604	1.800%	$540,968	1.803%
Midwest	$3,304	2.754%	$33,749	2.812%	$846,625	2.822%
Southwest	$2,076	1.730%	$21,686	1.807%	$553,651	1.846%
West	$1,712	1.427%	$17,118	1.427%	$427,960	1.427%
U.S. Average	**$2,528**	**2.107%**	**$25,676**	**2.140%**	**$645,247**	**2.151%**

Table 8 on the next page provides the same information for rural municipalities. On average, these burdens are highest in the Midwest with ETRs around 2.4%-2.5%; the lowest burdens are found in the West where the ETR is constant at 1.145% for all values. As with urban areas, ETRs rise with property value because of the diminishing value of property tax exemptions.

Table 8: Rural Commercial Property Taxes by Census Region and Real Property Value, Pay 2012

	$100,000		$1,000,000		$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	$2,352	1.960%	$23,515	1.960%	$587,875	1.960%
Mid-Atlantic	$2,185	1.821%	$21,854	1.821%	$546,361	1.821%
South	$1,652	1.377%	$16,858	1.405%	$422,602	1.409%
Midwest	$2,927	2.439%	$29,999	2.500%	$752,998	2.510%
Southwest	$1,472	1.227%	$15,468	1.289%	$395,922	1.320%
West	$1,375	1.145%	$13,745	1.145%	$343,637	1.145%
U.S. Average	**$2,020**	**1.683%**	**$20,514**	**1.710%**	**$514,599**	**1.715%**

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 2012

Rank (of 53)	$100,000		$1,000,000		$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Providence, RI	$5,085	Providence, RI	$50,850	Providence, RI	$1,271,250
2	Detroit, MI	$4,925	Detroit, MI	$49,254	Detroit, MI	$1,231,339
3	Des Moines, IA	$4,843	Des Moines, IA	$48,428	Des Moines, IA	$1,210,704
4	Chicago, IL	$4,664	Chicago, IL	$46,637	Chicago, IL	$1,165,923
5	New York, NY	$3,855	Minneapolis, MN	$40,539	Minneapolis, MN	$1,049,304
49	Las Vegas, NV	$1,354	Las Vegas, NV	$13,539	Las Vegas, NV	$338,474
50	Virginia Beach, VA	$1,201	Virginia Beach, VA	$12,010	Virginia Beach, VA	$300,243
51	Honolulu, HI	$1,188	Honolulu, HI	$11,884	Honolulu, HI	$297,104
52	Seattle, WA	$1,133	Seattle, WA	$11,335	Seattle, WA	$283,368
53	Cheyenne, WY	$797	Cheyenne, WY	$7,968	Cheyenne, WY	$199,197

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 2012

Rank (of 50)	$100,000		$1,000,000		$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Detroit, MI	$4,925	Detroit, MI	$49,254	Detroit, MI	$1,231,339
2	Chicago, IL	$4,664	Chicago, IL	$46,637	Chicago, IL	$1,165,923
3	New York, NY	$3,855	Minneapolis, MN	$40,539	Minneapolis, MN	$1,049,304
4	Kansas City, MO	$3,507	New York, NY	$38,550	New York, NY	$963,761
5	Philadelphia, PA	$3,504	Kansas City, MO	$35,065	Kansas City, MO	$876,634
46	Sacramento, CA	$1,343	Las Vegas, NV	$13,430	Las Vegas, NV	$335,760
47	San Diego, CA	$1,334	Virginia Beach, VA	$13,338	Virginia Beach, VA	$333,459
48	Virginia Beach, VA	$1,201	Honolulu, HI	$12,010	Honolulu, HI	$300,243
49	Raleigh, NC	$1,192	Seattle, WA	$11,925	Seattle, WA	$298,124
50	Seattle, WA	$1,133	Cheyenne, WY	$11,335	Cheyenne, WY	$283,368

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	**$200,000**
	$1,000,000	$500,000	$400,000	$100,000	**$2,000,000**
	$25,000,000	$12,500,000	$10,000,000	$2,500,00	**$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.

Our payable 2012 industrial tax burden findings can be found in the following sections of the report beginning with Table 26 on page 20 for urban cities; beginning with Table 33 on page 31 for the nation's largest fifty cities and Table 38 on page 40 for rural municipalities.

Table 12 on the next page provides a snapshot of payable 2012 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 2012

	$100,000		$1,000,000		$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	$2,945	1.472%	$29,446	1.472%	$736,158	1.472%
Mid-Atlantic	$2,771	1.386%	$29,896	1.495%	$759,394	1.519%
South	$3,345	1.673%	$33,776	1.689%	$845,258	1.691%
Midwest	$3,567	1.784%	$36,381	1.819%	$912,418	1.825%
Southwest	$3,095	1.548%	$34,694	1.735%	$878,844	1.758%
West	$2,338	1.169%	$23,381	1.169%	$584,533	1.169%
U.S. Average	**$3,051**	**1.525%**	**$31,324**	**1.566%**	**$786,462**	**1.573%**

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

Table 13 on the next page 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 is constant at 0.927% for all parcel values. 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 2012

	$100,000		$1,000,000		$25,000,000	
	Amount	ETR	Amount	ETR	Amount	ETR
New England	$2,226	1.113%	$22,258	1.113%	$556,455	1.113%
Mid-Atlantic	$2,111	1.055%	$21,108	1.055%	$527,711	1.055%
South	$2,677	1.338%	$27,201	1.360%	$681,180	1.362%
Midwest	$3,166	1.583%	$32,388	1.619%	$812,722	1.625%
Southwest	$2,263	1.131%	$25,625	1.281%	$649,829	1.300%
West	$1,855	0.927%	$18,547	0.927%	$463,677	0.927%
U.S. Average	**$2,469**	**1.235%**	**$25,214**	**1.261%**	**$632,077**	**1.264%**

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 2012 industrial tax rankings in the Top Five or Bottom Five for every example where personal property comprises 50% of the parcel's value are shown in Table 14. 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, South Carolina law 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 ratios at some fraction of market value (Wilmington's sales ratio is 35.0% for industrial properties), an exemption for business property (Wilmington and Honolulu), or some combination of the three.

Table 14: Urban Cities with the Highest and Lowest Industrial Taxes, Payable 2012

Rank (of 53)	$100,000		$1,000,000		$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Columbia, SC	$7,225	Columbia, SC	$72,246	Columbia, SC	$1,806,139
2	Detroit, MI	$6,050	Detroit, MI	$60,497	Detroit, MI	$1,512,417
3	Memphis, TN	$5,122	Memphis, TN	$51,216	Memphis, TN	$1,280,405
4	Des Moines, IA	$5,085	Des Moines, IA	$50,847	Des Moines, IA	$1,271,181
5	Jackson, MS	$5,072	Jackson, MS	$50,723	Jackson, MS	$1,268,084
46	Seattle, WA	$1,530	Seattle, WA	$15,299	Seattle, WA	$382,484
47	Wilmington, DE	$1,381	Wilmington, DE	$13,811	Wilmington, DE	$345,284
48	Cheyenne, WY	$1,291	Cheyenne, WY	$12,911	Cheyenne, WY	$322,783
49	Honolulu, HI	$1,207	Honolulu, HI	$12,074	Honolulu, HI	$301,847
50	Virginia Beach, VA	$1,053	Virginia Beach, VA	$10,530	Virginia Beach, VA	$263,243

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. Four of the five highest ranked locations (and seven of the top ten) are located in Texas – again reflecting in part Texas' relatively high reliance on the property tax in its state and local finances. 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 2012

Rank (of 50)	$100,000		$1,000,000		$25,000,000	
	City, State	Tax	City, State	Tax	City, State	Tax
1	Detroit, MI	$6,050	Detroit, MI	$60,497	Detroit, MI	$1,512,417
2	Fort Worth, TX	$5,636	Fort Worth, TX	$56,357	Fort Worth, TX	$1,408,934
3	Dallas, TX	$5,462	Dallas, TX	$54,615	Dallas, TX	$1,365,380
4	San Antonio, TX	$5,386	San Antonio, TX	$53,858	San Antonio, TX	$1,346,456
5	El Paso, TX	$5,217	El Paso, TX	$52,174	El Paso, TX	$1,304,362
46	San Diego, CA	$1,778	San Diego, CA	$17,784	San Diego, CA	$444,612
47	Raleigh, NC	$1,559	Raleigh, NC	$15,591	Raleigh, NC	$389,784
48	Louisville, KY	$1,537	Louisville, KY	$15,369	Louisville, KY	$384,213
49	Seattle, WA	$1,530	Seattle, WA	$15,299	Seattle, WA	$382,484
50	Virginia Beach, VA	$1,053	Virginia Beach, VA	$10,530	Virginia Beach, VA	$263,243

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 24), top 50 cities (Table 35 on page 35), and rural municipalities (Table 40 on page 44). Table 16 shows payable 2012 apartment property tax burdens by Census region for both urban and rural cities. On average, urban burdens are highest in the Midwest with the Mid-Atlantic and New England very close behind and lowest by far in the West; rural burdens were highest in the Midwest by a wider margin and lowest again in the West.

Table 16: Urban and Rural Apartment Property Taxes by Census Region, Payable 2012

	Urban		Rural	
	Amount	ETR	Amount	ETR
New England	$14,256	2.263%	$12,673	2.012%
Mid-Atlantic	$14,467	2.296%	$12,332	1.957%
South	$10,732	1.703%	$8,444	1.340%
Midwest	$14,993	2.380%	$13,976	2.218%
Southwest	$9,609	1.525%	$7,800	1.238%
West	$7,134	1.132%	$5,853	0.929%
U.S. Average	**$11,838**	**1.879%**	**$10,046**	**1.595%**

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 2012

City, State	$600,000	
	Tax	Rank (of 53)
Des Moines, IA	$29,057	1
Detroit, MI	$26,580	2
New York, NY	$23,986	3
Providence, RI	$22,339	4
Buffalo, NY	$21,478	5
Salt Lake City, UT	$5,728	49
Washington, DC	$5,013	50
Cheyenne, WY	$4,090	51
Denver, CO	$4,016	52
Honolulu, HI	$1,960	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 two cities with the bottom rankings (Denver and Colorado Springs) have burdens that are substantially below the next-highest ranked city (Mesa). 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 2012

City, State	$600,000	
	Tax	Rank (of 50)
Detroit, MI	$26,580	1
New York, NY	$23,986	2
Memphis, TN	$18,537	3
San Antonio, TX	$17,287	4
Cleveland, OH	$17,000	5
Virginia Beach, VA	$5,874	46
Washington, DC	$5,013	47
Mesa, AZ	$4,824	48
Denver, CO	$4,016	49
Colorado Springs, CO	$3,344	50

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 subsized 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.[8]

Table 19: Commercial-Homestead Classification Ratios for Payable 2012, Urban Cities

State	City	Median Value ($)	Ratio	Rank	State	City	Median Value ($)	Ratio	Rank
New York	New York City	382,500	5.969	1	Ohio	Columbus	142,100	1.346	27
Hawaii	Honolulu	629,700	3.932	2	South Dakota	Sioux Falls	150,800	1.316	28
Massachusetts	Boston	362,100	3.931	3	Arkansas	Little Rock	137,800	1.258	29
South Carolina	Columbia	143,400	3.729	4	Michigan	Detroit	60,200	1.258	30
Colorado	Denver	260,700	3.538	5	Texas	Houston	168,300	1.255	31
Indiana	Indianapolis	135,100	2.962	6	Maryland	Baltimore	255,000	1.104	32
Illinois	Chicago	187,700	2.960	7	Illinois	Aurora	187,700	1.102	33
Louisiana	New Orleans	165,100	2.578	8	New Mexico	Albuquerque	174,300	1.082	34
Arizona	Phoenix	148,400	2.566	9	North Dakota	Fargo	148,600	1.081	35
Georgia	Atlanta	103,200	2.507	10	Delaware	Wilmington	219,700	1.079	36
District of Columbia	Washington	367,000	2.412	11	Alaska	Anchorage	335,731	1.069	37
Rhode Island	Providence	217,500	2.305	12	Oklahoma	Oklahoma City	139,100	1.067	38
Missouri	Kansas City	148,400	2.152	13	Maine	Portland	226,000	1.046	39
West Virginia	Charleston	126,700	2.140	14	Vermont	Burlington	266,400	1.043	40
Kansas	Wichita	118,800	2.105	15	Wisconsin	Milwaukee	189,700	1.034	41
Alabama	Birmingham	154,100	2.105	16	California	Los Angeles	296,800	1.024	42
Iowa	Des Moines	162,600	2.045	17	Nebraska	Omaha	143,000	1.010	43
Idaho	Boise	138,200	2.021	18	Wyoming	Cheyenne	160,729	1.005	44
Minnesota*	Minneapolis	174,500	2.007	19	Connecticut	Bridgeport	374,900	1.000	45
Utah	Salt Lake City	187,000	1.849	20	New Hampshire	Manchester	212,700	1.000	45
U.S. Average			**1.791**	--	New Jersey	Newark	385,700	1.000	45
Mississippi	Jackson	146,500	1.754	21	North Carolina	Charlotte	164,600	1.000	45
U.S. Average (w/o NYC)			**1.710**	--	Oregon	Portland	233,900	1.000	45
New York	Buffalo	131,600	1.691	22	Washington	Seattle	290,700	1.000	45
Tennessee	Memphis	123,500	1.600	23	Nevada	Las Vegas	130,700	0.986	51
Pennsylvania	Philadelphia	219,700	1.490	24	Kentucky	Louisville	139,600	0.956	52
Montana	Billings	178,681	1.446	25	Virginia	Virginia Beach	195,000	0.956	53
Florida	Jacksonville	133,000	1.403	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 2.636.

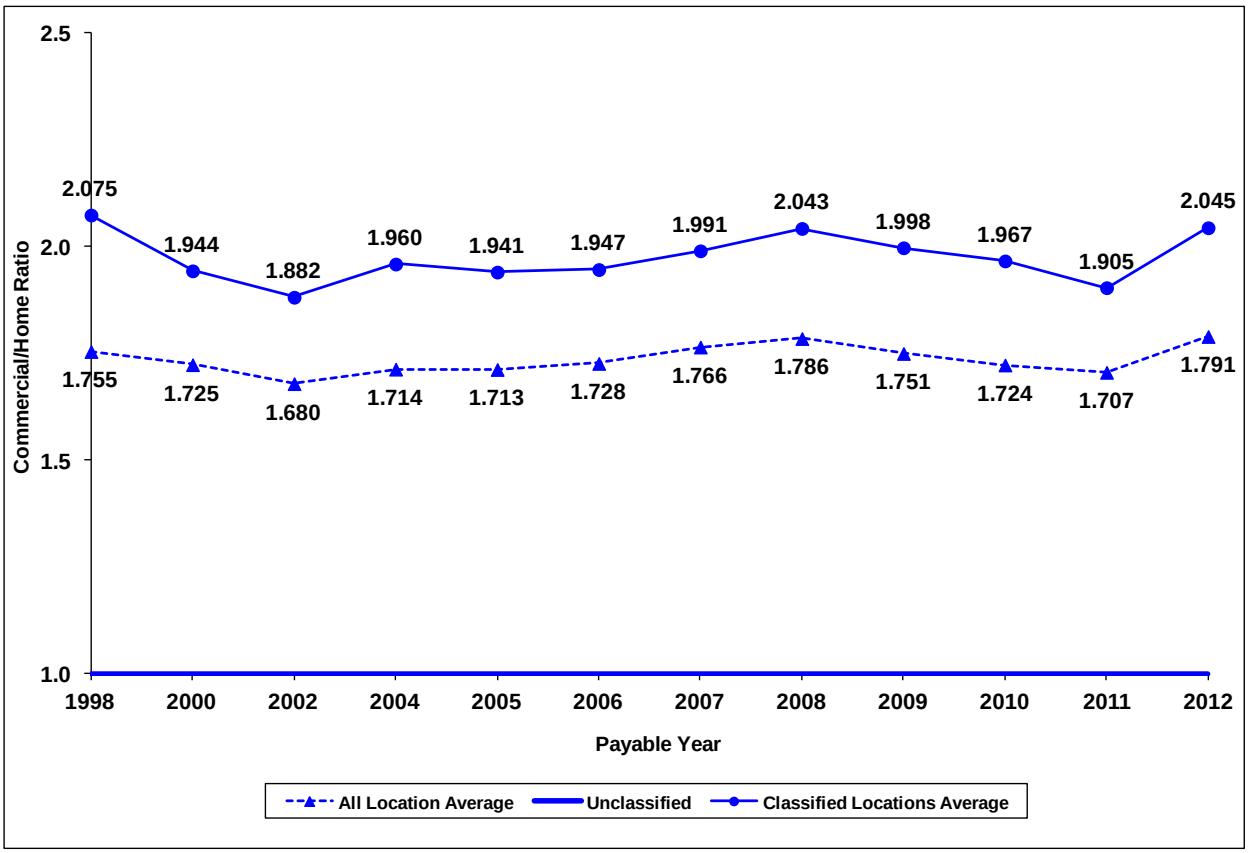
[8] Three locations have a ratio below 1.0, meaning that their classification systems favor commercial properties over homesteads. This is simply a function of applying the sales ratio; commercial properties in these locations are underassessed when compared to homestead properties.

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 roughly 35% of the value of the median home is excluded 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 jumped to an all-time high, from 1.707 to 1.791, after declining for three years in a row – meaning that the effective tax rate on $1 million commercial properties nationwide is, on average, 79.1% higher than the effective tax rate on median-valued homes. Tax disparities for "classified" locations[9], where residential and commercial property are treated differently in statute, also jumped considerably, to 2.045 – which is just above the recent high of 2.043 in 2008 and second only to the 2.075 figure seen in 1998. The increase in the classification ratio – a 4.9% increase nationwide and a 7.3% increase in the locations where residential preferences are written into law, indicates that states (and where allowed, local governments) are providing greater subsidies to homeowners. Figure 1 shows the trend since 1998.

Figure 1: Commercial-Homestead Classification Ratio, Urban Cities, 1998 – 2012



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.

[9] 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 specficially written into law.

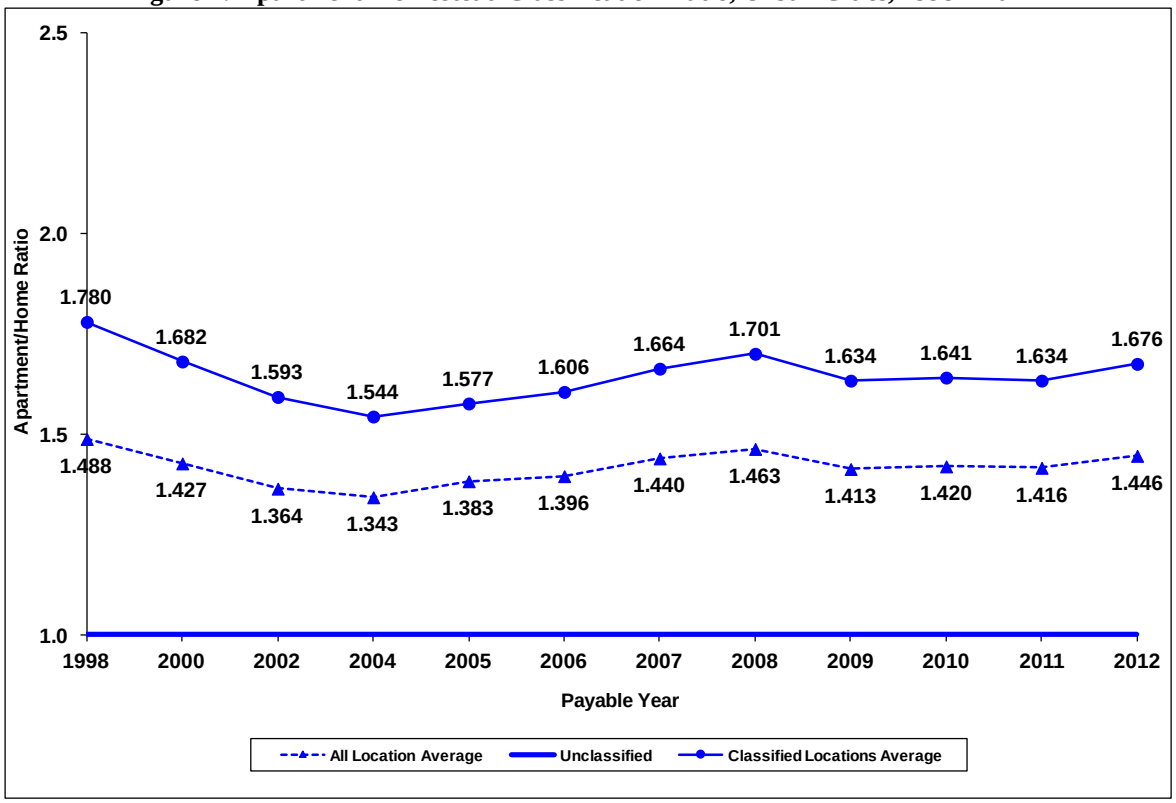
Table 20: Ratio of Apartment Effective Tax Rates (ETRs) to Homestead Rates, Urban Cities, Pay 2012

State	City	Median Value ($)	Ratio	Rank	State	City	Median Value ($)	Ratio	Rank
New York	New York City	382,500	6.190	1	North Dakota	Fargo	148,600	1.081	27
South Carolina	Columbia	143,400	3.729	2	Hawaii	Honolulu	629,700	1.081	28
Indiana	Indianapolis	135,100	2.962	3	Alaska	Anchorage	335,731	1.069	29
Georgia	Atlanta	103,200	2.507	4	Oklahoma	Oklahoma City	139,100	1.067	30
Alabama	Birmingham	154,100	2.105	5	Maine	Portland	226,000	1.046	31
West Virginia	Charleston	126,700	2.070	6	New Mexico	Albuquerque	174,300	1.041	32
Iowa	Des Moines	162,600	2.045	7	Wisconsin	Milwaukee	189,700	1.032	33
Idaho	Boise	138,200	2.021	8	California	Los Angeles	296,800	1.024	34
Rhode Island	Providence	217,500	2.000	9	Kansas	Wichita	118,800	1.023	35
Louisiana	New Orleans	165,100	1.788	10	Vermont	Burlington	266,400	1.018	36
Mississippi	Jackson	146,500	1.754	11	Utah	Salt Lake City	187,000	1.017	37
New York	Buffalo	131,600	1.691	12	Nebraska	Omaha	143,000	1.010	38
Massachusetts	Boston	362,100	1.643	13	Connecticut	Bridgeport	374,900	1.000	39
Tennessee	Memphis	123,500	1.600	14	Delaware	Wilmington	219,700	1.000	39
U.S. Average			**1.446**	--	Missouri	Kansas City	148,400	1.000	39
Minnesota*	Minneapolis	174,500	1.434	15	Montana	Billings	178,681	1.000	39
Florida	Jacksonville	133,000	1.403	16	New Hampshire	Manchester	212,700	1.000	39
U.S. Avg (w/o NYC)			**1.355**	--	New Jersey	Newark	385,700	1.000	39
Ohio	Columbus	142,100	1.346	17	North Carolina	Charlotte	164,600	1.000	39
Texas	Houston	168,300	1.337	18	Oregon	Portland	233,900	1.000	39
South Dakota	Sioux Falls	150,800	1.316	19	Pennsylvania	Philadelphia	219,700	1.490	39
Michigan	Detroit	60,200	1.265	20	Washington	Seattle	290,700	1.000	39
Arkansas	Little Rock	137,800	1.258	21	Colorado	Denver	260,700	0.997	49
District of Columbia	Washington	367,000	1.243	22	Wyoming	Cheyenne	160,729	0.984	50
Arizona	Phoenix	148,400	1.214	23	Nevada	Las Vegas	130,700	0.977	51
Illinois	Chicago	187,700	1.150	24	Kentucky	Louisville	139,600	0.956	52
Maryland	Baltimore	255,000	1.104	25	Virginia	Virginia Beach	195,000	0.956	53
Illinois	Aurora	187,700	1.102	26					--

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

Overall, the U.S. average rose 2.1% from the previous year; and by 2.9% if New York City is excluded, largely a reflection that effective tax rates for apartment properties increased faster than effective tax rates for the average median home. This indicates that homeowners are being offered a higher relative level of subsidy, either because existing homestead exemptions are becoming more valuable, or because states have enacted policies to widen 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 – 2012



Note: see footnote 8 on page 15 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. Twelve of the locations in our Urban set of cities have had classification ratios of 1.05 or less in at least eight of the ten 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 ten remaining locations[10] offer little or no preferential treatment to homeowners. Census data indicates that property tax increases between 1998 and 2010, on both a per capita and per $1,000 of income basis, have been lower in the ten states these locations represent that have offered little or no homeowner subsidy (Table 21).

Table 21: Property Tax Collections, FY 1998 and FY 2010, 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 = 10)		Remaining States (n = 41)	
	Prop Tax Per Capita	Prop Tax per $1,000 of Income	Prop Tax Per Capita	Prop Tax per $1,000 of Income
FY 1998	$780.81	$30.91	$861.42	$33.54
FY 2010	$1,258.56	$32.65	$1,452.53	$37.22
Pct Chg	**61.2%**	**5.7%**	**68.6%**	**11.0%**
Property tax and population data from Department of the Census; income data from Bureau of Economic Analysis. Calculations by MCFE.				

[10] Wilmington, DE; Louisville, KY; Baltimore, MD; Omaha, NE; Manchester, NH; Las Vegas, NV; Charlotte, NC; Seattle, WA; Milwaukee, WI; and Cheyenne, WY.

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IV. Rankings Tables – Urban

Table 22: Urban Homestead Property Taxes

Payable 2012

$150,000 VALUED PROPERTY

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	5,001	3.334%
2	Connecticut	Bridgeport	4,317	2.878%
3	Illinois	Aurora	4,176	2.784%
4	Wisconsin	Milwaukee	3,846	2.564%
5	Iowa	Des Moines	3,535	2.357%
6	Pennsylvania	Philadelphia	3,528	2.352%
7	New Jersey	Newark	3,523	2.348%
8	New Hampshire	Manchester	3,377	2.251%
9	Oregon	Portland	3,268	2.179%
10	New York	Buffalo	3,200	2.133%
11	Ohio	Columbus	3,063	2.042%
12	Nebraska	Omaha	3,028	2.019%
13	Maryland	Baltimore	2,992	1.995%
14	Vermont	Burlington	2,893	1.929%
15	Texas	Houston	2,812	1.875%
16	Tennessee	Memphis	2,796	1.864%
17	Maine	Portland	2,635	1.757%
18	Rhode Island	Providence	2,583	1.722%
19	North Dakota	Fargo	2,350	1.566%
20	Illinois	Chicago	2,298	1.532%
21	Minnesota	Minneapolis	2,227	1.485%
	AVERAGE		**2,148**	**1.432%**
22	Mississippi	Jackson	2,115	1.410%
23	Missouri	Kansas City	2,071	1.381%
24	Kansas	Wichita	2,053	1.369%
25	Florida	Jacksonville	1,969	1.312%
26	Kentucky	Louisville	1,967	1.311%
27	South Dakota	Sioux Falls	1,950	1.300%
28	Georgia	Atlanta	1,943	1.295%
29	Alaska	Anchorage	1,937	1.292%
30	Delaware	Wilmington	1,921	1.281%
31	New Mexico	Albuquerque	1,866	1.244%
32	North Carolina	Charlotte	1,847	1.231%
33	California	Los Angeles	1,810	1.206%
34	Oklahoma	Oklahoma City	1,783	1.189%
35	Nevada	Las Vegas	1,711	1.141%
36	Arkansas	Little Rock	1,673	1.115%
37	Montana	Billings	1,511	1.007%
38	Indiana	Indianapolis	1,496	0.997%
39	Idaho	Boise	1,465	0.977%
40	Virginia	Virginia Beach	1,420	0.947%
41	Washington	Seattle	1,403	0.935%
42	Utah	Salt Lake City	1,290	0.860%
43	Arizona	Phoenix	1,283	0.855%
44	West Virginia	Charleston	1,143	0.762%
45	Louisiana	New Orleans	1,088	0.725%
46	Wyoming	Cheyenne	988	0.658%
47	Alabama	Birmingham	985	0.657%
48	South Carolina	Columbia	930	0.620%
49	New York	New York City	854	0.569%
50	Colorado	Denver	851	0.568%
51	DC	Washington	669	0.446%
52	Hawaii	Honolulu	240	0.160%
53	Massachusetts	Boston	174	0.116%

$150,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	5,001	3.334%
2	Connecticut	Bridgeport	4,317	2.878%
3	Illinois	Aurora	4,176	2.784%
4	Wisconsin	Milwaukee	3,846	2.564%
5	Iowa	Des Moines	3,535	2.357%
6	Pennsylvania	Philadelphia	3,528	2.352%
7	New Jersey	Newark	3,523	2.348%
8	New Hampshire	Manchester	3,377	2.251%
9	New York	Buffalo	3,200	2.133%
10	Oregon	Portland	3,120	2.080%
11	Ohio	Columbus	3,063	2.042%
12	Nebraska	Omaha	3,028	2.019%
13	Maryland	Baltimore	2,992	1.995%
14	Vermont	Burlington	2,893	1.929%
15	Texas	Houston	2,812	1.875%
16	Tennessee	Memphis	2,796	1.864%
17	Maine	Portland	2,635	1.757%
18	Rhode Island	Providence	2,583	1.722%
19	North Dakota	Fargo	2,350	1.566%
20	Illinois	Chicago	2,298	1.532%
21	Minnesota	Minneapolis	2,227	1.485%
	AVERAGE		**2,137**	**1.424%**
22	Mississippi	Jackson	2,115	1.410%
23	Missouri	Kansas City	2,071	1.381%
24	Kansas	Wichita	2,053	1.369%
25	Florida	Jacksonville	1,969	1.312%
26	Kentucky	Louisville	1,967	1.311%
27	South Dakota	Sioux Falls	1,950	1.300%
28	Georgia	Atlanta	1,943	1.295%
29	Alaska	Anchorage	1,937	1.292%
30	Delaware	Wilmington	1,921	1.281%
31	New Mexico	Albuquerque	1,866	1.244%
32	North Carolina	Charlotte	1,847	1.231%
33	Oklahoma	Oklahoma City	1,783	1.189%
34	Arkansas	Little Rock	1,735	1.157%
35	Nevada	Las Vegas	1,711	1.141%
36	Montana	Billings	1,511	1.007%
37	Indiana	Indianapolis	1,496	0.997%
38	Idaho	Boise	1,465	0.977%
39	Virginia	Virginia Beach	1,420	0.947%
40	Washington	Seattle	1,403	0.935%
41	California	Los Angeles	1,321	0.881%
42	Utah	Salt Lake City	1,290	0.860%
43	Arizona	Phoenix	1,283	0.855%
44	West Virginia	Charleston	1,143	0.762%
45	Louisiana	New Orleans	1,088	0.725%
46	Wyoming	Cheyenne	988	0.658%
47	Alabama	Birmingham	985	0.657%
48	South Carolina	Columbia	969	0.646%
49	Colorado	Denver	851	0.568%
50	New York	New York City	770	0.514%
51	DC	Washington	669	0.446%
52	Hawaii	Honolulu	240	0.160%
53	Massachusetts	Boston	174	0.116%

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

Payable 2012

$300,000 VALUED PROPERTY

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	10,001	3.334%
2	Illinois	Aurora	8,899	2.966%
3	Connecticut	Bridgeport	8,633	2.878%
4	Wisconsin	Milwaukee	7,876	2.625%
5	Iowa	Des Moines	7,297	2.432%
6	Pennsylvania	Philadelphia	7,056	2.352%
7	New Jersey	Newark	7,045	2.348%
8	New Hampshire	Manchester	6,754	2.251%
9	New York	Buffalo	6,579	2.193%
10	Oregon	Portland	6,536	2.179%
11	Ohio	Columbus	6,126	2.042%
12	Nebraska	Omaha	6,057	2.019%
13	Maryland	Baltimore	5,985	1.995%
14	Vermont	Burlington	5,786	1.929%
15	Texas	Houston	5,763	1.921%
16	Tennessee	Memphis	5,592	1.864%
17	Maine	Portland	5,458	1.819%
18	Rhode Island	Providence	5,166	1.722%
19	Minnesota	Minneapolis	5,022	1.674%
20	Illinois	Chicago	4,923	1.641%
21	North Dakota	Fargo	4,699	1.566%
22	Florida	Jacksonville	4,610	1.537%
23	Georgia	Atlanta	4,570	1.523%
24	Mississippi	Jackson	4,531	1.510%
	AVERAGE		**4,480**	**1.493%**
25	Idaho	Boise	4,226	1.409%
26	Kansas	Wichita	4,152	1.384%
27	Missouri	Kansas City	4,142	1.381%
28	Alaska	Anchorage	3,994	1.331%
29	Kentucky	Louisville	3,934	1.311%
30	South Dakota	Sioux Falls	3,900	1.300%
31	Delaware	Wilmington	3,842	1.281%
32	New Mexico	Albuquerque	3,821	1.274%
33	California	Los Angeles	3,708	1.236%
34	Arkansas	Little Rock	3,696	1.232%
35	North Carolina	Charlotte	3,693	1.231%
36	Oklahoma	Oklahoma City	3,681	1.227%
37	Nevada	Las Vegas	3,422	1.141%
38	Louisiana	New Orleans	3,200	1.067%
39	Montana	Billings	3,021	1.007%
40	Indiana	Indianapolis	2,991	0.997%
41	Virginia	Virginia Beach	2,841	0.947%
42	Washington	Seattle	2,806	0.935%
43	Utah	Salt Lake City	2,581	0.860%
44	Arizona	Phoenix	2,565	0.855%
45	West Virginia	Charleston	2,287	0.762%
46	Alabama	Birmingham	2,024	0.675%
47	Wyoming	Cheyenne	1,975	0.658%
48	DC	Washington	1,913	0.638%
49	New York	New York City	1,897	0.632%
50	South Carolina	Columbia	1,860	0.620%
51	Massachusetts	Boston	1,837	0.612%
52	Colorado	Denver	1,703	0.568%
53	Hawaii	Honolulu	760	0.253%

$300,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	10,001	3.334%
2	Illinois	Aurora	8,899	2.966%
3	Connecticut	Bridgeport	8,633	2.878%
4	Wisconsin	Milwaukee	7,876	2.625%
5	Iowa	Des Moines	7,297	2.432%
6	Pennsylvania	Philadelphia	7,056	2.352%
7	New Jersey	Newark	7,045	2.348%
8	New Hampshire	Manchester	6,754	2.251%
9	New York	Buffalo	6,579	2.193%
10	Oregon	Portland	6,240	2.080%
11	Ohio	Columbus	6,126	2.042%
12	Nebraska	Omaha	6,057	2.019%
13	Maryland	Baltimore	5,985	1.995%
14	Vermont	Burlington	5,786	1.929%
15	Texas	Houston	5,763	1.921%
16	Tennessee	Memphis	5,592	1.864%
17	Maine	Portland	5,458	1.819%
18	Rhode Island	Providence	5,166	1.722%
19	Minnesota	Minneapolis	5,022	1.674%
20	Illinois	Chicago	4,923	1.641%
21	North Dakota	Fargo	4,699	1.566%
22	Florida	Jacksonville	4,610	1.537%
23	Georgia	Atlanta	4,570	1.523%
24	Mississippi	Jackson	4,531	1.510%
	AVERAGE		**4,457**	**1.486%**
25	Idaho	Boise	4,226	1.409%
26	Kansas	Wichita	4,152	1.384%
27	Missouri	Kansas City	4,142	1.381%
28	Alaska	Anchorage	3,994	1.331%
29	Kentucky	Louisville	3,934	1.311%
30	South Dakota	Sioux Falls	3,900	1.300%
31	Delaware	Wilmington	3,842	1.281%
32	New Mexico	Albuquerque	3,821	1.274%
33	Arkansas	Little Rock	3,821	1.274%
34	North Carolina	Charlotte	3,693	1.231%
35	Oklahoma	Oklahoma City	3,681	1.227%
36	Nevada	Las Vegas	3,422	1.141%
37	Louisiana	New Orleans	3,200	1.067%
38	Montana	Billings	3,021	1.007%
39	Indiana	Indianapolis	2,991	0.997%
40	Virginia	Virginia Beach	2,841	0.947%
41	Washington	Seattle	2,806	0.935%
42	California	Los Angeles	2,731	0.910%
43	Utah	Salt Lake City	2,581	0.860%
44	Arizona	Phoenix	2,565	0.855%
45	West Virginia	Charleston	2,287	0.762%
46	Alabama	Birmingham	2,024	0.675%
47	Wyoming	Cheyenne	1,975	0.658%
48	South Carolina	Columbia	1,937	0.646%
49	DC	Washington	1,913	0.638%
50	Massachusetts	Boston	1,837	0.612%
51	New York	New York City	1,730	0.577%
52	Colorado	Denver	1,703	0.568%
53	Hawaii	Honolulu	760	0.253%

V. Rankings Tables – Urban

Table 23: Urban Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2012

State	City	2012 2nd Quarter Median Sales Price#	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
Connecticut	Bridgeport	374,900	10,788	1	2.878%	2
New Jersey	Newark	385,700	9,058	2	2.348%	7
Illinois	Aurora	187,700	5,363	3	2.857%	3
Pennsylvania	Philadelphia	219,700	5,168	4	2.352%	6
Vermont	Burlington	266,400	5,138	5	1.929%	14
Oregon	Portland	233,900	5,096	6	2.179%	9
Maryland	Baltimore	255,000	5,087	7	1.995%	13
Wisconsin	Milwaukee	189,700	4,913	8	2.590%	4
New Hampshire	Manchester	212,700	4,788	9	2.251%	8
Alaska	Anchorage	335,731	4,507	10	1.342%	25
Maine	Portland	226,000	4,065	11	1.799%	17
Iowa	Des Moines	162,600	3,851	12	2.369%	5
Rhode Island	Providence	217,500	3,745	13	1.722%	18
California	Los Angeles	296,800	3,668	14	1.236%	31
Texas	Houston	168,300	3,172	15	1.885%	15
Illinois	Chicago	187,700	2,958	16	1.576%	19
Ohio	Columbus	142,100	2,902	17	2.042%	11
Nebraska	Omaha	143,000	2,887	18	2.019%	12
AVERAGE			**2,847**		**1.446%**	
Delaware	Wilmington	219,700	2,813	19	1.281%	28
New York	Buffalo	131,600	2,785	20	2.116%	10
Washington	Seattle	290,700	2,719	21	0.935%	40
Minnesota	Minneapolis	174,500	2,684	22	1.538%	21
Massachusetts	Boston	362,100	2,558	23	0.706%	45
New York	New York City	382,500	2,470	24	0.646%	50
DC	Washington	367,000	2,468	25	0.672%	47
North Dakota	Fargo	148,600	2,328	26	1.566%	20
Tennessee	Memphis	123,500	2,302	27	1.864%	16
New Mexico	Albuquerque	174,300	2,182	28	1.252%	30
Mississippi	Jackson	146,500	2,059	29	1.405%	22
Missouri	Kansas City	148,400	2,049	30	1.381%	23
North Carolina	Charlotte	164,600	2,026	31	1.231%	32
Michigan	Detroit	60,200	2,007	32	3.334%	1
South Dakota	Sioux Falls	150,800	1,961	33	1.300%	27
Hawaii	Honolulu	629,700	1,903	34	0.302%	53
Virginia	Virginia Beach	195,000	1,847	35	0.947%	39
Kentucky	Louisville	139,600	1,831	36	1.311%	26
Montana	Billings	178,681	1,799	37	1.007%	36
Florida	Jacksonville	133,000	1,669	38	1.255%	29
Oklahoma	Oklahoma City	139,100	1,645	39	1.183%	33
Kansas	Wichita	118,800	1,616	40	1.361%	24
Utah	Salt Lake City	187,000	1,609	41	0.860%	41
Arkansas	Little Rock	137,800	1,508	42	1.095%	35
Nevada	Las Vegas	130,700	1,491	43	1.141%	34
Colorado	Denver	260,700	1,480	44	0.568%	52
Idaho	Boise	138,200	1,350	45	0.977%	38
Indiana	Indianapolis	135,100	1,347	46	0.997%	37
Louisiana	New Orleans	165,100	1,301	47	0.788%	43
Arizona	Phoenix	148,400	1,269	48	0.855%	42
Wyoming	Cheyenne	160,729	1,058	49	0.658%	48
Alabama	Birmingham	154,100	1,014	50	0.658%	49
West Virginia	Charleston	126,700	966	51	0.762%	44
South Carolina	Columbia	143,400	889	52	0.620%	51
Georgia	Atlanta	103,200	721	53	0.698%	46

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.

Table 24: Urban Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2012 – With Assessment Limitations

State	City	2012 2nd Quarter Median Sales Price#	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
Connecticut	Bridgeport	374,900	10,788	1	2.878%	2
New Jersey	Newark	385,700	9,058	2	2.348%	7
Illinois	Aurora	187,700	5,363	3	2.857%	3
Pennsylvania	Philadelphia	219,700	5,168	4	2.352%	6
Vermont	Burlington	266,400	5,138	5	1.929%	14
Maryland	Baltimore	255,000	5,087	6	1.995%	13
Wisconsin	Milwaukee	189,700	4,913	7	2.590%	4
Oregon	Portland	233,900	4,865	8	2.080%	10
New Hampshire	Manchester	212,700	4,788	9	2.251%	8
Alaska	Anchorage	335,731	4,507	10	1.342%	25
Maine	Portland	226,000	4,065	11	1.799%	17
Iowa	Des Moines	162,600	3,851	12	2.369%	5
Rhode Island	Providence	217,500	3,745	13	1.722%	18
Texas	Houston	168,300	3,172	14	1.885%	15
Illinois	Chicago	187,700	2,958	15	1.576%	19
Ohio	Columbus	142,100	2,902	16	2.042%	11
Nebraska	Omaha	143,000	2,887	17	2.019%	12
AVERAGE			**2,821**		**1.437%**	
Delaware	Wilmington	219,700	2,813	18	1.281%	28
New York	Buffalo	131,600	2,785	19	2.116%	9
Washington	Seattle	290,700	2,719	20	0.935%	39
California	Los Angeles	296,800	2,701	21	0.910%	40
Minnesota	Minneapolis	174,500	2,684	22	1.538%	21
Massachusetts	Boston	362,100	2,558	23	0.706%	45
DC	Washington	367,000	2,468	24	0.672%	46
North Dakota	Fargo	148,600	2,328	25	1.566%	20
Tennessee	Memphis	123,500	2,302	26	1.864%	16
New York	New York City	382,500	2,258	27	0.590%	51
New Mexico	Albuquerque	174,300	2,182	28	1.252%	30
Mississippi	Jackson	146,500	2,059	29	1.405%	22
Missouri	Kansas City	148,400	2,049	30	1.381%	23
North Carolina	Charlotte	164,600	2,026	31	1.231%	31
Michigan	Detroit	60,200	2,007	32	3.334%	1
South Dakota	Sioux Falls	150,800	1,961	33	1.300%	27
Hawaii	Honolulu	629,700	1,903	34	0.302%	53
Virginia	Virginia Beach	195,000	1,847	35	0.947%	38
Kentucky	Louisville	139,600	1,831	36	1.311%	26
Montana	Billings	178,681	1,799	37	1.007%	35
Florida	Jacksonville	133,000	1,669	38	1.255%	29
Oklahoma	Oklahoma City	139,100	1,645	39	1.183%	32
Kansas	Wichita	118,800	1,616	40	1.361%	24
Utah	Salt Lake City	187,000	1,609	41	0.860%	41
Arkansas	Little Rock	137,800	1,566	42	1.136%	34
Nevada	Las Vegas	130,700	1,491	43	1.141%	33
Colorado	Denver	260,700	1,480	44	0.568%	52
Idaho	Boise	138,200	1,350	45	0.977%	37
Indiana	Indianapolis	135,100	1,347	46	0.997%	36
Louisiana	New Orleans	165,100	1,301	47	0.788%	43
Arizona	Phoenix	148,400	1,269	48	0.855%	42
Wyoming	Cheyenne	160,729	1,058	49	0.658%	47
Alabama	Birmingham	154,100	1,014	50	0.658%	48
West Virginia	Charleston	126,700	966	51	0.762%	44
South Carolina	Columbia	143,400	926	52	0.646%	49
Georgia	Atlanta	103,200	663	53	0.643%	50

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.

Table 25: Urban Commercial Property Taxes

Payable 2012

$100,000 VALUED PROPERTY
$20,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Rhode Island	Providence	5,085	4.238%
2	Michigan	Detroit	4,925	4.104%
3	Iowa	Des Moines	4,843	4.036%
4	Illinois	Chicago	4,664	3.886%
5	New York	New York City	3,855	3.213%
6	New York	Buffalo	3,580	2.983%
7	Missouri	Kansas City	3,507	2.922%
8	Pennsylvania	Philadelphia	3,504	2.920%
9	Kansas	Wichita	3,467	2.889%
10	Connecticut	Bridgeport	3,453	2.878%
11	Indiana	Indianapolis	3,423	2.853%
12	Massachusetts	Boston	3,415	2.846%
13	Tennessee	Memphis	3,410	2.842%
14	Maryland	Baltimore	3,331	2.776%
15	South Carolina	Columbia	3,305	2.754%
16	Minnesota	Minneapolis	3,208	2.673%
17	Illinois	Aurora	3,149	2.624%
18	Wisconsin	Milwaukee	3,144	2.620%
19	Mississippi	Jackson	2,986	2.488%
20	Texas	Houston	2,866	2.389%
21	Ohio	Columbus	2,748	2.290%
22	Oregon	Portland	2,615	2.179%
	AVERAGE		**2,528**	**2.107%**
23	Nebraska	Omaha	2,475	2.062%
24	Louisiana	New Orleans	2,472	2.060%
25	Colorado	Denver	2,422	2.018%
26	Idaho	Boise	2,364	1.970%
27	New Jersey	Newark	2,348	1.957%
28	Maine	Portland	2,258	1.882%
29	New Hampshire	Manchester	2,251	1.876%
30	Arizona	Phoenix	2,194	1.828%
31	Vermont	Burlington	2,182	1.819%
32	Georgia	Atlanta	2,106	1.755%
33	West Virginia	Charleston	1,952	1.627%
34	Utah	Salt Lake City	1,911	1.592%
35	Montana	Billings	1,782	1.485%
36	Florida	Jacksonville	1,761	1.467%
37	Alaska	Anchorage	1,746	1.455%
38	South Dakota	Sioux Falls	1,710	1.425%
39	North Dakota	Fargo	1,693	1.411%
40	New Mexico	Albuquerque	1,666	1.389%
41	Alabama	Birmingham	1,662	1.385%
42	Arkansas	Little Rock	1,660	1.383%
43	Kentucky	Louisville	1,630	1.358%
44	DC	Washington	1,622	1.352%
45	Oklahoma	Oklahoma City	1,577	1.314%
46	California	Los Angeles	1,519	1.266%
47	North Carolina	Charlotte	1,477	1.231%
48	Delaware	Wilmington	1,381	1.151%
49	Nevada	Las Vegas	1,354	1.128%
50	Virginia	Virginia Beach	1,201	1.001%
51	Hawaii	Honolulu	1,188	0.990%
52	Washington	Seattle	1,133	0.945%
53	Wyoming	Cheyenne	797	0.664%

$1 MILLION-VALUED PROPERTY
$200,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Rhode Island	Providence	50,850	4.238%
2	Michigan	Detroit	49,254	4.104%
3	Iowa	Des Moines	48,428	4.036%
4	Illinois	Chicago	46,637	3.886%
5	Minnesota	Minneapolis	40,539	3.378%
6	New York	New York City	38,550	3.213%
7	New York	Buffalo	35,797	2.983%
8	Missouri	Kansas City	35,065	2.922%
9	Pennsylvania	Philadelphia	35,043	2.920%
10	Kansas	Wichita	34,673	2.889%
11	Connecticut	Bridgeport	34,532	2.878%
12	Indiana	Indianapolis	34,230	2.853%
13	Massachusetts	Boston	34,154	2.846%
14	Tennessee	Memphis	34,104	2.842%
15	Maryland	Baltimore	33,308	2.776%
16	South Carolina	Columbia	33,049	2.754%
17	Wisconsin	Milwaukee	32,156	2.680%
18	Illinois	Aurora	31,486	2.624%
19	Mississippi	Jackson	29,861	2.488%
20	Texas	Houston	28,662	2.389%
21	Ohio	Columbus	27,484	2.290%
22	Oregon	Portland	26,146	2.179%
	AVERAGE		**25,676**	**2.140%**
23	Arizona	Phoenix	25,649	2.137%
24	Nebraska	Omaha	24,748	2.062%
25	Louisiana	New Orleans	24,720	2.060%
26	Colorado	Denver	24,215	2.018%
27	Idaho	Boise	23,642	1.970%
28	New Jersey	Newark	23,484	1.957%
29	Maine	Portland	22,584	1.882%
30	New Hampshire	Manchester	22,513	1.876%
31	Vermont	Burlington	21,823	1.819%
32	DC	Washington	21,320	1.777%
33	Georgia	Atlanta	21,060	1.755%
34	Florida	Jacksonville	20,634	1.719%
35	West Virginia	Charleston	19,522	1.627%
36	Utah	Salt Lake City	19,106	1.592%
37	Montana	Billings	17,816	1.485%
38	Alaska	Anchorage	17,465	1.455%
39	South Dakota	Sioux Falls	17,105	1.425%
40	North Dakota	Fargo	16,932	1.411%
41	New Mexico	Albuquerque	16,663	1.389%
42	Alabama	Birmingham	16,624	1.385%
43	Arkansas	Little Rock	16,596	1.383%
44	Kentucky	Louisville	16,301	1.358%
45	Oklahoma	Oklahoma City	15,773	1.314%
46	California	Los Angeles	15,187	1.266%
47	North Carolina	Charlotte	14,769	1.231%
48	Delaware	Wilmington	13,811	1.151%
49	Nevada	Las Vegas	13,539	1.128%
50	Virginia	Virginia Beach	12,010	1.001%
51	Hawaii	Honolulu	11,884	0.990%
52	Washington	Seattle	11,335	0.945%
53	Wyoming	Cheyenne	7,968	0.664%

Table 25 (cont'd.): Urban Commercial Property Taxes
Payable 2012

$25 MILLION-VALUED PROPERTY
$5,000,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Rhode Island	Providence	1,271,250	4.238%
2	Michigan	Detroit	1,231,339	4.104%
3	Iowa	Des Moines	1,210,704	4.036%
4	Illinois	Chicago	1,165,923	3.886%
5	Minnesota	Minneapolis	1,049,304	3.498%
6	New York	New York City	963,761	3.213%
7	New York	Buffalo	894,937	2.983%
8	Missouri	Kansas City	876,634	2.922%
9	Pennsylvania	Philadelphia	876,075	2.920%
10	Kansas	Wichita	866,827	2.889%
11	Connecticut	Bridgeport	863,310	2.878%
12	Indiana	Indianapolis	855,750	2.853%
13	Massachusetts	Boston	853,860	2.846%
14	Tennessee	Memphis	852,605	2.842%
15	Maryland	Baltimore	832,708	2.776%
16	South Carolina	Columbia	826,221	2.754%
17	Wisconsin	Milwaukee	805,808	2.686%
18	Illinois	Aurora	787,140	2.624%
19	Mississippi	Jackson	746,534	2.488%
20	Texas	Houston	716,553	2.389%
21	Arizona	Phoenix	687,167	2.291%
22	Ohio	Columbus	687,091	2.290%
23	Oregon	Portland	653,638	2.179%
	AVERAGE		**645,247**	**2.151%**
24	Nebraska	Omaha	618,697	2.062%
25	Louisiana	New Orleans	618,005	2.060%
26	DC	Washington	616,938	2.056%
27	Colorado	Denver	605,379	2.018%
28	Idaho	Boise	591,047	1.970%
29	New Jersey	Newark	587,099	1.957%
30	Maine	Portland	564,600	1.882%
31	New Hampshire	Manchester	562,818	1.876%
32	Vermont	Burlington	545,565	1.819%
33	Georgia	Atlanta	526,507	1.755%
34	Florida	Jacksonville	526,208	1.754%
35	West Virginia	Charleston	488,057	1.627%
36	Utah	Salt Lake City	477,656	1.592%
37	Montana	Billings	445,411	1.485%
38	Alaska	Anchorage	436,622	1.455%
39	South Dakota	Sioux Falls	427,613	1.425%
40	North Dakota	Fargo	423,299	1.411%
41	New Mexico	Albuquerque	416,568	1.389%
42	Alabama	Birmingham	415,610	1.385%
43	Arkansas	Little Rock	414,893	1.383%
44	Kentucky	Louisville	407,513	1.358%
45	Oklahoma	Oklahoma City	394,316	1.314%
46	California	Los Angeles	379,665	1.266%
47	North Carolina	Charlotte	369,221	1.231%
48	Delaware	Wilmington	345,284	1.151%
49	Nevada	Las Vegas	338,474	1.128%
50	Virginia	Virginia Beach	300,243	1.001%
51	Hawaii	Honolulu	297,104	0.990%
52	Washington	Seattle	283,368	0.945%
53	Wyoming	Cheyenne	199,197	0.664%

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

Payable 2012

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Columbia	7,225	3.612%
2	Michigan	Detroit	6,050	3.025%
3	Tennessee	Memphis	5,122	2.561%
4	Iowa	Des Moines	5,085	2.542%
5	Mississippi	Jackson	5,072	2.536%
6	Texas	Houston	5,058	2.529%
7	Missouri	Kansas City	4,577	2.289%
8	Rhode Island	Providence	4,527	2.264%
9	Indiana	Indianapolis	4,500	2.250%
10	Illinois	Chicago	4,272	2.136%
11	Louisiana	New Orleans	4,237	2.118%
12	New York	New York City	3,855	1.928%
13	New York	Buffalo	3,580	1.790%
14	Pennsylvania	Philadelphia	3,504	1.752%
15	Oregon	Portland	3,486	1.743%
16	Nebraska	Omaha	3,345	1.672%
17	Georgia	Atlanta	3,321	1.660%
18	Colorado	Denver	3,249	1.624%
19	West Virginia	Charleston	3,236	1.618%
20	Minnesota	Minneapolis	3,208	1.604%
21	Kansas	Wichita	3,166	1.583%
22	Connecticut	Bridgeport	3,165	1.583%
23	Illinois	Aurora	3,149	1.574%
24	Idaho	Boise	3,143	1.572%
25	Massachusetts	Boston	3,128	1.564%
	AVERAGE		**3,051**	**1.525%**
26	Alaska	Anchorage	2,992	1.496%
27	Wisconsin	Milwaukee	2,875	1.438%
28	Oklahoma	Oklahoma City	2,839	1.420%
29	Arkansas	Little Rock	2,788	1.394%
30	Maryland	Baltimore	2,767	1.383%
31	Ohio	Columbus	2,748	1.374%
32	Utah	Salt Lake City	2,552	1.276%
33	Vermont	Burlington	2,526	1.263%
34	Montana	Billings	2,432	1.216%
35	Florida	Jacksonville	2,366	1.183%
36	New Jersey	Newark	2,348	1.174%
37	New Mexico	Albuquerque	2,290	1.145%
38	New Hampshire	Manchester	2,251	1.126%
39	Alabama	Birmingham	2,218	1.109%
40	Arizona	Phoenix	2,194	1.097%
41	Maine	Portland	2,070	1.035%
42	California	Los Angeles	2,025	1.012%
43	North Carolina	Charlotte	1,969	0.984%
44	DC	Washington	1,962	0.981%
45	Nevada	Las Vegas	1,813	0.906%
46	South Dakota	Sioux Falls	1,710	0.855%
47	North Dakota	Fargo	1,693	0.847%
48	Kentucky	Louisville	1,537	0.768%
49	Washington	Seattle	1,530	0.765%
50	Delaware	Wilmington	1,381	0.691%
51	Wyoming	Cheyenne	1,291	0.646%
52	Hawaii	Honolulu	1,207	0.604%
53	Virginia	Virginia Beach	1,053	0.526%

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Columbia	72,246	3.612%
2	Michigan	Detroit	60,497	3.025%
3	Tennessee	Memphis	51,216	2.561%
4	Iowa	Des Moines	50,847	2.542%
5	Mississippi	Jackson	50,723	2.536%
6	Texas	Houston	50,584	2.529%
7	Missouri	Kansas City	45,770	2.289%
8	Rhode Island	Providence	45,270	2.264%
9	Indiana	Indianapolis	45,000	2.250%
10	Illinois	Chicago	42,715	2.136%
11	Louisiana	New Orleans	42,367	2.118%
12	Minnesota	Minneapolis	40,539	2.027%
13	New York	New York City	38,550	1.928%
14	Arizona	Phoenix	36,899	1.845%
15	New York	Buffalo	35,797	1.790%
16	Pennsylvania	Philadelphia	35,043	1.752%
17	DC	Washington	34,920	1.746%
18	Oregon	Portland	34,861	1.743%
19	Nebraska	Omaha	33,446	1.672%
20	Georgia	Atlanta	33,208	1.660%
21	Colorado	Denver	32,487	1.624%
22	West Virginia	Charleston	32,359	1.618%
23	Kansas	Wichita	31,658	1.583%
24	Connecticut	Bridgeport	31,655	1.583%
25	Illinois	Aurora	31,486	1.574%
26	Idaho	Boise	31,433	1.572%
	AVERAGE		**31,324**	**1.566%**
27	Massachusetts	Boston	31,282	1.564%
28	Alaska	Anchorage	29,921	1.496%
29	Wisconsin	Milwaukee	29,470	1.473%
30	Oklahoma	Oklahoma City	28,391	1.420%
31	Arkansas	Little Rock	27,876	1.394%
32	Maryland	Baltimore	27,667	1.383%
33	Florida	Jacksonville	27,546	1.377%
34	Ohio	Columbus	27,484	1.374%
35	Utah	Salt Lake City	25,515	1.276%
36	Vermont	Burlington	25,257	1.263%
37	Montana	Billings	24,316	1.216%
38	New Jersey	Newark	23,484	1.174%
39	New Mexico	Albuquerque	22,903	1.145%
40	New Hampshire	Manchester	22,513	1.126%
41	Alabama	Birmingham	22,184	1.109%
42	Maine	Portland	20,702	1.035%
43	California	Los Angeles	20,249	1.012%
44	North Carolina	Charlotte	19,686	0.984%
45	Nevada	Las Vegas	18,128	0.906%
46	South Dakota	Sioux Falls	17,105	0.855%
47	North Dakota	Fargo	16,932	0.847%
48	Kentucky	Louisville	15,369	0.768%
49	Washington	Seattle	15,299	0.765%
50	Delaware	Wilmington	13,811	0.691%
51	Wyoming	Cheyenne	12,911	0.646%
52	Hawaii	Honolulu	12,074	0.604%
53	Virginia	Virginia Beach	10,530	0.526%

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

Payable 2012

$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	South Carolina	Columbia	1,806,139	3.612%
2	Michigan	Detroit	1,512,417	3.025%
3	Tennessee	Memphis	1,280,405	2.561%
4	Iowa	Des Moines	1,271,181	2.542%
5	Mississippi	Jackson	1,268,084	2.536%
6	Texas	Houston	1,264,610	2.529%
7	Missouri	Kansas City	1,144,261	2.289%
8	Rhode Island	Providence	1,131,750	2.264%
9	Indiana	Indianapolis	1,125,000	2.250%
10	Illinois	Chicago	1,067,885	2.136%
11	Louisiana	New Orleans	1,059,185	2.118%
12	Minnesota	Minneapolis	1,049,304	2.099%
13	Arizona	Phoenix	968,425	1.937%
14	New York	New York City	963,761	1.928%
15	DC	Washington	956,938	1.914%
16	New York	Buffalo	894,937	1.790%
17	Pennsylvania	Philadelphia	876,075	1.752%
18	Oregon	Portland	871,518	1.743%
19	Nebraska	Omaha	836,145	1.672%
20	Georgia	Atlanta	830,199	1.660%
21	Colorado	Denver	812,169	1.624%
22	West Virginia	Charleston	808,971	1.618%
23	Kansas	Wichita	791,451	1.583%
24	Connecticut	Bridgeport	791,368	1.583%
25	Illinois	Aurora	787,140	1.574%
	AVERAGE		**786,462**	**1.573%**
26	Idaho	Boise	785,823	1.572%
27	Massachusetts	Boston	782,040	1.564%
28	Alaska	Anchorage	748,022	1.496%
29	Wisconsin	Milwaukee	738,650	1.477%
30	Oklahoma	Oklahoma City	709,768	1.420%
31	Florida	Jacksonville	699,019	1.398%
32	Arkansas	Little Rock	696,893	1.394%
33	Maryland	Baltimore	691,666	1.383%
34	Ohio	Columbus	687,091	1.374%
35	Utah	Salt Lake City	637,876	1.276%
36	Vermont	Burlington	631,426	1.263%
37	Montana	Billings	607,906	1.216%
38	New Jersey	Newark	587,099	1.174%
39	New Mexico	Albuquerque	572,571	1.145%
40	New Hampshire	Manchester	562,818	1.126%
41	Alabama	Birmingham	554,610	1.109%
42	Maine	Portland	517,550	1.035%
43	California	Los Angeles	506,220	1.012%
44	North Carolina	Charlotte	492,141	0.984%
45	Nevada	Las Vegas	453,211	0.906%
46	South Dakota	Sioux Falls	427,613	0.855%
47	North Dakota	Fargo	423,299	0.847%
48	Kentucky	Louisville	384,213	0.768%
49	Washington	Seattle	382,484	0.765%
50	Delaware	Wilmington	345,284	0.691%
51	Wyoming	Cheyenne	322,783	0.646%
52	Hawaii	Honolulu	301,847	0.604%
53	Virginia	Virginia Beach	263,243	0.526%

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

Payable 2012

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Columbia	8,713	3.485%
2	Michigan	Detroit	6,969	2.788%
3	Mississippi	Jackson	6,376	2.550%
4	Texas	Houston	6,323	2.529%
5	Tennessee	Memphis	6,191	2.476%
6	Indiana	Indianapolis	5,400	2.160%
7	Missouri	Kansas City	5,380	2.152%
8	Louisiana	New Orleans	5,340	2.136%
9	Iowa	Des Moines	5,085	2.034%
10	Rhode Island	Providence	4,806	1.922%
11	Illinois	Chicago	4,272	1.709%
12	Oregon	Portland	4,140	1.656%
13	Georgia	Atlanta	4,106	1.642%
14	West Virginia	Charleston	4,038	1.615%
15	Nebraska	Omaha	3,997	1.599%
16	Colorado	Denver	3,869	1.548%
17	New York	New York City	3,855	1.542%
18	Alaska	Anchorage	3,771	1.508%
19	Idaho	Boise	3,728	1.491%
20	Oklahoma	Oklahoma City	3,628	1.451%
21	New York	Buffalo	3,580	1.432%
22	Pennsylvania	Philadelphia	3,504	1.402%
23	Arkansas	Little Rock	3,493	1.397%
	AVERAGE		**3,477**	**1.391%**
24	Kansas	Wichita	3,317	1.327%
25	Connecticut	Bridgeport	3,309	1.324%
26	Massachusetts	Boston	3,288	1.315%
27	Minnesota	Minneapolis	3,208	1.283%
28	Illinois	Aurora	3,149	1.259%
29	Maryland	Baltimore	3,049	1.219%
30	Utah	Salt Lake City	3,032	1.213%
31	Wisconsin	Milwaukee	3,010	1.204%
32	DC	Washington	2,982	1.193%
33	Montana	Billings	2,919	1.168%
34	Florida	Jacksonville	2,884	1.154%
35	Arizona	Phoenix	2,810	1.124%
36	Vermont	Burlington	2,783	1.113%
37	New Mexico	Albuquerque	2,758	1.103%
38	Ohio	Columbus	2,748	1.099%
39	Alabama	Birmingham	2,635	1.054%
40	California	Los Angeles	2,405	0.962%
41	New Jersey	Newark	2,348	0.939%
42	North Carolina	Charlotte	2,337	0.935%
43	New Hampshire	Manchester	2,251	0.901%
44	Maine	Portland	2,164	0.866%
45	Nevada	Las Vegas	2,157	0.863%
46	Washington	Seattle	1,827	0.731%
47	South Dakota	Sioux Falls	1,710	0.684%
48	North Dakota	Fargo	1,693	0.677%
49	Kentucky	Louisville	1,678	0.671%
50	Wyoming	Cheyenne	1,536	0.614%
51	Delaware	Wilmington	1,381	0.552%
52	Hawaii	Honolulu	1,207	0.483%
53	Virginia	Virginia Beach	1,127	0.451%

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Columbia	87,131	3.485%
2	Michigan	Detroit	69,689	2.788%
3	Mississippi	Jackson	63,762	2.550%
4	Texas	Houston	63,231	2.529%
5	Tennessee	Memphis	61,911	2.476%
6	Indiana	Indianapolis	54,000	2.160%
7	Missouri	Kansas City	53,799	2.152%
8	Louisiana	New Orleans	53,397	2.136%
9	Iowa	Des Moines	50,847	2.034%
10	Rhode Island	Providence	48,060	1.922%
11	Arizona	Phoenix	45,337	1.813%
12	DC	Washington	45,120	1.805%
13	Illinois	Chicago	42,715	1.709%
14	Oregon	Portland	41,397	1.656%
15	Georgia	Atlanta	41,059	1.642%
16	Minnesota	Minneapolis	40,539	1.622%
17	West Virginia	Charleston	40,382	1.615%
18	Nebraska	Omaha	39,969	1.599%
19	Colorado	Denver	38,690	1.548%
20	New York	New York City	38,550	1.542%
21	Alaska	Anchorage	37,706	1.508%
22	Idaho	Boise	37,276	1.491%
23	Oklahoma	Oklahoma City	36,277	1.451%
24	New York	Buffalo	35,797	1.432%
	AVERAGE		**35,628**	**1.425%**
25	Pennsylvania	Philadelphia	35,043	1.402%
26	Arkansas	Little Rock	34,926	1.397%
27	Kansas	Wichita	33,166	1.327%
28	Connecticut	Bridgeport	33,094	1.324%
29	Massachusetts	Boston	32,878	1.315%
30	Florida	Jacksonville	32,730	1.309%
31	Illinois	Aurora	31,486	1.259%
32	Wisconsin	Milwaukee	30,813	1.233%
33	Maryland	Baltimore	30,487	1.219%
34	Utah	Salt Lake City	30,322	1.213%
35	Montana	Billings	29,191	1.168%
36	Vermont	Burlington	27,833	1.113%
37	New Mexico	Albuquerque	27,583	1.103%
38	Ohio	Columbus	27,484	1.099%
39	Alabama	Birmingham	26,354	1.054%
40	California	Los Angeles	24,045	0.962%
41	New Jersey	Newark	23,484	0.939%
42	North Carolina	Charlotte	23,373	0.935%
43	New Hampshire	Manchester	22,513	0.901%
44	Maine	Portland	21,643	0.866%
45	Nevada	Las Vegas	21,571	0.863%
46	Washington	Seattle	18,273	0.731%
47	South Dakota	Sioux Falls	17,105	0.684%
48	North Dakota	Fargo	16,932	0.677%
49	Kentucky	Louisville	16,785	0.671%
50	Wyoming	Cheyenne	15,361	0.614%
51	Delaware	Wilmington	13,811	0.552%
52	Hawaii	Honolulu	12,074	0.483%
53	Virginia	Virginia Beach	11,270	0.451%

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

Payable 2012

$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	Columbia	2,178,270	3.485%
2	Michigan	Detroit	1,742,216	2.788%
3	Mississippi	Jackson	1,594,052	2.550%
4	Texas	Houston	1,580,763	2.529%
5	Tennessee	Memphis	1,547,780	2.476%
6	Indiana	Indianapolis	1,350,000	2.160%
7	Missouri	Kansas City	1,344,981	2.152%
8	Louisiana	New Orleans	1,334,922	2.136%
9	Iowa	Des Moines	1,271,181	2.034%
10	DC	Washington	1,211,938	1.939%
11	Rhode Island	Providence	1,201,500	1.922%
12	Arizona	Phoenix	1,179,369	1.887%
13	Illinois	Chicago	1,067,885	1.709%
14	Minnesota	Minneapolis	1,049,304	1.679%
15	Oregon	Portland	1,034,927	1.656%
16	Georgia	Atlanta	1,026,476	1.642%
17	West Virginia	Charleston	1,009,543	1.615%
18	Nebraska	Omaha	999,231	1.599%
19	Colorado	Denver	967,262	1.548%
20	New York	New York City	963,761	1.542%
21	Alaska	Anchorage	942,647	1.508%
22	Idaho	Boise	931,905	1.491%
23	Oklahoma	Oklahoma City	906,926	1.451%
24	New York	Buffalo	894,937	1.432%
	AVERAGE		**894,051**	**1.430%**
25	Pennsylvania	Philadelphia	876,075	1.402%
26	Arkansas	Little Rock	873,143	1.397%
27	Kansas	Wichita	829,139	1.327%
28	Florida	Jacksonville	828,627	1.326%
29	Connecticut	Bridgeport	827,339	1.324%
30	Massachusetts	Boston	821,940	1.315%
31	Illinois	Aurora	787,140	1.259%
32	Wisconsin	Milwaukee	772,229	1.236%
33	Maryland	Baltimore	762,187	1.219%
34	Utah	Salt Lake City	758,041	1.213%
35	Montana	Billings	729,777	1.168%
36	Vermont	Burlington	695,822	1.113%
37	New Mexico	Albuquerque	689,574	1.103%
38	Ohio	Columbus	687,091	1.099%
39	Alabama	Birmingham	658,860	1.054%
40	California	Los Angeles	601,136	0.962%
41	New Jersey	Newark	587,099	0.939%
42	North Carolina	Charlotte	584,331	0.935%
43	New Hampshire	Manchester	562,818	0.901%
44	Maine	Portland	541,075	0.866%
45	Nevada	Las Vegas	539,264	0.863%
46	Washington	Seattle	456,820	0.731%
47	South Dakota	Sioux Falls	427,613	0.684%
48	North Dakota	Fargo	423,299	0.677%
49	Kentucky	Louisville	419,613	0.671%
50	Wyoming	Cheyenne	384,020	0.614%
51	Delaware	Wilmington	345,284	0.552%
52	Hawaii	Honolulu	301,847	0.483%
53	Virginia	Virginia Beach	281,743	0.451%

Table 28: Urban Apartment Property Taxes

Payable 2012

$600,000VALUED PROPERTY

$30,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Iowa	Des Moines	29,057	4.612%
2	Michigan	Detroit	26,580	4.219%
3	New York	New York City	23,986	3.807%
4	Rhode Island	Providence	22,339	3.546%
5	New York	Buffalo	21,478	3.409%
6	Illinois	Aurora	18,891	2.999%
7	Tennessee	Memphis	18,537	2.942%
8	Connecticut	Bridgeport	18,130	2.878%
9	Wisconsin	Milwaukee	16,844	2.674%
10	Ohio	Columbus	16,490	2.617%
11	Texas	Houston	15,875	2.520%
12	Mississippi	Jackson	15,570	2.471%
13	South Carolina	Columbia	15,364	2.439%
14	Maryland	Baltimore	14,907	2.366%
15	Pennsylvania	Philadelphia	14,113	2.240%
16	New Jersey	Newark	14,090	2.237%
17	Oregon	Portland	13,726	2.179%
18	New Hampshire	Manchester	13,508	2.144%
19	Minnesota	Minneapolis	13,229	2.100%
20	Nebraska	Omaha	12,892	2.046%
21	Idaho	Boise	12,432	1.973%
22	Maine	Portland	11,857	1.882%
	AVERAGE		**11,838**	**1.879%**
23	Vermont	Burlington	11,781	1.870%
24	Indiana	Indianapolis	11,292	1.792%
25	Georgia	Atlanta	11,037	1.752%
26	Illinois	Chicago	10,870	1.725%
27	Florida	Jacksonville	10,652	1.691%
28	South Dakota	Sioux Falls	10,263	1.629%
29	North Dakota	Fargo	10,159	1.613%
30	West Virginia	Charleston	9,948	1.579%
31	Kansas	Wichita	9,255	1.469%
32	Louisiana	New Orleans	9,111	1.446%
33	Missouri	Kansas City	9,086	1.442%
34	Alaska	Anchorage	9,078	1.441%
35	Alabama	Birmingham	8,724	1.385%
36	Arkansas	Little Rock	8,688	1.379%
37	New Mexico	Albuquerque	8,291	1.316%
38	Oklahoma	Oklahoma City	8,044	1.277%
39	California	Los Angeles	7,973	1.266%
40	Massachusetts	Boston	7,921	1.257%
41	North Carolina	Charlotte	7,755	1.231%
42	Delaware	Wilmington	7,683	1.220%
43	Kentucky	Louisville	7,522	1.194%
44	Nevada	Las Vegas	7,032	1.116%
45	Montana	Billings	6,530	1.036%
46	Arizona	Phoenix	6,227	0.988%
47	Washington	Seattle	5,909	0.938%
48	Virginia	Virginia Beach	5,874	0.932%
49	Utah	Salt Lake City	5,728	0.909%
50	DC	Washington	5,013	0.796%
51	Wyoming	Cheyenne	4,090	0.649%
52	Colorado	Denver	4,016	0.637%
53	Hawaii	Honolulu	1,960	0.311%

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

Table 29: Top 50 Homestead Property Taxes

Payable 2012

$150,000 VALUED PROPERTY

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	5,001	3.334%
2	Texas	San Antonio	3,916	2.611%
3	Wisconsin	Milwaukee	3,848	2.565%
4	Texas	El Paso	3,685	2.457%
5	Texas	Fort Worth	3,678	2.452%
6	Pennsylvania	Philadelphia	3,528	2.352%
7	Texas	Arlington	3,447	2.298%
8	Ohio	Cleveland	3,332	2.221%
9	Oregon	Portland	3,268	2.179%
10	Texas	Dallas	3,241	2.160%
11	Texas	Austin	3,141	2.094%
12	Ohio	Columbus	3,063	2.042%
13	Nebraska	Omaha	3,028	2.019%
14	Maryland	Baltimore	2,992	1.995%
15	Texas	Houston	2,812	1.875%
16	Tennessee	Memphis	2,796	1.864%
17	Florida	Miami	2,322	1.548%
18	Illinois	Chicago	2,298	1.532%
19	Minnesota	Minneapolis	2,227	1.485%
	AVERAGE		**2,186**	**1.457%**
20	Missouri	Kansas City	2,071	1.381%
21	Kansas	Wichita	2,053	1.369%
22	California	Oakland	2,010	1.340%
23	Oklahoma	Tulsa	1,978	1.318%
24	Florida	Jacksonville	1,969	1.312%
25	Kentucky	Louisville	1,967	1.311%
26	Georgia	Atlanta	1,943	1.295%
27	New Mexico	Albuquerque	1,866	1.244%
28	North Carolina	Charlotte	1,847	1.231%
29	California	San Jose	1,822	1.215%
30	California	Los Angeles	1,810	1.206%
31	Oklahoma	Oklahoma City	1,783	1.189%
32	California	Fresno	1,760	1.173%
33	Tennessee	Nashville	1,744	1.163%
34	Nevada	Las Vegas	1,711	1.141%
35	California	San Francisco	1,672	1.115%
36	California	Long Beach	1,642	1.095%
37	California	Sacramento	1,600	1.067%
38	California	San Diego	1,589	1.060%
39	North Carolina	Raleigh	1,514	1.009%
40	Indiana	Indianapolis	1,496	0.997%
41	Arizona	Tucson	1,449	0.966%
42	Virginia	Virginia Beach	1,420	0.947%
43	Washington	Seattle	1,403	0.935%
44	Arizona	Phoenix	1,283	0.855%
45	Arizona	Mesa	1,016	0.677%
46	New York	New York City	854	0.569%
47	Colorado	Denver	851	0.568%
49	Colorado	Colorado Springs	703	0.469%
48	DC	Washington	669	0.446%
50	Massachusetts	Boston	174	0.116%

$150,000 VALUED PROPERTY – WITH ASSESSMENT LIMITS

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	5,001	3.334%
2	Texas	San Antonio	3,916	2.611%
3	Wisconsin	Milwaukee	3,848	2.565%
4	Texas	El Paso	3,685	2.457%
5	Texas	Fort Worth	3,678	2.452%
6	Pennsylvania	Philadelphia	3,528	2.352%
7	Texas	Arlington	3,447	2.298%
8	Ohio	Cleveland	3,332	2.221%
9	Texas	Dallas	3,241	2.160%
10	Texas	Austin	3,141	2.094%
11	Oregon	Portland	3,120	2.080%
12	Ohio	Columbus	3,063	2.042%
13	Nebraska	Omaha	3,028	2.019%
14	Maryland	Baltimore	2,992	1.995%
15	Texas	Houston	2,812	1.875%
16	Tennessee	Memphis	2,796	1.864%
17	Florida	Miami	2,322	1.548%
18	Illinois	Chicago	2,298	1.532%
19	Minnesota	Minneapolis	2,227	1.485%
	AVERAGE		**2,161**	**1.441%**
20	Missouri	Kansas City	2,071	1.381%
21	Kansas	Wichita	2,053	1.369%
22	California	Oakland	2,010	1.340%
23	Oklahoma	Tulsa	1,978	1.318%
24	Florida	Jacksonville	1,969	1.312%
25	Kentucky	Louisville	1,967	1.311%
26	Georgia	Atlanta	1,943	1.295%
27	New Mexico	Albuquerque	1,866	1.244%
28	North Carolina	Charlotte	1,847	1.231%
29	California	San Jose	1,822	1.215%
30	Oklahoma	Oklahoma City	1,783	1.189%
31	California	Fresno	1,760	1.173%
32	Tennessee	Nashville	1,744	1.163%
33	Nevada	Las Vegas	1,711	1.141%
34	California	San Francisco	1,672	1.115%
35	California	Sacramento	1,600	1.067%
36	North Carolina	Raleigh	1,514	1.009%
37	California	San Diego	1,513	1.008%
38	Indiana	Indianapolis	1,496	0.997%
39	Arizona	Tucson	1,449	0.966%
40	Virginia	Virginia Beach	1,420	0.947%
41	Washington	Seattle	1,403	0.935%
42	California	Los Angeles	1,321	0.881%
43	Arizona	Phoenix	1,283	0.855%
44	California	Long Beach	1,199	0.799%
45	Arizona	Mesa	1,016	0.677%
46	Colorado	Denver	851	0.568%
47	New York	New York City	770	0.514%
49	Colorado	Colorado Springs	703	0.469%
48	DC	Washington	669	0.446%
50	Massachusetts	Boston	174	0.116%

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

Payable 2012

$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	10,001	3.334%	1	Michigan	Detroit	10,001	3.334%
2	Texas	San Antonio	8,038	2.679%	2	Texas	San Antonio	8,038	2.679%
3	Wisconsin	Milwaukee	7,877	2.626%	3	Wisconsin	Milwaukee	7,877	2.626%
4	Texas	El Paso	7,609	2.536%	4	Texas	El Paso	7,609	2.536%
5	Texas	Fort Worth	7,553	2.518%	5	Texas	Fort Worth	7,553	2.518%
6	Texas	Arlington	7,089	2.363%	6	Texas	Arlington	7,089	2.363%
7	Pennsylvania	Philadelphia	7,056	2.352%	7	Pennsylvania	Philadelphia	7,056	2.352%
8	Ohio	Cleveland	6,663	2.221%	8	Ohio	Cleveland	6,663	2.221%
9	Texas	Dallas	6,656	2.219%	9	Texas	Dallas	6,656	2.219%
10	Oregon	Portland	6,536	2.179%	10	Texas	Austin	6,473	2.158%
11	Texas	Austin	6,473	2.158%	11	Oregon	Portland	6,240	2.080%
12	Ohio	Columbus	6,126	2.042%	12	Ohio	Columbus	6,126	2.042%
13	Nebraska	Omaha	6,057	2.019%	13	Nebraska	Omaha	6,057	2.019%
14	Maryland	Baltimore	5,985	1.995%	14	Maryland	Baltimore	5,985	1.995%
15	Texas	Houston	5,763	1.921%	15	Texas	Houston	5,763	1.921%
16	Tennessee	Memphis	5,592	1.864%	16	Tennessee	Memphis	5,592	1.864%
17	Florida	Miami	5,536	1.845%	17	Florida	Miami	5,536	1.845%
18	Minnesota	Minneapolis	5,022	1.674%	18	Minnesota	Minneapolis	5,022	1.674%
19	Illinois	Chicago	4,923	1.641%	19	Illinois	Chicago	4,923	1.641%
20	Florida	Jacksonville	4,610	1.537%	20	Florida	Jacksonville	4,610	1.537%
21	Georgia	Atlanta	4,570	1.523%	21	Georgia	Atlanta	4,570	1.523%
	AVERAGE		**4,531**	**1.510%**		**AVERAGE**		**4,482**	**1.494%**
22	Kansas	Wichita	4,152	1.384%	22	Kansas	Wichita	4,152	1.384%
23	Missouri	Kansas City	4,142	1.381%	23	Missouri	Kansas City	4,142	1.381%
24	California	Oakland	4,119	1.373%	24	California	Oakland	4,119	1.373%
25	Oklahoma	Tulsa	4,083	1.361%	25	Oklahoma	Tulsa	4,083	1.361%
26	Kentucky	Louisville	3,934	1.311%	26	Kentucky	Louisville	3,934	1.311%
27	New Mexico	Albuquerque	3,821	1.274%	27	New Mexico	Albuquerque	3,821	1.274%
28	California	San Jose	3,733	1.244%	28	California	San Jose	3,733	1.244%
29	California	Los Angeles	3,708	1.236%	29	North Carolina	Charlotte	3,693	1.231%
30	North Carolina	Charlotte	3,693	1.231%	30	Oklahoma	Oklahoma City	3,681	1.227%
31	Oklahoma	Oklahoma City	3,681	1.227%	31	California	Fresno	3,606	1.202%
32	California	Fresno	3,606	1.202%	32	Tennessee	Nashville	3,489	1.163%
33	Tennessee	Nashville	3,489	1.163%	33	California	San Francisco	3,425	1.142%
34	California	San Francisco	3,425	1.142%	34	Nevada	Las Vegas	3,422	1.141%
35	Nevada	Las Vegas	3,422	1.141%	35	California	Sacramento	3,279	1.093%
36	California	Long Beach	3,365	1.122%	36	California	San Diego	3,103	1.034%
37	California	Sacramento	3,279	1.093%	37	North Carolina	Raleigh	3,028	1.009%
38	California	San Diego	3,257	1.086%	38	Indiana	Indianapolis	2,991	0.997%
39	North Carolina	Raleigh	3,028	1.009%	39	Arizona	Tucson	2,899	0.966%
40	Indiana	Indianapolis	2,991	0.997%	40	Virginia	Virginia Beach	2,841	0.947%
41	Arizona	Tucson	2,899	0.966%	41	Washington	Seattle	2,806	0.935%
42	Virginia	Virginia Beach	2,841	0.947%	42	California	Los Angeles	2,731	0.910%
43	Washington	Seattle	2,806	0.935%	43	Arizona	Phoenix	2,565	0.855%
44	Arizona	Phoenix	2,565	0.855%	44	California	Long Beach	2,478	0.826%
45	Arizona	Mesa	2,031	0.677%	45	Arizona	Mesa	2,031	0.677%
46	DC	Washington	1,913	0.638%	46	DC	Washington	1,913	0.638%
47	New York	New York City	1,897	0.632%	47	Massachusetts	Boston	1,837	0.612%
48	Massachusetts	Boston	1,837	0.612%	48	New York	New York City	1,730	0.577%
49	Colorado	Denver	1,703	0.568%	49	Colorado	Denver	1,703	0.568%
50	Colorado	Colorado Springs	1,406	0.469%	50	Colorado	Colorado Springs	1,406	0.469%

Table 30: Top 50 Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2012

State	City	2012 2nd Quarter Median Sales Price*	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
California	San Jose	655,200	8,259	1	1.260%	25
California	Oakland	552,600	7,669	2	1.388%	20
California	San Francisco	552,600	6,379	3	1.154%	33
Pennsylvania	Philadelphia	219,700	5,168	4	2.352%	6
Oregon	Portland	233,900	5,096	5	2.179%	9
Maryland	Baltimore	255,000	5,087	6	1.995%	14
Wisconsin	Milwaukee	189,700	4,914	7	2.590%	3
Texas	Austin	214,500	4,573	8	2.132%	11
Texas	San Antonio	162,800	4,268	9	2.622%	2
California	San Diego	372,000	4,057	10	1.091%	36
Texas	Fort Worth	163,000	4,013	11	2.462%	4
Texas	Arlington	163,000	3,763	12	2.308%	7
California	Los Angeles	296,800	3,668	13	1.236%	28
Florida	Miami	206,700	3,537	14	1.711%	17
Texas	Dallas	163,000	3,537	15	2.170%	10
California	Long Beach	296,800	3,328	16	1.121%	35
Texas	El Paso	135,000	3,293	17	2.439%	5
Texas	Houston	168,300	3,172	18	1.885%	15
Illinois	Chicago	187,700	2,958	19	1.576%	18
AVERAGE			**2,915**		**1.473%**	
Ohio	Columbus	142,100	2,902	20	2.042%	12
Nebraska	Omaha	143,000	2,887	21	2.019%	13
Washington	Seattle	290,700	2,719	22	0.935%	42
Minnesota	Minneapolis	174,500	2,684	23	1.538%	19
Massachusetts	Boston	362,100	2,558	24	0.706%	44
New York	New York City	382,500	2,470	25	0.646%	48
DC	Washington	367,000	2,468	26	0.672%	47
Ohio	Cleveland	103,900	2,308	27	2.221%	8
Tennessee	Memphis	123,500	2,302	28	1.864%	16
New Mexico	Albuquerque	174,300	2,182	29	1.252%	27
Missouri	Kansas City	148,400	2,049	30	1.381%	21
North Carolina	Charlotte	164,600	2,026	31	1.231%	29
Michigan	Detroit	60,200	2,007	32	3.334%	1
North Carolina	Raleigh	193,200	1,950	33	1.009%	38
Tennessee	Nashville	161,600	1,879	34	1.163%	32
Virginia	Virginia Beach	195,000	1,847	35	0.947%	41
California	Sacramento	171,000	1,835	36	1.073%	37
Kentucky	Louisville	139,600	1,831	37	1.311%	23
Oklahoma	Tulsa	136,500	1,788	38	1.310%	24
California	Fresno	144,070	1,687	39	1.171%	31
Florida	Jacksonville	133,000	1,669	40	1.255%	26
Oklahoma	Oklahoma City	139,100	1,645	41	1.183%	30
Kansas	Wichita	118,800	1,616	42	1.361%	22
Nevada	Las Vegas	130,700	1,491	43	1.141%	34
Colorado	Denver	260,700	1,480	44	0.568%	49
Arizona	Tucson	147,800	1,428	45	0.966%	40
Indiana	Indianapolis	135,100	1,347	46	0.997%	39
Arizona	Phoenix	148,400	1,269	47	0.855%	43
Arizona	Mesa	148,400	1,005	48	0.677%	46
Colorado	Colorado Springs	205,400	963	49	0.469%	50
Georgia	Atlanta	103,200	718	50	0.695%	45

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.

VI. Rankings Tables – Largest 50 Cities

Table 31: Top 50 Homestead Property Taxes for a Median-Value Home – Listed by Net Tax Payable 2012 – With Assessment Limitations

State	City	2012 2nd Quarter Median Sales Price, Adjusted for Assessment Limitations*	Net Tax	Tax Rank	Effective Tax Rate	Rate Rank
California	San Jose	655,200	8,259	1	1.260%	25
California	Oakland	552,600	7,669	2	1.388%	20
California	San Francisco	552,600	6,379	3	1.154%	32
Pennsylvania	Philadelphia	219,700	5,168	4	2.352%	6
Maryland	Baltimore	255,000	5,087	5	1.995%	14
Wisconsin	Milwaukee	189,700	4,914	6	2.590%	3
Oregon	Portland	233,900	4,865	7	2.080%	11
Texas	Austin	214,500	4,573	8	2.132%	10
Texas	San Antonio	162,800	4,268	9	2.622%	2
Texas	Fort Worth	163,000	4,013	10	2.462%	4
California	San Diego	372,000	3,866	11	1.039%	35
Texas	Arlington	163,000	3,763	12	2.308%	7
Florida	Miami	206,700	3,537	13	1.711%	17
Texas	Dallas	163,000	3,537	14	2.170%	9
Texas	El Paso	135,000	3,293	15	2.439%	5
Texas	Houston	168,300	3,172	16	1.885%	15
Illinois	Chicago	187,700	2,958	17	1.576%	18
Ohio	Columbus	142,100	2,902	18	2.042%	12
Nebraska	Omaha	143,000	2,887	19	2.019%	13
AVERAGE			**2,865**		**1.457%**	
Washington	Seattle	290,700	2,719	20	0.935%	40
California	Los Angeles	296,800	2,701	21	0.910%	41
Minnesota	Minneapolis	174,500	2,684	22	1.538%	19
Massachusetts	Boston	362,100	2,558	23	0.706%	44
DC	Washington	367,000	2,468	24	0.672%	47
California	Long Beach	296,800	2,451	25	0.826%	43
Ohio	Cleveland	103,900	2,308	26	2.221%	8
Tennessee	Memphis	123,500	2,302	27	1.864%	16
New York	New York City	382,500	2,258	28	0.590%	48
New Mexico	Albuquerque	174,300	2,182	29	1.252%	27
Missouri	Kansas City	148,400	2,049	30	1.381%	21
North Carolina	Charlotte	164,600	2,026	31	1.231%	28
Michigan	Detroit	60,200	2,007	32	3.334%	1
North Carolina	Raleigh	193,200	1,950	33	1.009%	36
Tennessee	Nashville	161,600	1,879	34	1.163%	31
Virginia	Virginia Beach	195,000	1,847	35	0.947%	39
California	Sacramento	171,000	1,835	36	1.073%	34
Kentucky	Louisville	139,600	1,831	37	1.311%	23
Oklahoma	Tulsa	136,500	1,788	38	1.310%	24
California	Fresno	144,070	1,687	39	1.171%	30
Florida	Jacksonville	133,000	1,669	40	1.255%	26
Oklahoma	Oklahoma City	139,100	1,645	41	1.183%	29
Kansas	Wichita	118,800	1,616	42	1.361%	22
Nevada	Las Vegas	130,700	1,491	43	1.141%	33
Colorado	Denver	260,700	1,480	44	0.568%	49
Arizona	Tucson	147,800	1,428	45	0.966%	38
Indiana	Indianapolis	135,100	1,347	46	0.997%	37
Arizona	Phoenix	148,400	1,269	47	0.855%	42
Arizona	Mesa	148,400	1,005	48	0.677%	46
Colorado	Colorado Springs	205,400	963	49	0.469%	50
Georgia	Atlanta	103,200	718	50	0.695%	45

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.

Table 32: Top 50 Commercial Property Taxes

Payable 2012

$100,000 VALUED PROPERTY
$20,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	4,925	4.104%
2	Illinois	Chicago	4,664	3.886%
3	New York	New York City	3,855	3.213%
4	Missouri	Kansas City	3,507	2.922%
5	Pennsylvania	Philadelphia	3,504	2.920%
6	Kansas	Wichita	3,467	2.889%
7	Massachusetts	Boston	3,415	2.846%
8	Tennessee	Memphis	3,410	2.842%
9	Maryland	Baltimore	3,331	2.776%
10	Minnesota	Minneapolis	3,208	2.673%
11	Texas	Fort Worth	3,178	2.648%
12	Texas	Dallas	3,170	2.642%
13	Wisconsin	Milwaukee	3,144	2.620%
14	Texas	San Antonio	3,043	2.536%
15	Texas	El Paso	2,900	2.417%
16	Texas	Houston	2,866	2.389%
17	Texas	Arlington	2,854	2.378%
18	Ohio	Cleveland	2,833	2.361%
19	Texas	Austin	2,771	2.309%
20	Ohio	Columbus	2,748	2.290%
21	Oregon	Portland	2,615	2.179%
22	Nebraska	Omaha	2,475	2.062%
23	Colorado	Denver	2,422	2.018%
	AVERAGE		**2,388**	**1.990%**
24	Arizona	Tucson	2,379	1.982%
25	Indiana	Indianapolis	2,282	1.902%
26	Arizona	Phoenix	2,194	1.828%
27	Florida	Miami	2,143	1.786%
28	Tennessee	Nashville	2,140	1.784%
29	Georgia	Atlanta	2,106	1.755%
30	Colorado	Colorado Springs	2,062	1.718%
31	Arizona	Mesa	1,864	1.553%
32	Florida	Jacksonville	1,761	1.467%
33	California	Oakland	1,687	1.406%
34	New Mexico	Albuquerque	1,666	1.389%
35	Oklahoma	Tulsa	1,659	1.382%
36	Kentucky	Louisville	1,630	1.358%
37	DC	Washington	1,622	1.352%
38	Oklahoma	Oklahoma City	1,577	1.314%
39	California	San Jose	1,529	1.274%
40	California	Los Angeles	1,519	1.266%
41	North Carolina	Charlotte	1,477	1.231%
42	California	Fresno	1,477	1.231%
43	California	San Francisco	1,403	1.169%
44	California	Long Beach	1,378	1.148%
45	Nevada	Las Vegas	1,354	1.128%
46	California	Sacramento	1,343	1.119%
47	California	San Diego	1,334	1.112%
48	Virginia	Virginia Beach	1,201	1.001%
49	North Carolina	Raleigh	1,192	0.994%
50	Washington	Seattle	1,133	0.945%

$1 MILLION-VALUED PROPERTY
$200,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	49,254	4.104%
2	Illinois	Chicago	46,637	3.886%
3	Minnesota	Minneapolis	40,539	3.378%
4	New York	New York City	38,550	3.213%
5	Missouri	Kansas City	35,065	2.922%
6	Pennsylvania	Philadelphia	35,043	2.920%
7	Kansas	Wichita	34,673	2.889%
8	Massachusetts	Boston	34,154	2.846%
9	Tennessee	Memphis	34,104	2.842%
10	Maryland	Baltimore	33,308	2.776%
11	Wisconsin	Milwaukee	32,156	2.680%
12	Texas	Fort Worth	31,776	2.648%
13	Texas	Dallas	31,699	2.642%
14	Texas	San Antonio	30,427	2.536%
15	Texas	El Paso	29,003	2.417%
16	Texas	Houston	28,662	2.389%
17	Texas	Arlington	28,536	2.378%
18	Ohio	Cleveland	28,333	2.361%
19	Arizona	Tucson	27,808	2.317%
20	Texas	Austin	27,708	2.309%
21	Ohio	Columbus	27,484	2.290%
22	Oregon	Portland	26,146	2.179%
23	Arizona	Phoenix	25,649	2.137%
24	Florida	Miami	25,225	2.102%
25	Nebraska	Omaha	24,748	2.062%
	AVERAGE		**24,518**	**2.043%**
26	Colorado	Denver	24,215	2.018%
27	Indiana	Indianapolis	22,820	1.902%
28	Arizona	Mesa	21,548	1.796%
29	Tennessee	Nashville	21,402	1.784%
30	DC	Washington	21,320	1.777%
31	Georgia	Atlanta	21,060	1.755%
32	Florida	Jacksonville	20,634	1.719%
33	Colorado	Colorado Springs	20,621	1.718%
34	California	Oakland	16,868	1.406%
35	New Mexico	Albuquerque	16,663	1.389%
36	Oklahoma	Tulsa	16,587	1.382%
37	Kentucky	Louisville	16,301	1.358%
38	Oklahoma	Oklahoma City	15,773	1.314%
39	California	San Jose	15,289	1.274%
40	California	Los Angeles	15,187	1.266%
41	North Carolina	Charlotte	14,769	1.231%
42	California	Fresno	14,768	1.231%
43	California	San Francisco	14,029	1.169%
44	California	Long Beach	13,781	1.148%
45	Nevada	Las Vegas	13,539	1.128%
46	California	Sacramento	13,430	1.119%
47	California	San Diego	13,338	1.112%
48	Virginia	Virginia Beach	12,010	1.001%
49	North Carolina	Raleigh	11,925	0.994%
50	Washington	Seattle	11,335	0.945%

Table 32 (cont'd.): Top 50 Commercial Property Taxes
Payable 2012
$25 MILLION-VALUED PROPERTY
$5,000,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	1,231,339	4.104%
2	Illinois	Chicago	1,165,923	3.886%
3	Minnesota	Minneapolis	1,049,304	3.498%
4	New York	New York City	963,761	3.213%
5	Missouri	Kansas City	876,634	2.922%
6	Pennsylvania	Philadelphia	876,075	2.920%
7	Kansas	Wichita	866,827	2.889%
8	Massachusetts	Boston	853,860	2.846%
9	Tennessee	Memphis	852,605	2.842%
10	Maryland	Baltimore	832,708	2.776%
11	Wisconsin	Milwaukee	805,808	2.686%
12	Texas	Fort Worth	794,399	2.648%
13	Texas	Dallas	792,480	2.642%
14	Texas	San Antonio	760,667	2.536%
15	Arizona	Tucson	744,977	2.483%
16	Texas	El Paso	725,068	2.417%
17	Texas	Houston	716,553	2.389%
18	Texas	Arlington	713,392	2.378%
19	Ohio	Cleveland	708,313	2.361%
20	Texas	Austin	692,705	2.309%
21	Arizona	Phoenix	687,167	2.291%
22	Ohio	Columbus	687,091	2.290%
23	Oregon	Portland	653,638	2.179%
24	Florida	Miami	643,641	2.145%
25	Nebraska	Omaha	618,697	2.062%
	AVERAGE		**618,485**	**2.062%**
26	DC	Washington	616,938	2.056%
27	Colorado	Denver	605,379	2.018%
28	Arizona	Mesa	574,738	1.916%
29	Indiana	Indianapolis	570,500	1.902%
30	Tennessee	Nashville	535,061	1.784%
31	Georgia	Atlanta	526,507	1.755%
32	Florida	Jacksonville	526,208	1.754%
33	Colorado	Colorado Springs	515,516	1.718%
34	California	Oakland	421,710	1.406%
35	New Mexico	Albuquerque	416,568	1.389%
36	Oklahoma	Tulsa	414,668	1.382%
37	Kentucky	Louisville	407,513	1.358%
38	Oklahoma	Oklahoma City	394,316	1.314%
39	California	San Jose	382,230	1.274%
40	California	Los Angeles	379,665	1.266%
41	North Carolina	Charlotte	369,221	1.231%
42	California	Fresno	369,197	1.231%
43	California	San Francisco	350,730	1.169%
44	California	Long Beach	344,516	1.148%
45	Nevada	Las Vegas	338,474	1.128%
46	California	Sacramento	335,760	1.119%
47	California	San Diego	333,459	1.112%
48	Virginia	Virginia Beach	300,243	1.001%
49	North Carolina	Raleigh	298,124	0.994%
50	Washington	Seattle	283,368	0.945%

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

Payable 2012

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

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	6,050	3.025%
2	Texas	Fort Worth	5,636	2.818%
3	Texas	Dallas	5,462	2.731%
4	Texas	San Antonio	5,386	2.693%
5	Texas	El Paso	5,217	2.609%
6	Texas	Arlington	5,180	2.590%
7	Tennessee	Memphis	5,122	2.561%
8	Texas	Houston	5,058	2.529%
9	Texas	Austin	4,838	2.419%
10	Missouri	Kansas City	4,577	2.289%
11	Indiana	Indianapolis	4,500	2.250%
12	Illinois	Chicago	4,272	2.136%
13	New York	New York City	3,855	1.928%
14	Pennsylvania	Philadelphia	3,504	1.752%
15	Oregon	Portland	3,486	1.743%
16	Nebraska	Omaha	3,345	1.672%
17	Georgia	Atlanta	3,321	1.660%
18	Tennessee	Nashville	3,259	1.629%
19	Colorado	Denver	3,249	1.624%
20	Minnesota	Minneapolis	3,208	1.604%
21	Kansas	Wichita	3,166	1.583%
22	Massachusetts	Boston	3,128	1.564%
	AVERAGE		**3,106**	**1.553%**
23	Florida	Miami	2,902	1.451%
24	Wisconsin	Milwaukee	2,875	1.438%
25	Oklahoma	Oklahoma City	2,839	1.420%
26	Ohio	Cleveland	2,833	1.417%
27	Colorado	Colorado Springs	2,768	1.384%
28	Maryland	Baltimore	2,767	1.383%
29	Ohio	Columbus	2,748	1.374%
30	Oklahoma	Tulsa	2,679	1.340%
31	Arizona	Tucson	2,379	1.189%
32	Florida	Jacksonville	2,366	1.183%
33	New Mexico	Albuquerque	2,290	1.145%
34	California	Oakland	2,249	1.125%
35	Arizona	Phoenix	2,194	1.097%
36	California	San Jose	2,039	1.019%
37	California	Los Angeles	2,025	1.012%
38	California	Fresno	1,969	0.985%
39	North Carolina	Charlotte	1,969	0.984%
40	DC	Washington	1,962	0.981%
41	California	San Francisco	1,871	0.935%
42	Arizona	Mesa	1,864	0.932%
43	California	Long Beach	1,837	0.919%
44	Nevada	Las Vegas	1,813	0.906%
45	California	Sacramento	1,791	0.895%
46	California	San Diego	1,778	0.889%
47	North Carolina	Raleigh	1,559	0.780%
48	Kentucky	Louisville	1,537	0.768%
49	Washington	Seattle	1,530	0.765%
50	Virginia	Virginia Beach	1,053	0.526%

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

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	60,497	3.025%
2	Texas	Fort Worth	56,357	2.818%
3	Texas	Dallas	54,615	2.731%
4	Texas	San Antonio	53,858	2.693%
5	Texas	El Paso	52,174	2.609%
6	Texas	Arlington	51,797	2.590%
7	Tennessee	Memphis	51,216	2.561%
8	Texas	Houston	50,584	2.529%
9	Texas	Austin	48,380	2.419%
10	Missouri	Kansas City	45,770	2.289%
11	Indiana	Indianapolis	45,000	2.250%
12	Illinois	Chicago	42,715	2.136%
13	Minnesota	Minneapolis	40,539	2.027%
14	Arizona	Tucson	39,993	2.000%
15	New York	New York City	38,550	1.928%
16	Arizona	Phoenix	36,899	1.845%
17	Pennsylvania	Philadelphia	35,043	1.752%
18	DC	Washington	34,920	1.746%
19	Oregon	Portland	34,861	1.743%
20	Florida	Miami	33,901	1.695%
21	Nebraska	Omaha	33,446	1.672%
22	Georgia	Atlanta	33,208	1.660%
23	Tennessee	Nashville	32,586	1.629%
	AVERAGE		**32,583**	**1.629%**
24	Colorado	Denver	32,487	1.624%
25	Kansas	Wichita	31,658	1.583%
26	Massachusetts	Boston	31,282	1.564%
27	Arizona	Mesa	30,371	1.519%
28	Wisconsin	Milwaukee	29,470	1.473%
29	Oklahoma	Oklahoma City	28,391	1.420%
30	Ohio	Cleveland	28,333	1.417%
31	Colorado	Colorado Springs	27,676	1.384%
32	Maryland	Baltimore	27,667	1.383%
33	Florida	Jacksonville	27,546	1.377%
34	Ohio	Columbus	27,484	1.374%
35	Oklahoma	Tulsa	26,794	1.340%
36	New Mexico	Albuquerque	22,903	1.145%
37	California	Oakland	22,491	1.125%
38	California	San Jose	20,386	1.019%
39	California	Los Angeles	20,249	1.012%
40	California	Fresno	19,690	0.985%
41	North Carolina	Charlotte	19,686	0.984%
42	California	San Francisco	18,706	0.935%
43	California	Long Beach	18,374	0.919%
44	Nevada	Las Vegas	18,128	0.906%
45	California	Sacramento	17,907	0.895%
46	California	San Diego	17,784	0.889%
47	North Carolina	Raleigh	15,591	0.780%
48	Kentucky	Louisville	15,369	0.768%
49	Washington	Seattle	15,299	0.765%
50	Virginia	Virginia Beach	10,530	0.526%

Table 33 (cont'd.): Top 50 Industrial Property Taxes (50% Personal Property)
Payable 2012

$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	Michigan	Detroit	1,512,417	3.025%
2	Texas	Fort Worth	1,408,934	2.818%
3	Texas	Dallas	1,365,380	2.731%
4	Texas	San Antonio	1,346,456	2.693%
5	Texas	El Paso	1,304,362	2.609%
6	Texas	Arlington	1,294,934	2.590%
7	Tennessee	Memphis	1,280,405	2.561%
8	Texas	Houston	1,264,610	2.529%
9	Texas	Austin	1,209,500	2.419%
10	Missouri	Kansas City	1,144,261	2.289%
11	Indiana	Indianapolis	1,125,000	2.250%
12	Illinois	Chicago	1,067,885	2.136%
13	Arizona	Tucson	1,049,585	2.099%
14	Minnesota	Minneapolis	1,049,304	2.099%
15	Arizona	Phoenix	968,425	1.937%
16	New York	New York City	963,761	1.928%
17	DC	Washington	956,938	1.914%
18	Pennsylvania	Philadelphia	876,075	1.752%
19	Oregon	Portland	871,518	1.743%
20	Florida	Miami	860,537	1.721%
21	Nebraska	Omaha	836,145	1.672%
22	Georgia	Atlanta	830,199	1.660%
	AVERAGE		**820,117**	**1.640%**
23	Tennessee	Nashville	814,661	1.629%
24	Colorado	Denver	812,169	1.624%
25	Arizona	Mesa	795,308	1.591%
26	Kansas	Wichita	791,451	1.583%
27	Massachusetts	Boston	782,040	1.564%
28	Wisconsin	Milwaukee	738,650	1.477%
29	Oklahoma	Oklahoma City	709,768	1.420%
30	Ohio	Cleveland	708,313	1.417%
31	Florida	Jacksonville	699,019	1.398%
32	Colorado	Colorado Springs	691,911	1.384%
33	Maryland	Baltimore	691,666	1.383%
34	Ohio	Columbus	687,091	1.374%
35	Oklahoma	Tulsa	669,848	1.340%
36	New Mexico	Albuquerque	572,571	1.145%
37	California	Oakland	562,280	1.125%
38	California	San Jose	509,640	1.019%
39	California	Los Angeles	506,220	1.012%
40	California	Fresno	492,262	0.985%
41	North Carolina	Charlotte	492,141	0.984%
42	California	San Francisco	467,640	0.935%
43	California	Long Beach	459,355	0.919%
44	Nevada	Las Vegas	453,211	0.906%
45	California	Sacramento	447,680	0.895%
46	California	San Diego	444,612	0.889%
47	North Carolina	Raleigh	389,784	0.780%
48	Kentucky	Louisville	384,213	0.768%
49	Washington	Seattle	382,484	0.765%
50	Virginia	Virginia Beach	263,243	0.526%

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

Payable 2012

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

Rank	State	City	Net Tax	ETR
1	Texas	Fort Worth	7,045	2.818%
2	Michigan	Detroit	6,969	2.788%
3	Texas	Dallas	6,827	2.731%
4	Texas	San Antonio	6,732	2.693%
5	Texas	El Paso	6,522	2.609%
6	Texas	Arlington	6,475	2.590%
7	Texas	Houston	6,323	2.529%
8	Tennessee	Memphis	6,191	2.476%
9	Texas	Austin	6,048	2.419%
10	Indiana	Indianapolis	5,400	2.160%
11	Missouri	Kansas City	5,380	2.152%
12	Illinois	Chicago	4,272	1.709%
13	Oregon	Portland	4,140	1.656%
14	Georgia	Atlanta	4,106	1.642%
15	Nebraska	Omaha	3,997	1.599%
16	Tennessee	Nashville	3,958	1.583%
17	Colorado	Denver	3,869	1.548%
18	New York	New York City	3,855	1.542%
	AVERAGE		**3,662**	**1.465%**
19	Oklahoma	Oklahoma City	3,628	1.451%
20	Florida	Miami	3,553	1.421%
21	Pennsylvania	Philadelphia	3,504	1.402%
22	Oklahoma	Tulsa	3,317	1.327%
23	Kansas	Wichita	3,317	1.327%
24	Colorado	Colorado Springs	3,297	1.319%
25	Massachusetts	Boston	3,288	1.315%
26	Minnesota	Minneapolis	3,208	1.283%
27	Maryland	Baltimore	3,049	1.219%
28	Arizona	Tucson	3,047	1.219%
29	Wisconsin	Milwaukee	3,010	1.204%
30	DC	Washington	2,982	1.193%
31	Florida	Jacksonville	2,884	1.154%
32	Ohio	Cleveland	2,833	1.133%
33	Arizona	Phoenix	2,810	1.124%
34	New Mexico	Albuquerque	2,758	1.103%
35	Ohio	Columbus	2,748	1.099%
36	California	Oakland	2,671	1.068%
37	California	San Jose	2,421	0.968%
38	California	Los Angeles	2,405	0.962%
39	Arizona	Mesa	2,347	0.939%
40	California	Fresno	2,338	0.935%
41	North Carolina	Charlotte	2,337	0.935%
42	California	San Francisco	2,221	0.889%
43	California	Long Beach	2,182	0.873%
44	Nevada	Las Vegas	2,157	0.863%
45	California	Sacramento	2,126	0.851%
46	California	San Diego	2,112	0.845%
47	North Carolina	Raleigh	1,834	0.734%
48	Washington	Seattle	1,827	0.731%
49	Kentucky	Louisville	1,678	0.671%
50	Virginia	Virginia Beach	1,127	0.451%

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

Rank	State	City	Net Tax	ETR
1	Texas	Fort Worth	70,447	2.818%
2	Michigan	Detroit	69,689	2.788%
3	Texas	Dallas	68,269	2.731%
4	Texas	San Antonio	67,323	2.693%
5	Texas	El Paso	65,218	2.609%
6	Texas	Arlington	64,747	2.590%
7	Texas	Houston	63,231	2.529%
8	Tennessee	Memphis	61,911	2.476%
9	Texas	Austin	60,475	2.419%
10	Indiana	Indianapolis	54,000	2.160%
11	Missouri	Kansas City	53,799	2.152%
12	Arizona	Tucson	49,131	1.965%
13	Arizona	Phoenix	45,337	1.813%
14	DC	Washington	45,120	1.805%
15	Illinois	Chicago	42,715	1.709%
16	Oregon	Portland	41,397	1.656%
17	Georgia	Atlanta	41,059	1.642%
18	Minnesota	Minneapolis	40,539	1.622%
19	Florida	Miami	40,408	1.616%
20	Nebraska	Omaha	39,969	1.599%
21	Tennessee	Nashville	39,576	1.583%
22	Colorado	Denver	38,690	1.548%
23	New York	New York City	38,550	1.542%
	AVERAGE		**38,278**	**1.531%**
24	Arizona	Mesa	36,988	1.480%
25	Oklahoma	Oklahoma City	36,277	1.451%
26	Pennsylvania	Philadelphia	35,043	1.402%
27	Oklahoma	Tulsa	33,173	1.327%
28	Kansas	Wichita	33,166	1.327%
29	Colorado	Colorado Springs	32,968	1.319%
30	Massachusetts	Boston	32,878	1.315%
31	Florida	Jacksonville	32,730	1.309%
32	Wisconsin	Milwaukee	30,813	1.233%
33	Maryland	Baltimore	30,487	1.219%
34	Ohio	Cleveland	28,333	1.133%
35	New Mexico	Albuquerque	27,583	1.103%
36	Ohio	Columbus	27,484	1.099%
37	California	Oakland	26,708	1.068%
38	California	San Jose	24,208	0.968%
39	California	Los Angeles	24,045	0.962%
40	California	Fresno	23,382	0.935%
41	North Carolina	Charlotte	23,373	0.935%
42	California	San Francisco	22,213	0.889%
43	California	Long Beach	21,819	0.873%
44	Nevada	Las Vegas	21,571	0.863%
45	California	Sacramento	21,265	0.851%
46	California	San Diego	21,119	0.845%
47	North Carolina	Raleigh	18,341	0.734%
48	Washington	Seattle	18,273	0.731%
49	Kentucky	Louisville	16,785	0.671%
50	Virginia	Virginia Beach	11,270	0.451%

Table 34 (cont'd.): Top 50 Industrial Property Taxes (60% Personal Property)
Payable 2012

$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	1,761,167	2.818%
2	Michigan	Detroit	1,742,216	2.788%
3	Texas	Dallas	1,706,724	2.731%
4	Texas	San Antonio	1,683,069	2.693%
5	Texas	El Paso	1,630,452	2.609%
6	Texas	Arlington	1,618,667	2.590%
7	Texas	Houston	1,580,763	2.529%
8	Tennessee	Memphis	1,547,780	2.476%
9	Texas	Austin	1,511,875	2.419%
10	Indiana	Indianapolis	1,350,000	2.160%
11	Missouri	Kansas City	1,344,981	2.152%
12	Arizona	Tucson	1,278,041	2.045%
13	DC	Washington	1,211,938	1.939%
14	Arizona	Phoenix	1,179,369	1.887%
15	Illinois	Chicago	1,067,885	1.709%
16	Minnesota	Minneapolis	1,049,304	1.679%
17	Oregon	Portland	1,034,927	1.656%
18	Georgia	Atlanta	1,026,476	1.642%
19	Florida	Miami	1,023,210	1.637%
20	Nebraska	Omaha	999,231	1.599%
21	Tennessee	Nashville	989,411	1.583%
22	Colorado	Denver	967,262	1.548%
23	New York	New York City	963,761	1.542%
	AVERAGE		**962,484**	**1.540%**
24	Arizona	Mesa	960,735	1.537%
25	Oklahoma	Oklahoma City	906,926	1.451%
26	Pennsylvania	Philadelphia	876,075	1.402%
27	Oklahoma	Tulsa	829,335	1.327%
28	Kansas	Wichita	829,139	1.327%
29	Florida	Jacksonville	828,627	1.326%
30	Colorado	Colorado Springs	824,208	1.319%
31	Massachusetts	Boston	821,940	1.315%
32	Wisconsin	Milwaukee	772,229	1.236%
33	Maryland	Baltimore	762,187	1.219%
34	Ohio	Cleveland	708,313	1.133%
35	New Mexico	Albuquerque	689,574	1.103%
36	Ohio	Columbus	687,091	1.099%
37	California	Oakland	667,708	1.068%
38	California	San Jose	605,198	0.968%
39	California	Los Angeles	601,136	0.962%
40	California	Fresno	584,562	0.935%
41	North Carolina	Charlotte	584,331	0.935%
42	California	San Francisco	555,323	0.889%
43	California	Long Beach	545,484	0.873%
44	Nevada	Las Vegas	539,264	0.863%
45	California	Sacramento	531,620	0.851%
46	California	San Diego	527,977	0.845%
47	North Carolina	Raleigh	458,529	0.734%
48	Washington	Seattle	456,820	0.731%
49	Kentucky	Louisville	419,613	0.671%
50	Virginia	Virginia Beach	281,743	0.451%

Table 35: Top 50 Apartment Property Taxes

Payable 2012

$600,000VALUED PROPERTY
$30,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Michigan	Detroit	26,580	4.219%
2	New York	New York City	23,986	3.807%
3	Tennessee	Memphis	18,537	2.942%
4	Texas	San Antonio	17,287	2.744%
5	Ohio	Cleveland	17,000	2.698%
6	Wisconsin	Milwaukee	16,844	2.674%
7	Texas	Dallas	16,789	2.665%
8	Ohio	Columbus	16,490	2.617%
9	Texas	El Paso	16,438	2.609%
10	Texas	Houston	15,875	2.520%
11	Texas	Fort Worth	15,820	2.511%
12	Texas	Austin	15,034	2.386%
13	Maryland	Baltimore	14,907	2.366%
14	Texas	Arlington	14,829	2.354%
15	Pennsylvania	Philadelphia	14,113	2.240%
16	Oregon	Portland	13,726	2.179%
17	**Minnesota**	**Minneapolis**	**13,229**	**2.100%**
18	Florida	Miami	12,966	2.058%
19	Nebraska	Omaha	12,892	2.046%
20	Indiana	Indianapolis	11,892	1.888%
21	Tennessee	Nashville	11,583	1.839%
	AVERAGE		**11,056**	**1.755%**
22	Georgia	Atlanta	11,037	1.752%
23	Illinois	Chicago	10,870	1.725%
24	Florida	Jacksonville	10,652	1.691%
25	Kansas	Wichita	9,255	1.469%
26	Missouri	Kansas City	9,086	1.442%
27	California	Oakland	8,856	1.406%
28	Oklahoma	Tulsa	8,804	1.397%
29	New Mexico	Albuquerque	8,291	1.316%
30	Oklahoma	Oklahoma City	8,044	1.277%
31	California	San Jose	8,027	1.274%
32	California	Los Angeles	7,973	1.266%
33	Massachusetts	Boston	7,921	1.257%
34	North Carolina	Charlotte	7,755	1.231%
35	California	Fresno	7,753	1.231%
36	Kentucky	Louisville	7,522	1.194%
37	California	San Francisco	7,365	1.169%
38	California	Long Beach	7,235	1.148%
39	California	Sacramento	7,051	1.119%
40	Nevada	Las Vegas	7,032	1.116%
41	California	San Diego	7,003	1.112%
42	Arizona	Tucson	6,899	1.095%
43	North Carolina	Raleigh	6,330	1.005%
44	Arizona	Phoenix	6,227	0.988%
45	Washington	Seattle	5,912	0.938%
46	Virginia	Virginia Beach	5,874	0.932%
47	DC	Washington	5,013	0.796%
48	Arizona	Mesa	4,824	0.766%
49	Colorado	Denver	4,016	0.637%
50	Colorado	Colorado Springs	3,344	0.531%

VI. Rankings Tables – Rural

Table 36: Rural Homestead Property Taxes

Payable 2012

$70,000 VALUED PROPERTY

Rank	State	City	Net Tax	ETR
1	New Hampshire	Lancaster	1,847	2.639%
2	New York	Warsaw	1,767	2.524%
3	Pennsylvania	Ridgway	1,633	2.333%
4	Vermont	Newport	1,613	2.304%
5	Nebraska	Sidney	1,555	2.221%
6	New Jersey	Maurice River Township	1,466	2.094%
7	Rhode Island	Hopkinton	1,455	2.078%
8	Michigan	Manistique	1,450	2.072%
9	Wisconsin	Rice Lake	1,431	2.044%
10	Illinois	Clinton	1,389	1.985%
11	Kansas	Iola	1,364	1.948%
12	Iowa	Hampton	1,224	1.748%
13	North Dakota	Devils Lake	1,176	1.680%
14	Maine	Rockland	1,165	1.665%
15	Massachusetts	Adams	1,148	1.640%
16	Texas	Fort Stockton	1,110	1.585%
17	South Dakota	Madison	1,098	1.568%
18	Connecticut	Litchfield	1,088	1.554%
19	Maryland	Denton	1,032	1.474%
20	Ohio	Bryan	1,011	1.444%
21	Georgia	Fitzgerald	952	1.360%
22	Mississippi	Aberdeen	902	1.289%
23	Nevada	Fallon	871	1.245%
	AVERAGE		**864**	**1.234%**
24	Minnesota	Glencoe	837	1.196%
25	Oregon	Tillamook	816	1.166%
26	Missouri	Boonville	753	1.075%
27	Alaska	Ketchican	692	0.989%
28	North Carolina	Edenton	669	0.955%
29	Kentucky	London	668	0.954%
30	California	Yreka	652	0.932%
31	Florida	Moore Haven	645	0.921%
32	Washington	Colville	575	0.822%
33	South Carolina	Mullins	571	0.816%
34	New Mexico	Santa Rosa	570	0.814%
35	Oklahoma	Mangum	549	0.784%
36	Montana	Glasgow	547	0.781%
37	Indiana	North Vernon	516	0.737%
38	Arizona	Safford	513	0.733%
39	Wyoming	Worland	497	0.710%
40	Idaho	Saint Anthony	484	0.691%
41	Delaware	Georgetown	434	0.620%
42	Utah	Richfield	431	0.615%
43	Tennessee	Savannah	429	0.614%
44	West Virginia	Elkins	422	0.603%
45	Colorado	Walsenburg	394	0.563%
46	Virginia	Wise	350	0.500%
47	Alabama	Monroeville	225	0.321%
48	Arkansas	Pocahontas	121	0.173%
49	Hawaii	Kauai	92	0.132%
50	Louisiana	Natchitoches	0	0.000%

$150,000 VALUED PROPERTY

Rank	State	City	Net Tax	ETR
1	New York	Warsaw	4,533	3.022%
2	New Hampshire	Lancaster	3,958	2.639%
3	Illinois	Clinton	3,519	2.346%
4	Pennsylvania	Ridgway	3,513	2.342%
5	Vermont	Newport	3,456	2.304%
6	Nebraska	Sidney	3,332	2.221%
7	Wisconsin	Rice Lake	3,229	2.152%
8	New Jersey	Maurice River Township	3,141	2.094%
9	Rhode Island	Hopkinton	3,117	2.078%
10	Michigan	Manistique	3,108	2.072%
11	Kansas	Iola	2,975	1.983%
12	Iowa	Hampton	2,840	1.893%
13	Maine	Rockland	2,719	1.813%
14	Texas	Fort Stockton	2,582	1.721%
15	North Dakota	Devils Lake	2,520	1.680%
16	Florida	Moore Haven	2,492	1.662%
17	Massachusetts	Adams	2,460	1.640%
18	Minnesota	Glencoe	2,425	1.617%
19	South Dakota	Madison	2,352	1.568%
20	Connecticut	Litchfield	2,331	1.554%
21	Georgia	Fitzgerald	2,247	1.498%
22	Maryland	Denton	2,211	1.474%
23	Mississippi	Aberdeen	2,211	1.474%
24	Ohio	Bryan	2,165	1.444%
	AVERAGE		**1,978**	**1.318%**
25	Nevada	Fallon	1,867	1.245%
26	Oregon	Tillamook	1,748	1.166%
27	Missouri	Boonville	1,613	1.075%
28	Alaska	Ketchican	1,484	0.989%
29	California	Yreka	1,480	0.987%
30	Indiana	North Vernon	1,440	0.960%
31	North Carolina	Edenton	1,433	0.955%
32	Kentucky	London	1,431	0.954%
33	New Mexico	Santa Rosa	1,282	0.855%
34	Oklahoma	Mangum	1,261	0.840%
35	Washington	Colville	1,233	0.822%
36	South Carolina	Mullins	1,225	0.816%
37	Montana	Glasgow	1,172	0.781%
38	Arizona	Safford	1,099	0.733%
39	Wyoming	Worland	1,066	0.710%
40	Idaho	Saint Anthony	1,037	0.691%
41	Delaware	Georgetown	930	0.620%
42	Utah	Richfield	923	0.615%
43	Tennessee	Savannah	920	0.614%
44	West Virginia	Elkins	905	0.603%
45	Colorado	Walsenburg	844	0.563%
46	Virginia	Wise	751	0.500%
47	Louisiana	Natchitoches	692	0.461%
48	Arkansas	Pocahontas	660	0.440%
49	Alabama	Monroeville	532	0.354%
50	Hawaii	Kauai	427	0.285%

Table 36 (cont'd.): Rural Homestead Property Taxes
Payable 2012

$300,000 VALUED PROPERTY

Rank	State	City	Net Tax	ETR
1	New York	Warsaw	9,718	3.239%
2	New Hampshire	Lancaster	7,917	2.639%
3	Illinois	Clinton	7,513	2.504%
4	Pennsylvania	Ridgway	7,039	2.346%
5	Vermont	Newport	6,912	2.304%
6	Nebraska	Sidney	6,664	2.221%
7	Wisconsin	Rice Lake	6,600	2.200%
8	New Jersey	Maurice River Township	6,281	2.094%
9	Rhode Island	Hopkinton	6,234	2.078%
10	Michigan	Manistique	6,215	2.072%
11	Kansas	Iola	5,995	1.998%
12	Florida	Moore Haven	5,957	1.986%
13	Iowa	Hampton	5,871	1.957%
14	Maine	Rockland	5,632	1.877%
15	Minnesota	Glencoe	5,420	1.807%
16	Texas	Fort Stockton	5,342	1.781%
17	North Dakota	Devils Lake	5,041	1.680%
18	Massachusetts	Adams	4,919	1.640%
19	Mississippi	Aberdeen	4,721	1.574%
20	South Dakota	Madison	4,704	1.568%
21	Georgia	Fitzgerald	4,674	1.558%
22	Connecticut	Litchfield	4,662	1.554%
23	Maryland	Denton	4,421	1.474%
24	Ohio	Bryan	4,331	1.444%
	AVERAGE		**4,083**	**1.361%**
25	Nevada	Fallon	3,735	1.245%
26	Oregon	Tillamook	3,497	1.166%
27	Missouri	Boonville	3,226	1.075%
28	California	Yreka	3,033	1.011%
29	Idaho	Saint Anthony	2,978	0.993%
30	Alaska	Ketchican	2,967	0.989%
31	Indiana	North Vernon	2,880	0.960%
32	North Carolina	Edenton	2,865	0.955%
33	Kentucky	London	2,863	0.954%
34	New Mexico	Santa Rosa	2,618	0.873%
35	Oklahoma	Mangum	2,596	0.865%
36	Washington	Colville	2,465	0.822%
37	South Carolina	Mullins	2,449	0.816%
38	Montana	Glasgow	2,343	0.781%
39	Arizona	Safford	2,198	0.733%
40	Wyoming	Worland	2,131	0.710%
41	Louisiana	Natchitoches	2,124	0.708%
42	Delaware	Georgetown	1,859	0.620%
43	Utah	Richfield	1,846	0.615%
44	Tennessee	Savannah	1,841	0.614%
45	West Virginia	Elkins	1,810	0.603%
46	Colorado	Walsenburg	1,688	0.563%
47	Arkansas	Pocahontas	1,670	0.557%
48	Virginia	Wise	1,501	0.500%
49	Alabama	Monroeville	1,107	0.369%
50	Hawaii	Kauai	1,056	0.352%

Table 37: Rural Commercial Property Taxes

Payable 2012

$100,000 VALUED PROPERTY
$20,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Kansas	Iola	4,995	4.163%
2	Indiana	North Vernon	3,778	3.149%
3	Iowa	Hampton	3,710	3.092%
4	New York	Warsaw	3,514	2.928%
5	Michigan	Manistique	3,446	2.872%
6	South Carolina	Mullins	3,311	2.759%
7	Mississippi	Aberdeen	3,107	2.589%
8	Minnesota	Glencoe	3,086	2.572%
9	Texas	Fort Stockton	2,777	2.314%
10	Nebraska	Sidney	2,690	2.242%
11	Illinois	Clinton	2,662	2.219%
12	New Hampshire	Lancaster	2,639	2.199%
13	Wisconsin	Rice Lake	2,635	2.196%
14	Rhode Island	Hopkinton	2,478	2.065%
15	Missouri	Boonville	2,443	2.036%
16	Vermont	Newport	2,443	2.036%
17	Colorado	Walsenburg	2,440	2.033%
18	Massachusetts	Adams	2,354	1.962%
19	Pennsylvania	Ridgway	2,350	1.958%
20	Maine	Rockland	2,330	1.942%
21	Florida	Moore Haven	2,309	1.925%
22	Maryland	Denton	2,259	1.883%
23	New Jersey	Maurice River Township	2,094	1.745%
	AVERAGE		**2,020**	**1.683%**
24	South Dakota	Madison	1,975	1.646%
25	North Dakota	Devils Lake	1,973	1.644%
26	Georgia	Fitzgerald	1,944	1.620%
27	Connecticut	Litchfield	1,865	1.554%
28	Ohio	Bryan	1,729	1.441%
29	Idaho	Saint Anthony	1,672	1.394%
30	Nevada	Fallon	1,576	1.313%
31	Louisiana	Natchitoches	1,542	1.285%
32	Montana	Glasgow	1,507	1.256%
33	West Virginia	Elkins	1,487	1.239%
34	Utah	Richfield	1,427	1.190%
35	Oregon	Tillamook	1,399	1.166%
36	Kentucky	London	1,282	1.069%
37	New Mexico	Santa Rosa	1,258	1.049%
38	California	Yreka	1,242	1.035%
39	Alaska	Ketchican	1,213	1.011%
40	North Carolina	Edenton	1,150	0.958%
41	Tennessee	Savannah	1,133	0.944%
42	Oklahoma	Mangum	1,112	0.927%
43	Washington	Colville	993	0.828%
44	Alabama	Monroeville	919	0.766%
45	Wyoming	Worland	880	0.733%
46	Virginia	Wise	824	0.687%
47	Arkansas	Pocahontas	817	0.681%
48	Hawaii	Kauai	770	0.642%
49	Arizona	Safford	742	0.618%
50	Delaware	Georgetown	711	0.592%

$1 MILLION-VALUED PROPERTY
$200,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Kansas	Iola	49,950	4.163%
2	Minnesota	Glencoe	39,060	3.255%
3	Indiana	North Vernon	37,784	3.149%
4	Iowa	Hampton	37,100	3.092%
5	New York	Warsaw	35,138	2.928%
6	Michigan	Manistique	34,461	2.872%
7	South Carolina	Mullins	33,113	2.759%
8	Mississippi	Aberdeen	31,071	2.589%
9	Texas	Fort Stockton	27,770	2.314%
10	Florida	Moore Haven	27,124	2.260%
11	Wisconsin	Rice Lake	26,907	2.242%
12	Nebraska	Sidney	26,898	2.242%
13	Illinois	Clinton	26,625	2.219%
14	New Hampshire	Lancaster	26,389	2.199%
15	Rhode Island	Hopkinton	24,775	2.065%
16	Missouri	Boonville	24,434	2.036%
17	Vermont	Newport	24,433	2.036%
18	Colorado	Walsenburg	24,398	2.033%
19	Massachusetts	Adams	23,541	1.962%
20	Pennsylvania	Ridgway	23,502	1.958%
21	Maine	Rockland	23,304	1.942%
22	Maryland	Denton	22,590	1.883%
23	New Jersey	Maurice River Township	20,937	1.745%
	AVERAGE		**20,514**	**1.683%**
24	South Dakota	Madison	19,747	1.646%
25	North Dakota	Devils Lake	19,731	1.644%
26	Georgia	Fitzgerald	19,444	1.620%
27	Connecticut	Litchfield	18,648	1.554%
28	Ohio	Bryan	17,293	1.441%
29	Idaho	Saint Anthony	16,723	1.394%
30	Nevada	Fallon	15,761	1.313%
31	Louisiana	Natchitoches	15,421	1.285%
32	Montana	Glasgow	15,075	1.256%
33	West Virginia	Elkins	14,868	1.239%
34	Utah	Richfield	14,274	1.190%
35	Oregon	Tillamook	13,986	1.166%
36	Kentucky	London	12,824	1.069%
37	New Mexico	Santa Rosa	12,583	1.049%
38	California	Yreka	12,422	1.035%
39	Alaska	Ketchican	12,131	1.011%
40	North Carolina	Edenton	11,500	0.958%
41	Tennessee	Savannah	11,329	0.944%
42	Oklahoma	Mangum	11,124	0.927%
43	Arizona	Safford	10,396	0.866%
44	Washington	Colville	9,934	0.828%
45	Alabama	Monroeville	9,188	0.766%
46	Wyoming	Worland	8,796	0.733%
47	Virginia	Wise	8,242	0.687%
48	Arkansas	Pocahontas	8,171	0.681%
49	Hawaii	Kauai	7,700	0.642%
50	Delaware	Georgetown	7,106	0.592%

Table 37 (cont'd.): Rural Commercial Property Taxes
Payable 2012

$25 MILLION-VALUED PROPERTY
$5,000,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Kansas	Iola	1,248,753	4.163%
2	Minnesota	Glencoe	1,011,229	3.371%
3	Indiana	North Vernon	944,608	3.149%
4	Iowa	Hampton	927,501	3.092%
5	New York	Warsaw	878,445	2.928%
6	Michigan	Manistique	861,524	2.872%
7	South Carolina	Mullins	827,828	2.759%
8	Mississippi	Aberdeen	776,787	2.589%
9	Texas	Fort Stockton	694,260	2.314%
10	Florida	Moore Haven	691,925	2.306%
11	Wisconsin	Rice Lake	674,173	2.247%
12	Nebraska	Sidney	672,454	2.242%
13	Illinois	Clinton	665,614	2.219%
14	New Hampshire	Lancaster	659,732	2.199%
15	Rhode Island	Hopkinton	619,380	2.065%
16	Missouri	Boonville	610,862	2.036%
17	Vermont	Newport	610,827	2.036%
18	Colorado	Walsenburg	609,957	2.033%
19	Massachusetts	Adams	588,513	1.962%
20	Pennsylvania	Ridgway	587,545	1.958%
21	Maine	Rockland	582,600	1.942%
22	Maryland	Denton	564,755	1.883%
23	New Jersey	Maurice River Township	523,418	1.745%
	AVERAGE		**514,599**	**1.715%**
24	South Dakota	Madison	493,675	1.646%
25	North Dakota	Devils Lake	493,269	1.644%
26	Georgia	Fitzgerald	486,104	1.620%
27	Connecticut	Litchfield	466,200	1.554%
28	Ohio	Bryan	432,317	1.441%
29	Idaho	Saint Anthony	418,069	1.394%
30	Nevada	Fallon	394,030	1.313%
31	Louisiana	Natchitoches	385,528	1.285%
32	Montana	Glasgow	376,865	1.256%
33	West Virginia	Elkins	371,694	1.239%
34	Utah	Richfield	356,850	1.190%
35	Oregon	Tillamook	349,651	1.166%
36	Kentucky	London	320,600	1.069%
37	New Mexico	Santa Rosa	314,578	1.049%
38	California	Yreka	310,560	1.035%
39	Alaska	Ketchican	303,268	1.011%
40	Arizona	Safford	296,749	0.989%
41	North Carolina	Edenton	287,503	0.958%
42	Tennessee	Savannah	283,223	0.944%
43	Oklahoma	Mangum	278,100	0.927%
44	Washington	Colville	248,358	0.828%
45	Alabama	Monroeville	229,710	0.766%
46	Wyoming	Worland	219,904	0.733%
47	Virginia	Wise	206,042	0.687%
48	Arkansas	Pocahontas	204,283	0.681%
49	Hawaii	Kauai	192,500	0.642%
50	Delaware	Georgetown	177,639	0.592%

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

Payable 2012

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Mullins	7,169	3.585%
2	Mississippi	Aberdeen	5,196	2.598%
3	Indiana	North Vernon	4,959	2.480%
4	Texas	Fort Stockton	4,628	2.314%
5	Kansas	Iola	4,557	2.279%
6	Michigan	Manistique	4,035	2.017%
7	Iowa	Hampton	3,710	1.855%
8	Nebraska	Sidney	3,627	1.813%
9	New York	Warsaw	3,514	1.757%
10	Missouri	Boonville	3,266	1.633%
11	Colorado	Walsenburg	3,253	1.627%
12	Florida	Moore Haven	3,115	1.558%
13	Minnesota	Glencoe	3,086	1.543%
14	Georgia	Fitzgerald	2,853	1.426%
15	Louisiana	Natchitoches	2,727	1.363%
16	Illinois	Clinton	2,662	1.331%
17	New Hampshire	Lancaster	2,639	1.319%
18	West Virginia	Elkins	2,521	1.261%
	AVERAGE		**2,469**	**1.235%**
19	Vermont	Newport	2,443	1.222%
20	Wisconsin	Rice Lake	2,410	1.205%
21	Pennsylvania	Ridgway	2,350	1.175%
22	Rhode Island	Hopkinton	2,278	1.139%
23	Montana	Glasgow	2,263	1.131%
24	Idaho	Saint Anthony	2,230	1.115%
25	Massachusetts	Adams	2,149	1.075%
26	Maine	Rockland	2,136	1.068%
27	New Jersey	Maurice River Township	2,094	1.047%
28	Nevada	Fallon	2,086	1.043%
29	Oklahoma	Mangum	2,002	1.001%
30	South Dakota	Madison	1,975	0.987%
31	North Dakota	Devils Lake	1,973	0.987%
32	Utah	Richfield	1,903	0.952%
33	Maryland	Denton	1,886	0.943%
34	Oregon	Tillamook	1,865	0.932%
35	Tennessee	Savannah	1,738	0.869%
36	Ohio	Bryan	1,729	0.865%
37	Connecticut	Litchfield	1,709	0.855%
38	New Mexico	Santa Rosa	1,677	0.839%
39	Alaska	Ketchican	1,661	0.831%
40	California	Yreka	1,656	0.828%
41	North Carolina	Edenton	1,540	0.770%
42	Virginia	Wise	1,420	0.710%
43	Arkansas	Pocahontas	1,378	0.689%
44	Wyoming	Worland	1,378	0.689%
45	Washington	Colville	1,337	0.668%
46	Kentucky	London	1,243	0.622%
47	Alabama	Monroeville	1,223	0.611%
48	Hawaii	Kauai	770	0.385%
49	Arizona	Safford	742	0.371%
50	Delaware	Georgetown	711	0.355%

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Mullins	71,691	3.585%
2	Mississippi	Aberdeen	51,960	2.598%
3	Indiana	North Vernon	49,592	2.480%
4	Texas	Fort Stockton	46,284	2.314%
5	Kansas	Iola	45,572	2.279%
6	Michigan	Manistique	40,348	2.017%
7	Minnesota	Glencoe	39,060	1.953%
8	Iowa	Hampton	37,100	1.855%
9	Florida	Moore Haven	36,335	1.817%
10	Nebraska	Sidney	36,266	1.813%
11	New York	Warsaw	35,138	1.757%
12	Missouri	Boonville	32,664	1.633%
13	Colorado	Walsenburg	32,531	1.627%
14	Georgia	Fitzgerald	28,526	1.426%
15	Louisiana	Natchitoches	27,270	1.363%
16	Illinois	Clinton	26,625	1.331%
17	New Hampshire	Lancaster	26,389	1.319%
	AVERAGE		**25,214**	**1.261%**
18	West Virginia	Elkins	25,211	1.261%
19	Wisconsin	Rice Lake	24,660	1.233%
20	Vermont	Newport	24,433	1.222%
21	Pennsylvania	Ridgway	23,502	1.175%
22	Rhode Island	Hopkinton	22,777	1.139%
23	Montana	Glasgow	22,629	1.131%
24	Idaho	Saint Anthony	22,297	1.115%
25	Massachusetts	Adams	21,494	1.075%
26	Maine	Rockland	21,362	1.068%
27	New Jersey	Maurice River Township	20,937	1.047%
28	Nevada	Fallon	20,857	1.043%
29	Oklahoma	Mangum	20,023	1.001%
30	South Dakota	Madison	19,747	0.987%
31	North Dakota	Devils Lake	19,731	0.987%
32	Arizona	Safford	19,418	0.971%
33	Utah	Richfield	19,032	0.952%
34	Maryland	Denton	18,860	0.943%
35	Oregon	Tillamook	18,648	0.932%
36	Tennessee	Savannah	17,377	0.869%
37	Ohio	Bryan	17,293	0.865%
38	Connecticut	Litchfield	17,094	0.855%
39	New Mexico	Santa Rosa	16,774	0.839%
40	Alaska	Ketchican	16,611	0.831%
41	California	Yreka	16,563	0.828%
42	North Carolina	Edenton	15,400	0.770%
43	Virginia	Wise	14,202	0.710%
44	Arkansas	Pocahontas	13,783	0.689%
45	Wyoming	Worland	13,782	0.689%
46	Washington	Colville	13,367	0.668%
47	Kentucky	London	12,432	0.622%
48	Alabama	Monroeville	12,228	0.611%
49	Hawaii	Kauai	7,700	0.385%
50	Delaware	Georgetown	7,106	0.355%

Table 38 (cont'd.): Rural Industrial Property Taxes (50% Personal Property)
Payable 2012

$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	South Carolina	Mullins	1,792,285	3.585%
2	Mississippi	Aberdeen	1,298,997	2.598%
3	Indiana	North Vernon	1,239,798	2.480%
4	Texas	Fort Stockton	1,157,100	2.314%
5	Kansas	Iola	1,139,309	2.279%
6	Minnesota	Glencoe	1,011,229	2.022%
7	Michigan	Manistique	1,008,698	2.017%
8	Iowa	Hampton	927,501	1.855%
9	Florida	Moore Haven	922,183	1.844%
10	Nebraska	Sidney	906,659	1.813%
11	New York	Warsaw	878,445	1.757%
12	Missouri	Boonville	816,609	1.633%
13	Colorado	Walsenburg	813,276	1.627%
14	Georgia	Fitzgerald	713,140	1.426%
15	Louisiana	Natchitoches	681,748	1.363%
16	Illinois	Clinton	665,614	1.331%
17	New Hampshire	Lancaster	659,732	1.319%
	AVERAGE		**632,077**	**1.264%**
18	West Virginia	Elkins	630,264	1.261%
19	Wisconsin	Rice Lake	617,986	1.236%
20	Vermont	Newport	610,827	1.222%
21	Pennsylvania	Ridgway	587,545	1.175%
22	Rhode Island	Hopkinton	569,430	1.139%
23	Montana	Glasgow	565,725	1.131%
24	Idaho	Saint Anthony	557,425	1.115%
25	Massachusetts	Adams	537,338	1.075%
26	Maine	Rockland	534,050	1.068%
27	New Jersey	Maurice River Township	523,418	1.047%
28	Arizona	Safford	522,295	1.045%
29	Nevada	Fallon	521,430	1.043%
30	Oklahoma	Mangum	500,580	1.001%
31	South Dakota	Madison	493,675	0.987%
32	North Dakota	Devils Lake	493,269	0.987%
33	Utah	Richfield	475,800	0.952%
34	Maryland	Denton	471,505	0.943%
35	Oregon	Tillamook	466,201	0.932%
36	Tennessee	Savannah	434,423	0.869%
37	Ohio	Bryan	432,317	0.865%
38	Connecticut	Litchfield	427,350	0.855%
39	New Mexico	Santa Rosa	419,341	0.839%
40	Alaska	Ketchican	415,268	0.831%
41	California	Yreka	414,080	0.828%
42	North Carolina	Edenton	385,003	0.770%
43	Virginia	Wise	355,042	0.710%
44	Arkansas	Pocahontas	344,563	0.689%
45	Wyoming	Worland	344,554	0.689%
46	Washington	Colville	334,186	0.668%
47	Kentucky	London	310,800	0.622%
48	Alabama	Monroeville	305,710	0.611%
49	Hawaii	Kauai	192,500	0.385%
50	Delaware	Georgetown	177,639	0.355%

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

Payable 2012

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Mullins	8,501	3.401%
2	Mississippi	Aberdeen	6,502	2.601%
3	Indiana	North Vernon	5,845	2.338%
4	Texas	Fort Stockton	5,786	2.314%
5	Kansas	Iola	4,776	1.910%
6	Michigan	Manistique	4,566	1.827%
7	Nebraska	Sidney	4,329	1.732%
8	Missouri	Boonville	3,884	1.553%
9	Colorado	Walsenburg	3,863	1.545%
10	Florida	Moore Haven	3,806	1.522%
11	Iowa	Hampton	3,710	1.484%
12	New York	Warsaw	3,514	1.406%
13	Georgia	Fitzgerald	3,470	1.388%
14	Louisiana	Natchitoches	3,468	1.387%
15	West Virginia	Elkins	3,167	1.267%
16	Minnesota	Glencoe	3,086	1.234%
17	Montana	Glasgow	2,829	1.132%
	AVERAGE		**2,812**	**1.125%**
18	Illinois	Clinton	2,662	1.065%
19	Idaho	Saint Anthony	2,648	1.059%
20	New Hampshire	Lancaster	2,639	1.056%
21	Oklahoma	Mangum	2,559	1.023%
22	Wisconsin	Rice Lake	2,522	1.009%
23	Nevada	Fallon	2,468	0.987%
24	Vermont	Newport	2,443	0.977%
25	Rhode Island	Hopkinton	2,378	0.951%
26	Pennsylvania	Ridgway	2,350	0.940%
27	Utah	Richfield	2,260	0.904%
28	Massachusetts	Adams	2,252	0.901%
29	Maine	Rockland	2,233	0.893%
30	Oregon	Tillamook	2,214	0.886%
31	Tennessee	Savannah	2,116	0.846%
32	New Jersey	Maurice River Township	2,094	0.837%
33	Maryland	Denton	2,073	0.829%
34	Alaska	Ketchican	1,997	0.799%
35	New Mexico	Santa Rosa	1,992	0.797%
36	South Dakota	Madison	1,975	0.790%
37	North Dakota	Devils Lake	1,973	0.789%
38	California	Yreka	1,967	0.787%
39	Virginia	Wise	1,867	0.747%
40	North Carolina	Edenton	1,833	0.733%
41	Connecticut	Litchfield	1,787	0.715%
42	Ohio	Bryan	1,729	0.692%
43	Arkansas	Pocahontas	1,729	0.692%
44	Wyoming	Worland	1,641	0.656%
45	Washington	Colville	1,594	0.638%
46	Alabama	Monroeville	1,451	0.580%
47	Kentucky	London	1,358	0.543%
48	Arizona	Safford	1,236	0.495%
49	Hawaii	Kauai	770	0.308%
50	Delaware	Georgetown	711	0.284%

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

Rank	State	City	Net Tax	ETR
1	South Carolina	Mullins	85,014	3.401%
2	Mississippi	Aberdeen	65,015	2.601%
3	Indiana	North Vernon	58,448	2.338%
4	Texas	Fort Stockton	57,855	2.314%
5	Kansas	Iola	47,761	1.910%
6	Michigan	Manistique	45,663	1.827%
7	Nebraska	Sidney	43,293	1.732%
8	Florida	Moore Haven	43,242	1.730%
9	Minnesota	Glencoe	39,060	1.562%
10	Missouri	Boonville	38,837	1.553%
11	Colorado	Walsenburg	38,631	1.545%
12	Iowa	Hampton	37,100	1.484%
13	New York	Warsaw	35,138	1.406%
14	Georgia	Fitzgerald	34,697	1.388%
15	Louisiana	Natchitoches	34,675	1.387%
16	West Virginia	Elkins	31,675	1.267%
	AVERAGE		**28,679**	**1.147%**
17	Montana	Glasgow	28,295	1.132%
18	Illinois	Clinton	26,625	1.065%
19	Idaho	Saint Anthony	26,478	1.059%
20	New Hampshire	Lancaster	26,389	1.056%
21	Arizona	Safford	26,184	1.047%
22	Wisconsin	Rice Lake	25,783	1.031%
23	Oklahoma	Mangum	25,585	1.023%
24	Nevada	Fallon	24,679	0.987%
25	Vermont	Newport	24,433	0.977%
26	Rhode Island	Hopkinton	23,776	0.951%
27	Pennsylvania	Ridgway	23,502	0.940%
28	Utah	Richfield	22,601	0.904%
29	Massachusetts	Adams	22,517	0.901%
30	Maine	Rockland	22,333	0.893%
31	Oregon	Tillamook	22,145	0.886%
32	Tennessee	Savannah	21,157	0.846%
33	New Jersey	Maurice River Township	20,937	0.837%
34	Maryland	Denton	20,725	0.829%
35	Alaska	Ketchican	19,971	0.799%
36	New Mexico	Santa Rosa	19,917	0.797%
37	South Dakota	Madison	19,747	0.790%
38	North Dakota	Devils Lake	19,731	0.789%
39	California	Yreka	19,669	0.787%
40	Virginia	Wise	18,672	0.747%
41	North Carolina	Edenton	18,325	0.733%
42	Connecticut	Litchfield	17,871	0.715%
43	Ohio	Bryan	17,293	0.692%
44	Arkansas	Pocahontas	17,290	0.692%
45	Wyoming	Worland	16,409	0.656%
46	Washington	Colville	15,942	0.638%
47	Alabama	Monroeville	14,508	0.580%
48	Kentucky	London	13,578	0.543%
49	Hawaii	Kauai	7,700	0.308%
50	Delaware	Georgetown	7,106	0.284%

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

Payable 2012

$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	2,125,345	3.401%
2	Mississippi	Aberdeen	1,625,379	2.601%
3	Indiana	North Vernon	1,461,191	2.338%
4	Texas	Fort Stockton	1,446,375	2.314%
5	Kansas	Iola	1,194,031	1.910%
6	Michigan	Manistique	1,141,579	1.827%
7	Florida	Moore Haven	1,094,876	1.752%
8	Nebraska	Sidney	1,082,313	1.732%
9	Minnesota	Glencoe	1,011,229	1.618%
10	Missouri	Boonville	970,919	1.553%
11	Colorado	Walsenburg	965,765	1.545%
12	Iowa	Hampton	927,501	1.484%
13	New York	Warsaw	878,445	1.406%
14	Georgia	Fitzgerald	867,430	1.388%
15	Louisiana	Natchitoches	866,886	1.387%
16	West Virginia	Elkins	791,871	1.267%
	AVERAGE		**718,725**	**1.150%**
17	Montana	Glasgow	707,370	1.132%
18	Arizona	Safford	691,455	1.106%
19	Illinois	Clinton	665,614	1.065%
20	Idaho	Saint Anthony	661,942	1.059%
21	New Hampshire	Lancaster	659,732	1.056%
22	Wisconsin	Rice Lake	646,080	1.034%
23	Oklahoma	Mangum	639,630	1.023%
24	Nevada	Fallon	616,980	0.987%
25	Vermont	Newport	610,827	0.977%
26	Rhode Island	Hopkinton	594,405	0.951%
27	Pennsylvania	Ridgway	587,545	0.940%
28	Utah	Richfield	565,013	0.904%
29	Massachusetts	Adams	562,925	0.901%
30	Maine	Rockland	558,325	0.893%
31	Oregon	Tillamook	553,614	0.886%
32	Tennessee	Savannah	528,923	0.846%
33	New Jersey	Maurice River Township	523,418	0.837%
34	Maryland	Denton	518,130	0.829%
35	Alaska	Ketchican	499,268	0.799%
36	New Mexico	Santa Rosa	497,914	0.797%
37	South Dakota	Madison	493,675	0.790%
38	North Dakota	Devils Lake	493,269	0.789%
39	California	Yreka	491,720	0.787%
40	Virginia	Wise	466,792	0.747%
41	North Carolina	Edenton	458,128	0.733%
42	Connecticut	Litchfield	446,775	0.715%
43	Ohio	Bryan	432,317	0.692%
44	Arkansas	Pocahontas	432,238	0.692%
45	Wyoming	Worland	410,233	0.656%
46	Washington	Colville	398,557	0.638%
47	Alabama	Monroeville	362,710	0.580%
48	Kentucky	London	339,450	0.543%
49	Hawaii	Kauai	192,500	0.308%
50	Delaware	Georgetown	177,639	0.284%

Table 40: Rural Apartment Property Taxes

Payable 2012

$600,000VALUED PROPERTY
$30,000 Fixtures

Rank	State	City	Net Tax	ETR
1	Iowa	Hampton	22,260	3.533%
2	New York	Warsaw	21,083	3.346%
3	Michigan	Manistique	18,722	2.972%
4	Mississippi	Aberdeen	16,293	2.586%
5	Illinois	Clinton	15,975	2.536%
6	South Carolina	Mullins	15,871	2.519%
7	New Hampshire	Lancaster	15,834	2.513%
8	Minnesota	Glencoe	15,808	2.509%
9	Vermont	Newport	14,660	2.327%
10	Texas	Fort Stockton	14,579	2.314%
11	Pennsylvania	Ridgway	14,101	2.238%
12	Wisconsin	Rice Lake	14,097	2.238%
13	Nebraska	Sidney	14,031	2.227%
14	Florida	Moore Haven	13,972	2.218%
15	Kansas	Iola	13,350	2.119%
16	Rhode Island	Hopkinton	13,067	2.074%
17	Indiana	North Vernon	12,960	2.057%
18	New Jersey	Maurice River Township	12,562	1.994%
19	Maine	Rockland	12,235	1.942%
20	South Dakota	Madison	11,848	1.881%
21	North Dakota	Devils Lake	11,838	1.879%
22	Massachusetts	Adams	10,452	1.659%
23	Ohio	Bryan	10,376	1.647%
24	Georgia	Fitzgerald	10,199	1.619%
25	Maryland	Denton	10,197	1.619%
	AVERAGE		**10,046**	**1.595%**
26	Connecticut	Litchfield	9,790	1.554%
27	Idaho	Saint Anthony	8,779	1.394%
28	West Virginia	Elkins	7,886	1.252%
29	Nevada	Fallon	7,764	1.232%
30	Oregon	Tillamook	7,343	1.166%
31	California	Yreka	6,522	1.035%
32	Missouri	Boonville	6,451	1.024%
33	Alaska	Ketchican	6,270	0.995%
34	Louisiana	Natchitoches	6,174	0.980%
35	Tennessee	Savannah	6,117	0.971%
36	Kentucky	London	6,084	0.966%
37	North Carolina	Edenton	6,023	0.956%
38	Oklahoma	Mangum	5,673	0.901%
39	New Mexico	Santa Rosa	5,657	0.898%
40	Arizona	Safford	5,291	0.840%
41	Montana	Glasgow	5,219	0.828%
42	Washington	Colville	5,188	0.824%
43	Alabama	Monroeville	4,829	0.767%
44	Hawaii	Kauai	4,620	0.733%
45	Wyoming	Worland	4,433	0.704%
46	Utah	Richfield	4,282	0.680%
47	Arkansas	Pocahontas	4,272	0.678%
48	Colorado	Walsenburg	3,958	0.628%
49	Delaware	Georgetown	3,718	0.590%
50	Virginia	Wise	3,604	0.572%

VII. Appendix: Methodology and Assumptions

This study updates the *50-State Property Tax Comparison Study: Payable Year 2011*. 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

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:

Net Property Tax = TMV x SR x CR x TR – 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 x .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 2012 applicable to the greatest number of parcels in the largest urban area of each state. "Payable 2012 tax rate" was defined as the tax rate used to calculate the property taxes with a lien date originating in 2012, 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.

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				
	Real	**Mach. & Equip.**	**Inventories**	**Fixtures**	**Total**
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**
	$25,000,000	$0	$0	$5,000,000	**$30,000,000**
Industrial	$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	$2,500,00	**$50,000,000**
Industrial	$100,000	$75,000	$60,000	$15,000	**$250,000**
(60% Personal)	$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**

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 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 intabgibles 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 44.3% land and buildings (real property) and 55.7% personal property. Overall, the shares of personal property range from 51.3% (Oregon) to 59.5% (Oklahoma) 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 have discontinued this analysis beginning with this report for payable 2011 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 this report for taxes payable 2012, we now 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.

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.