

Government of the
District of Columbia



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**Tax Rates and Tax Burdens
in the District of Columbia -
A Nationwide Comparison**

2015

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EXECUTIVE SUMMARY

State and local tax systems in the United States are widely diverse. The District of Columbia and the 50 states employ a broad range of taxes and fees to fund state and local government operations. The combination of taxes and fees used by a particular jurisdiction is dependent upon many factors, including revenue needs, the tax base of the local government, the fiscal relationship between the state and local governments, constitutional limitations in some states, and the level of local government services demanded by residents.

The District's tax structure employs taxes typically used by local governments, such as real and personal property taxes, deed taxes, traffic fines, and others. At the same time, the District has taxes usually associated with the state level of government, such as the income tax, estate tax, sales and use taxes, excise taxes, gross receipts taxes, and motor vehicle taxes. About two-thirds of the District's generated revenues come from taxes usually administered by the states.

However, the District's tax rates are often compared to either state rates, or other city rates, and not usually a combination of both rates that would be applicable to citizens living in those locales. As such, this study aims to calculate the combined state and local tax burdens that would apply to a hypothetical family at five different income levels living in D.C. as well as the largest city in each state. The study includes four main tax types in its tax burden calculations: income, property, sales, and auto taxes. For these four tax types, tax burdens are calculated by applying the relevant state and local tax rates to economic data on average and median costs of various consumer goods and housing. The study assumes the incidence of each tax is on the individual and it also must make other assumptions that affect the findings. These assumptions, as well as data sources and steps taken to arrive at the tax burdens, are laid out in the pages that follow.

The main findings are presented in Charts 1a-e and Tables 1a-e (pages 12-21), with combined tax burdens broken out by tax type and income level. Readers may view the rankings at five income levels: \$25,000, \$50,000, \$75,000, \$100,000, and \$150,000. At the \$25,000/year income level, the lowest combined tax burden is on a family living in Burlington, Vermont, while the highest combined tax burden falls on a family earning \$150,000 and living in Bridgeport, Connecticut.

Income tax: Residents in 44 of the 51 cities in this study are subject to some type of individual income tax at the state and/or local levels (Table 3, page 27). There are several types of individual income tax systems, including graduated state and local rates, graduated state and flat local rates, flat state and local rates, graduated state tax rates, and flat state rates with exemptions. Income tax burdens in jurisdictions levying an income tax ranged from a low of (\$4,057) in Burlington, Vermont, for a family earning \$25,000 (this negative amount represents an income tax refund due to refundable credits), to a high of \$10,664 for a family earning \$150,000 and living in New York City, New York.

The District's 2015 income tax structure included five rates, with the highest rate of 8.95 percent applying to income over \$350,000. The District's income tax burden was below the average for the 44 cities that levied an income tax for a family earning \$25,000, and slightly higher than the average for the other four income levels.

Property tax: All 51 cities in this study levy a tax on real property located within the city, and effective tax rates range from a high of \$3.46 per \$100 of assessed value in Detroit, Michigan, to \$0.02 per \$100 of assessed value in Jackson, Mississippi (Table 4, page 30). In addition, several jurisdictions allow tax exemptions and credits in the calculation of the real property tax liability (Table 6, page 33). Property tax burdens range from a low of \$692 on a family earning \$50,000 a year and living in Honolulu, Hawaii to a high of \$15,869 on a family earning \$150,000/year and living in Newark, New Jersey.

In 2015, the the District taxed residential property at a rate of \$0.85 per \$100 of assessed value; and offered a \$71,400 homestead deduction for owner-occupied residences. D.C.'s property tax burdens were below the 51-city average for the top four income levels (all of those assumed to own homes). However, the District's property tax burden for those earning \$25,000 was the second highest of all the cities, due to the high cost of rental housing, and the assumption that a portion of rental payments goes toward the property tax.

Sales tax: As noted in Table 7, page 37, residents in 46 of the 51 cities studied are subject to some form of sales and use tax. The highest combined (state + local) sales tax rates are found in Columbia, South Carolina; and Birmingham, Alabama, both at 10 percent total. Residents of Washington, D.C.; Milwaukee, Wisconsin; Portland, Maine; and Honolulu, Hawaii have the lowest combined sales tax rates. These lowest rates range from 4.5 to 5.75 percent total. Sales tax burdens in jurisdictions levying a general sales tax ranged from a low of \$522 for a family earning \$25,000 in Baltimore, Maryland; to a high of \$3,412 for a family earning \$150,000 in Memphis, Tennessee.

The District's general sales tax of 5.75 percent is the fourth lowest of all 51 cities, when looking at total state and local sales tax rates combined. Consequently, sales tax burdens in D.C. were lower than the 51-city average at all five income levels.

Auto tax: Table 9, page 41, indicates that residents in all 51 cities in this study pay some type of automobile registration fee or tax -- usually either a flat rate per vehicle or by weight of vehicle. In addition, personal property taxes on automobiles are levied in thirteen of the cities. Auto tax burdens ranged from a low of \$105 for a family earning \$25,000 in Newark, New Jersey, to a high of \$3,966 for a family earning \$150,000 in Providence, Rhode Island.

The District's annual auto registration fees range from \$72 to \$155, depending on vehicle weight, and are among the highest in the study; however, D.C. does not charge an annual excise tax or personal property tax on automobiles. District gas tax rates were 23.5 cents per gallon, and D.C. auto tax burdens were below the 51-city average for all five income levels.

There is no single pattern that characterizes either a high or low tax burden city. Details concerning the various taxes levied and why the tax burdens differ from one jurisdiction to another are presented in this publication. Part I compares selected tax burdens in D.C. with those of the most populous city in each state, through December 31, 2015. Part II contains tax rate tables for D.C. and the 50 states for 12 different types of taxes as of January 1, 2016.

ACKNOWLEDGMENT

Each year the Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis publishes several reports to provide information to the citizens and taxpayers of the District of Columbia about the tax rates of states and large cities. The reports contain information about the rates and burdens of major taxes in the District of Columbia compared with states and the largest city in those states.

This publication contains two reports: (I) Tax Burdens in Washington, D.C. Compared with Those in the Largest City in Each State, 2015 and (II) A Comparison of Selected Tax Rates in the District of Columbia with Those in the 50 States as of January 1, 2016. This information is requested annually by committees of the U.S. Congress and the District of Columbia Council. It is provided pursuant to Public Law 93-407.

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Appreciation is extended to the many state and local officials in various state offices who responded to our state survey and provided data in response to our follow up inquiries. Their cooperation in providing information and their helpful suggestions make this publication possible. I would also like to thank Lori Metcalf, who prepared this document, and Bob Zuraski, who offered editing assistance.

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Part I

Tax Burdens in Washington, D.C. Compared with Those in the Largest City in Each State

2015

Overview

There is a wide diversity in state and local tax systems in the United States. The fifty states and the District of Columbia employ a broad range of taxes and fees to fund state and local government operations. The combination of taxes and fees used by a particular jurisdiction is dependent upon many factors, including its revenue needs, the local government tax base, the fiscal relationships between the state and the local government, constitutional and legal limitations on the powers of taxation, and the jurisdiction's philosophy of government taxation.

The District's tax structure includes taxes typically imposed by local governments, such as real and personal property taxes, deed taxes, and others. At the same time, the District also levies taxes usually associated with the state level of government, such as individual and corporate income taxes, excise taxes, and motor vehicle related taxes. About two-thirds of the District's locally generated revenues come from taxes usually administered by a state.

The District is often compared to other cities, or states, independently, and without taking into account its unique situation of having to charge taxes that both a city and a state normally levy. Therefore, a primary goal of this study is to normalize the cumulative amount of nominal state and local tax rates as much as possible to provide a comparison of tax burdens across major taxes in the District and the largest city in each state. Further, this study defines the term 'tax burden' as the dollar amount of taxes owed if the final incidence of each major tax examined (income, property, sales, and auto) is on the individual.¹

This study compares the income, property, sales, and auto tax burdens in 51 different jurisdictions for a hypothetical family of three, at five different income levels. For context, Appendix Table 27 presents data on population and recent changes in population in these jurisdictions. Appendix Map 10 shows the population of the largest cities as a portion of total state population and illustrates how many people, and what portion of each state, are represented by the tax burdens calculated in this study.

Useful information and insights can be gleaned from comparing the tax burdens in one jurisdiction with the burdens in other jurisdictions. However, in evaluating or interpreting these comparisons, consideration should be given to special circumstances within each jurisdiction that may affect tax burdens. These tax burden comparisons reflect the assumptions used in their computation. For this reason it is important to study the methodology used in the report before drawing conclusions. The methodology used in this report is best suited to provide a relative comparison of tax burdens, within a single tax type and within a single year, across each of the 51 cities studied.

As in past years, readers are advised not to compare the hypothetical tax burdens across years; any number of small changes in the assumptions of the study can result in misleading information under such comparisons. The purpose of the study remains to compare tax burdens on a hypothetical household in different jurisdictions in a specific year, and not over time.

¹ This approach differs from the use of the phrase 'tax burden' that may be more common in the field of economics, which includes an economic analysis of which group bears the 'burden' of a tax by ultimately having to pay it, also known as the 'incidence' of a tax.

Further, the report does not include all taxes levied in a given jurisdiction, as there are state and/or local taxes not captured in the calculations here. However, the report makes every effort to consistently capture and measure tax burdens across jurisdictions for the taxes we include, making comparisons of the relative tax burdens presented a key feature of the report.

Why Do Tax Burdens Differ From One City to Another?

In the following chapters, the differences in tax burdens for the largest city in each state in the United States will be discussed. The assumptions used to compute the various tax burdens will affect the relative tax burdens for the 51 cities. This is especially true for the real estate tax, because both the methodology used to derive housing values and the relative housing values from one income level to another and from one city to another are important determinants of the real property tax burden. However, no matter what set of assumptions is used in such a study; there will be substantial tax burden differences from one city to another. Some of the reasons for these differences are as follows:

- 1) This study only measures major state and local tax burdens for individuals. Business tax burdens also differ substantially from one city to another. Many cities, because of a large manufacturing base or because of a dominant industry, can shift a large portion of the tax burden away from individuals to businesses. Cities in natural resource states, for example, may shift a substantial portion of the tax burden to industry, thus exporting, to some extent, their local government tax burden. Convention and tourist activity in cities such as Chicago, Washington, D.C., New York City, and Las Vegas can help reduce local tax burdens by increasing sales tax, gasoline tax, and parking tax revenues from non-residents, another form of tax exporting.
- 2) Service demands in each of the 51 cities may vary a great deal. Cold weather services, such as snow removal, in northern cities may increase costs. Furthermore, citizens of some cities simply desire, or are accustomed to, more government services than residents of other cities.
- 3) The costs of providing services may differ substantially from one city to another. Wage levels, efficiency of the work force, and costs of overhead items, such as utilities, may be very different.
- 4) The tax base of each city is different. Cities that have a relatively large percentage of employed residents will normally have a broad tax base. This type of city can levy taxes at lower rates than can those with low levels of employment or high levels of exempt property. External forces, such as the federal presence in Washington, D.C., can restrict the tax base. The tax base can also be defined by the scope of a particular tax. For example, it is desirable from a social point of view to exempt groceries from the sales tax; however, such an exemption can narrow the sales tax base and may require a higher sales tax rate in order to raise sufficient revenues.

- 5) The proportion of public versus private services may differ from one city to another. Some cities may provide services such as garbage collection and hospital care, while in other cities the private sector may perform these services for a fee.

As a result, a city in which the private sector performs such functions may have a lower tax burden than one in which these functions are performed by the city. In these instances, the fees charged by the private sector represent payments by individuals for public services that are not reflected in tax burdens.

- 6) Certain taxes that are not discussed in this study may affect state and local tax burdens. Taxes which are levied on individuals, but not covered by the study, include liquor and cigarette taxes and taxes on public utility bills. Rates for some of these taxes are listed at the end of the report.
- 7) The state and local tax burdens in this study are computed without regard to their effect on the federal tax burden of individuals in the respective cities. To some extent, high state and local income and property taxes can be used to partially alleviate federal tax burdens through itemized deductions.

As noted above, the number and kind of public services each city provides necessarily has a bearing on the amount of revenue that must be raised. The tax burden comparisons in this report must be studied in the context of these differing conditions, in addition to the assumptions and methodologies used.

The Government Accountability Office (GAO) has documented in the past that the District has had a structural imbalance, due primarily to two factors. First, the District has a higher service delivery cost than the average state fiscal system – due to the high rates of poverty and crime associated with an urban area, as well as a higher cost of living.² Further, the District’s revenue capacity is restricted by the federal presence – D.C. cannot tax non-residents who work in the city under its income tax, and as of Tax Year 2015 property assessments, 44 percent of the land value in the District is tax exempt.³ In spite of this restriction, GAO notes that the District has a high revenue capacity. The city’s economic and fiscal situation has changed over the the past decade, however these factors remain relevant when considering the District’s tax structure and its tax burdens.

² “Structural Imbalance and Management Issues.” GAO–03–666. Government Accountability Office. Washington, D.C.: 2003. p. 1.

³ “D.C. Tax Facts 2016.” 2015 Tax Exempt Land value as a % of Total Taxable and Exempt Land Value. Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis. Washington, D.C.: 2016. p.41.

CHAPTER I

How Tax Burdens are Computed for the Largest City in Each State

The majority of taxpayers in the United States are aware that the amount of state and local tax liability of an individual taxpayer varies from one jurisdiction to another. The extent of these differences in state and local tax burdens across the country, however, may not be fully recognized.

The taxing systems of states and local jurisdictions differ in many aspects. The relationship of state taxes to federal tax law is one of several factors causing differences in tax burdens from one state to another. Other differences reflect decisions by state and local governments on what should and should not be subject to tax. For example, several states do not levy an individual income tax, although for many others it represents a major source of state funding. Tax burdens also differ because some states can shift a larger portion of governmental costs to business and may be able to "export" some of their tax burden. This has been true, for example, for energy producing states and states specializing in tourism.

This report compares the major state and local tax burdens of hypothetical households in Washington, D.C., with the burden for the households in the largest city in each of the 50 states for 2015. The four major taxes used in the comparison are the individual income tax, the real property tax on residential property, the general sales and use tax, and automobile taxes, including the gasoline tax, registration fees, excise tax, and the personal property tax. This study does not incorporate the effects of differing local tax burdens on the federal individual income tax burden. Income and property taxes are deductible in computing federal income taxes and the effect of federal deductibility is to reduce the overall difference in tax burdens between jurisdictions.

All tax burdens reflect state and local tax rates. Tax burdens are compared for a hypothetical family that consists of two wage-earning spouses and one school-age child. The gross family annual income levels used are \$25,000, \$50,000, \$75,000, \$100,000, and \$150,000, and is assumed to have been earned in the city. The wage and salary split is assumed to be 70-30 between the two spouses. All other income is assumed to be split evenly. The families at the top four income levels are assumed to own a single family home and to reside within the confines of the city. At the \$25,000 income level, the study assumes that the household rents and does not own its housing unit. The particular assumptions used in the calculation of each major tax type are indicated on the following pages.

- **Housing Values.** Housing values across income levels in the 2015 study are based on data from the U.S. Census Bureau’s American Community Survey (ACS) and adjusted using a linear multiplier for the different income levels. This involves dividing the median house value of each metropolitan statistical area (MSA) by the MSA’s median household income of mortgage holders, and then multiplying that number by each income level for which home ownership is assumed (\$50,000, \$75,000, \$100,000, and \$150,000).
- **Mortgage Interest.** The mortgage interest amount (for use as an itemized deduction in the income tax) in the 2015 study is derived by calculating an amortization schedule for the estimated home value for each income level in each city. Home values for the Mortgage Interest Deduction (MID) are calculated in the same manner as in the previous bullet, based on median house values and median incomes for mortgage holders for a house purchased in 2010.
- **Renters versus Owners.** The hypothetical family at the \$25,000 income level in this year’s study is assumed to rent, rather than own a home. Given the real estate values in most areas of the country, the assumption that families earning \$25,000 per year rent is likely more realistic than the assumption that they own a home.

Individual Income Tax

The five income levels used in this study are divided between wage and salary income and other types of income. The table below shows the wages and salaries, interest income and capital gains for Washington, D.C. married filers who itemize deductions. The following data have been updated from the previous year for all of the income categories using 2014 tax year data from the IRS.

Gross Income		Wages and Salaries	Interest	Long-Term Capital Gains 1/
\$25,000	Spouse 1	\$16,595	\$248	\$1,045
	Spouse 2	7,112		
\$50,000	Spouse 1	\$34,681	\$157	\$299
	Spouse 2	14,863		
\$75,000	Spouse 1	\$50,978	\$261	\$1,913
	Spouse 2	21,848		
\$100,000	Spouse 1	\$68,606	\$507	\$1,485
	Spouse 2	29,402		
\$150,000	Spouse 1	\$102,325	\$497	\$3,325
	Spouse 2	43,853		

1/ Assumes a three-year holding period

Because the Federal Earned Income Tax credit (EITC) at the \$25,000 income level in some states will determine the state's EITC, and because several states (such as Alabama, Iowa, Louisiana, Missouri, Montana, and Oregon) allow the deduction of all or part of an individual's federal income tax liability in computing the state income tax, it is necessary to compute the 2015 federal individual income tax at each income level using the above assumptions. Many states in 2015 allowed taxpayers to begin their state income tax computations with federal adjusted gross income (AGI) or federal taxable income. Other states do not use either of these two measures of federal income as a starting point.

Total itemized deductions, which were also used in the federal tax computation, were assumed to be equal to the following, where the deductions have been adjusted to reflect the income levels for tax year 2015.

Gross Income Level					
Deduction	\$ 25,000	\$ 50,000	\$ 75,000	\$100,000	\$150,000
Medical (Gross)	6,454	8,327	10,416	12,494	16,347
Nondeductible Medical 1/	<u>-2,500</u>	<u>-5,000</u>	<u>-7,500</u>	<u>-10,000</u>	<u>-15,000</u>
Net Medical Deduction	3,954	3,327	2,916	2,494	1,347
Deductible Taxes	2/	2/	2/	2/	2/
Mortgage Interest	3/	3/	3/	3/	3/
Contribution Deduction	2,553	3,395	4,089	4,431	3,933
Gross Miscellaneous	3,062	6,178	4,471	3,767	4,400
Nondeductible 4/	<u>-500</u>	<u>-1,000</u>	<u>-1,500</u>	<u>-2,000</u>	<u>-3,000</u>
Net Miscellaneous Deduction	2,562	5,178	2,971	1,767	1,400
Other Miscellaneous Deductions	149	107	145	135	104
Total Deductions-without taxes And mortgage interest	9,218	12,007	10,121	8,827	6,784

1/ Nondeductible medical equal 10 percent of federal A.G.I. All or part of medical deductions may be allowed in some states.

2/ The tax deduction varies from city to city and is based on real and personal property taxes computed in the 2015 study and individual income taxes computed in the 2015 study for tax year 2014.

3/ Mortgage interest is based on 5th year interest paid on a home purchased in 2010 at an interest rate of 4.69%.

4/ Nondeductible miscellaneous deductions equal 2 percent of A.G.I.

The itemized deductions shown above are used in the calculation of the 2015 tax burdens, unless the standard deduction is more advantageous. In 2015, the federal standard deduction for married filing jointly was \$12,600, so this would be automatically used for the family earning \$25,000 per year (at all other income levels in the report, the mortgage interest deduction would put the total itemized deductions above the standard deduction). The 2015 deductible real and personal property taxes computed in the current year's 51-city burden study are used for the 2015 property tax deduction. For the 2015 state and local individual income tax deduction, 2014 tax burdens calculated for the previous year's study were used. Each of these figures was used in computing the 2015 federal income tax burden, which is the starting point for the state income tax burden calculations.

Real Property Tax

Real property tax burdens in the 51 cities are a function of residential real estate values, the ratio of assessed value to market value, and the tax rate. Some jurisdictions allow certain deductions from the value of residential property before the tax is calculated while others allow credits against the calculated real estate tax. These deductions and/or credits are normally limited to owner-occupied properties.

The property tax rates for each of the 51 cities, presented in Table 4 (page 30), indicate a wide range in these rates. This information is based upon survey data received from various state research agencies and/or local assessors, and is intended to represent the total rate applicable to a homeowner in each city, inclusive of any state, city and other local property taxes. In addition to tax rate differences, data presented in Table 5 (page 32) indicate that the assumed market value of a residence for purposes of this study varies widely from one city to another at all income levels. For example, based on extrapolations of 2015 American Community Survey (ACS) data, the estimated house value at the \$75,000 income level ranges from a high of \$416,641 in Honolulu, Hawaii, to a low of \$134,491 in Charleston, West Virginia.

The housing values for each income level (except the \$25,000 income level) shown in Table 5 are derived from 2015 ACS data. A series of assumptions and calculations were made in order to estimate the median house value in each city, for each income level used in the report. First, data on median house values and median household incomes of mortgage holders were retrieved from the Census Bureau's American Community Survey 2015. Data were collected for the Metropolitan Statistical Area (MSA) within which the largest city in each state falls.⁴

Since the focus of this study is identifying the median house value at the \$50,000, \$75,000, \$100,000 and \$150,000 income levels, a linear multiplier was calculated based on the median house value in the MSA divided by the median household income of mortgage holders in that MSA. This multiplier was used to scale the house values to the various income levels in the report by multiplying them by each income level to determine the hypothetical house value at that level. This assumption serves as an input for both the property tax burden calculations and

⁴ Newark, New Jersey, falls in the New York City MSA and Wilmington, Delaware, falls in the Philadelphia MSA, thus those MSA data are used for both cities. A sensitivity analysis presented in the 2013 Tax Rates and Tax Burdens Report shows how this choice affects the findings.

the mortgage interest deduction for the income tax burden. This method, which was also used in the 2012, 2013, and 2014 *Tax Burden Studies*, makes the assumption that house values increase in a linear fashion with income, which is the case up to near \$100,000 of annual income (all median household incomes in the 51 cities are below this level). A modification for the 2014 and 2015 Studies is the use of median household income of *mortgage holders*, rather than the median income of all households, within an MSA in order to calculate the linear multiplier. This change results in a lower multiplier, in general, thus moderating the increase in house values as incomes rise. This change generally leads to lower property tax burdens overall than in the two previous years. However, any analysis should focus on the relative rankings within a given year.

As stated previously, the study assumes that the family with an annual income of \$25,000 does not own a home (and as a result does not pay property tax directly), but instead rents. Because renters pay property tax indirectly through their rent, it was necessary to compute a percentage of said rent constituting property taxes. The property tax equivalent of rent (PTER) in each city was calculated by first obtaining data on median rents for each MSA from the U.S. Department of Housing and Urban Development.⁵ States with property tax circuit breaker programs estimate a property tax rent equivalent in order to calculate the amount that renters are paying in property taxes. While there is some variation in the assumption of rent constituting property taxes within different states, on average, states assume that about 20 percent⁶ of rent goes toward paying property taxes.⁷ This flat assumption means that any variation in the property tax burden for renters is driven entirely by the housing market in a given jurisdiction, and not the tax system in place.

The use of the above methodology is an attempt to reflect the different values of housing in different parts of the country and at different income levels. Data from the 2015 ACS were used for estimating house values because they are the latest data comparable for all the jurisdictions in this study. It is important to note that these are **hypothetical** values based on income levels and do not represent **average** values for a particular jurisdiction.

In computing property tax burdens, it is also necessary to consider the various exemptions and credits noted in Table 6 (page 33). The variety of real property tax exemptions, most of which apply only to residential real property, is very broad. Table 6 does not include the many senior citizen exemptions and credits available in a large number of states, nor can it adjust for “caps” on the growth of assessed values or limitations on tax liability over time. Some states have a type of assessment limitation or valuation freeze, for example strict limits in California mean many families’ assessments would be much lower than those assumed here, particularly if they have owned their home for a number of years. Table 4 (page 30), which compares residential real estate tax rates for each city, does not reflect the various exemptions and credits

⁵ U.S. Department of Housing and Urban Development, “2015 50th Percentile Rent Estimates.” Data for studio apartments used.

⁶ Of the states that do set a PTER to use in circuit break programs, the levels generally range from 15 to 25 percent, (New Mexico has a low of 6 percent while Illinois, Massachusetts, and New York each use a 25 percent assumption).

⁷ In January 2016, the Minnesota Department of Revenue used American Community Survey data on annual counts of occupied and vacant rental units, cash rent paid, and rent asked for vacant units to calculate the PTER in Minnesota. Additionally, internal data on property taxes paid by apartments and non-homestead residential properties was used to assess the percentage of rent that constitutes property taxes throughout Minnesota. The researchers found that statewide, the PTER hovered around 15 percent each year from 2009 to 2014, though in Minneapolis in particular it was often up to 16.9 percent. Such studies may provide justification for lowering the 20 percent PTER assumption to 15 percent in future Tax Burden Studies.

noted in Table 6. The many other exemptions and credits available, such as those for senior citizens, are also not reflected in Table 4, because seniors are not included in the hypothetical households of this study. However, the property tax burdens computed and shown in Table 1 of this study reflect the applicable provisions for families owning and residing in their homes.

Sales and Use Tax

The sales tax burdens included in this study are based on information from the 2015 Bureau of Labor Statistics' Consumer Expenditure Survey (CES), and local and state sales tax rates. The CES provides data on average consumer expenditures by income level. For example, the CES data provide average annual expenditures on items such as food at home, food away from home, apparel and services, and transportation. The expenditure data and the specific city and state tax rates on each type of item are used to determine the sales tax that these expenditures would generate. This year, the same CES categories are included as in the 2013 and 2014 Study. The state and local general sales tax rates in each city are reported in Table 7, page 37.

Automobile Taxes

Automobile taxes included in this study are gasoline taxes, motor vehicle registration fees (state and local), excise taxes, and personal property taxes levied on automobiles. Table 10 (page 41) summarizes automobile ownership assumptions for each income level, including types of vehicles, weight, value, and annual gasoline consumption.

CHAPTER II

Overall Tax Burdens for Hypothetical Families in the Largest City in Each State

The major state and local tax burdens by tax type for the five different income levels used in this study are presented in Tables 1a-e (pages 13-21). As reflected in Table 1, tax burdens across the 51 cities vary widely at all income levels. At the \$25,000 income level, the \$4,461 combined burden for Philadelphia, Pennsylvania, is significantly greater than the *negative* tax burden of (\$1,088) that a similar taxpayer in Burlington, Vermont, would receive as a refund. Similarly, at the \$150,000 income level, the Bridgeport, Connecticut, burden of \$26,851 is nearly five times the Anchorage, Alaska burden of \$5,658. Differences in state and local tax structures, as well as housing markets and costs-of-living, contribute to the variation at each income level.

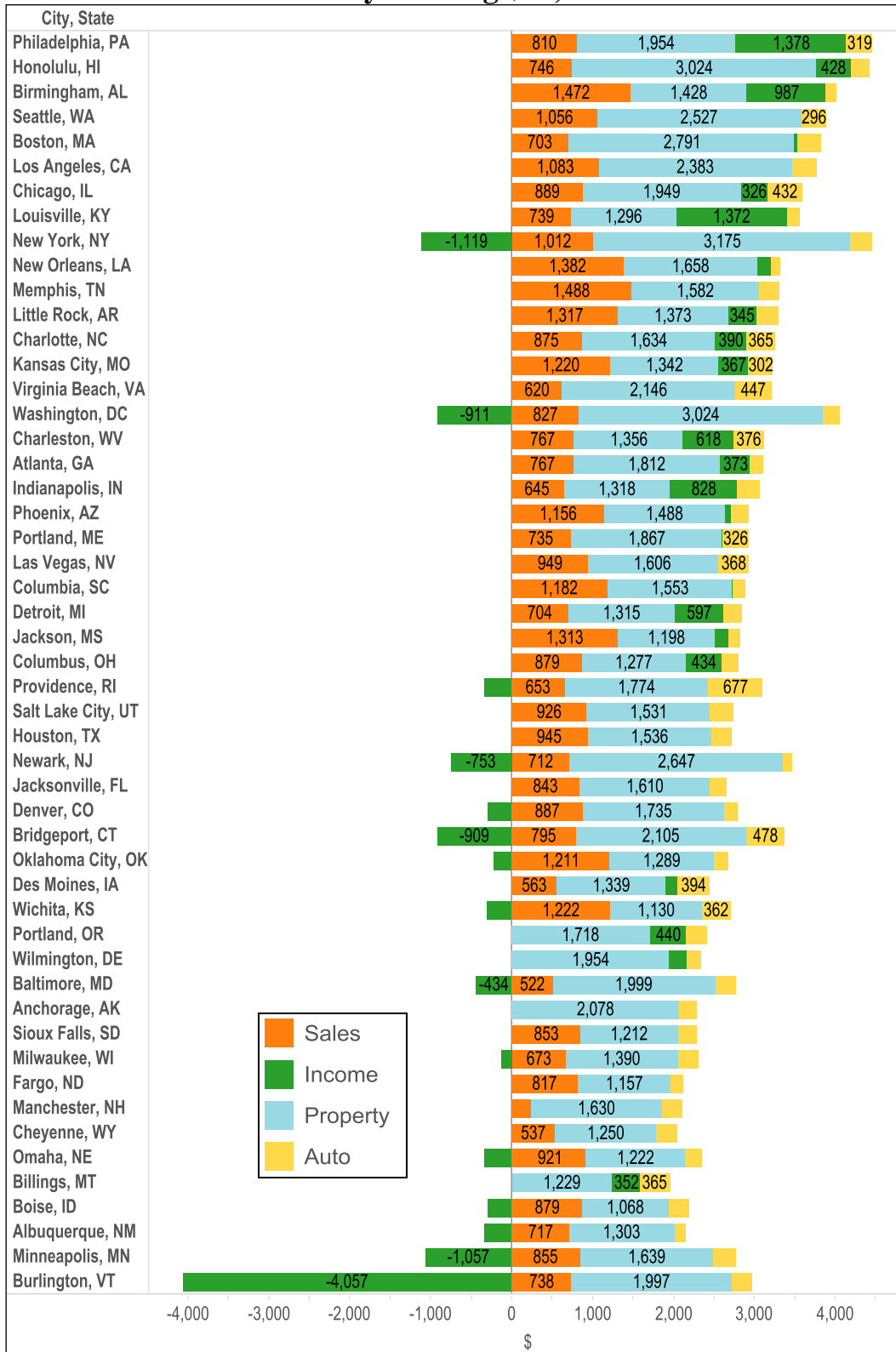
The highest combined tax burdens of all four taxes added together at the \$25,000 income level occur in Philadelphia, Pennsylvania; Honolulu, Hawaii; Birmingham, Alabama; Seattle, Washington; and Boston, Massachusetts. Philadelphia's high local wage tax adds to the state income tax to make it by far the highest income tax burden for a family at this income level. The high property tax burdens (which are assumed to be a portion of rent) due to expensive real estate markets in these cities generally put Honolulu and Boston at the top of this list, while Birmingham's high sales tax burden contributes to its ranking.

The lowest combined tax burdens of all four taxes added together at the \$25,000 income level occur in Burlington, Vermont; Minneapolis, Minnesota; Albuquerque, New Mexico; Boise, Idaho; and Billings, Montana. The first three of these states have a refundable EITC or other credits, which contributes to their low ranking.

The highest combined tax burdens of all four taxes added together at the \$150,000 income level occur in Bridgeport, Connecticut; Newark, New Jersey; Detroit, Michigan; Baltimore, Maryland; and Portland, Maine. The lowest combined tax burdens at this income level are Anchorage, Alaska; Cheyenne, Wyoming; Sioux Falls, South Dakota; Seattle, Washington; and Fargo, North Dakota. These lower tax burdens are primarily a result of the lack of an income tax in these jurisdictions. Map 1 (page 22) illustrates the combined burden of all four taxes for a family earning \$75,000/year. See the Appendix for maps showing the combined burdens by state for a family at each of the other income levels.

No single pattern characterizes a city with either a high or a low tax burden. Generally, however, high tax burden cities have a graduated individual income tax rate and/or high real estate tax rates, moderate to high housing values and are cities located in the Northeast. Low tax burden cities generally have a low individual income tax (if they have one at all) and average or below average real property tax rates.

Chart 1a: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$25,000/Year



Source: ORA analysis. Cities are ranked by total estimated tax burden as a percentage of income (highest at the top). Negative bars represent tax refunds due to state EITC (or other refundable credits). See Table 1a on the following page for tax burdens as a percent of income.

Table 1a: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$25,000/Year

RANK	CITY	ST	TAXES				BURDEN		
			INCOME 2/	PROPERTY 3/	SALES 4/	AUTO	AMOUNT	PERCENT	
1	Philadelphia	PA	1,378	1,954	810	319	4,461	17.8%	
2	Honolulu	HI	428	3,024	746	228	4,427	17.7%	
3	Birmingham	AL	987	1,428	1,472	122	4,009	16.0%	
4	Seattle	WA	-	2,527	1,056	296	3,879	15.5%	
5	Boston	MA	49	2,791	703	280	3,824	15.3%	
6	Los Angeles	CA	0	2,383	1,083	300	3,767	15.1%	
7	Chicago	IL	326	1,949	889	432	3,596	14.4%	
8	Louisville	KY	1,372	1,296	739	158	3,565	14.3%	
9	New York	NY	(1,119)	3,175	1,012	257	3,325	13.3%	
10	New Orleans	LA	162	1,658	1,382	122	3,325	13.3%	
11	Memphis	TN	-	1,582	1,488	236	3,306	13.2%	
12	Little Rock	AR	345	1,373	1,317	265	3,301	13.2%	
13	Charlotte	NC	390	1,634	875	365	3,264	13.1%	
14	Kansas City	MO	367	1,342	1,220	302	3,230	12.9%	
15	Virginia Beach	VA	0	2,146	620	447	3,213	12.9%	
16	Washington	DC	(911)	3,024	827	203	3,142	12.6%	
17	Charleston	WV	618	1,356	767	376	3,117	12.5%	
18	Atlanta	GA	373	1,812	767	164	3,116	12.5%	
19	Indianapolis	IN	828	1,318	645	273	3,064	12.3%	
20	Phoenix	AZ	59	1,488	1,156	229	2,932	11.7%	
21	Portland	ME	0	1,867	735	326	2,928	11.7%	
22	Las Vegas	NV	-	1,606	949	368	2,923	11.7%	
23	Columbia	SC	0	1,553	1,182	143	2,878	11.5%	
24	Detroit	MI	597	1,315	704	231	2,848	11.4%	
25	Jackson	MS	176	1,198	1,313	133	2,819	11.3%	
26	Columbus	OH	434	1,277	879	210	2,800	11.2%	
27	Providence	RI	(330)	1,774	653	677	2,774	11.1%	
28	Salt Lake City	UT	0	1,531	926	290	2,747	11.0%	
29	Houston	TX	-	1,536	945	235	2,716	10.9%	
30	Newark	NJ	(753)	2,647	712	105	2,711	10.8%	
31	Jacksonville	FL	-	1,610	843	206	2,659	10.6%	
32	Denver	CO	(287)	1,735	887	172	2,508	10.0%	
33	Bridgeport	CT	(909)	2,105	795	478	2,469	9.9%	
34	Oklahoma City	OK	(219)	1,289	1,211	180	2,460	9.8%	
35	Des Moines	IA	146	1,339	563	394	2,442	9.8%	
36	Wichita	KS	(299)	1,130	1,222	362	2,415	9.7%	
37	Portland	OR	440	1,718	-	256	2,415	9.7%	
38	Wilmington	DE	218	1,954	-	168	2,340	9.4%	
39	Baltimore	MD	(434)	1,999	522	246	2,333	9.3%	
40	Anchorage	AK	-	2,078	-	214	2,293	9.2%	
41	Sioux Falls	SD	-	1,212	853	228	2,292	9.2%	
42	Milwaukee	WI	(132)	1,390	673	244	2,175	8.7%	
43	Fargo	ND	0	1,157	817	143	2,117	8.5%	
44	Manchester	NH	-	1,630	242	237	2,109	8.4%	
45	Cheyenne	WY	-	1,250	537	248	2,035	8.1%	
46	Omaha	NE	(330)	1,222	921	215	2,027	8.1%	
47	Billings	MT	352	1,229	15	365	1,961	7.8%	
48	Boise	ID	(290)	1,068	879	247	1,904	7.6%	
49	Albuquerque	NM	(330)	1,303	717	127	1,817	7.3%	
50	Minneapolis	MN	(1,057)	1,639	855	267	1,705	6.8%	
51	Burlington	VT	(4,057)	1,997	738	234	(1,088)	-4.4%	
AVERAGE			1/	(34)	1,718	872	261	2,772	11.1%
MEDIAN			25	1,606	848	244	2,800	11.2%	

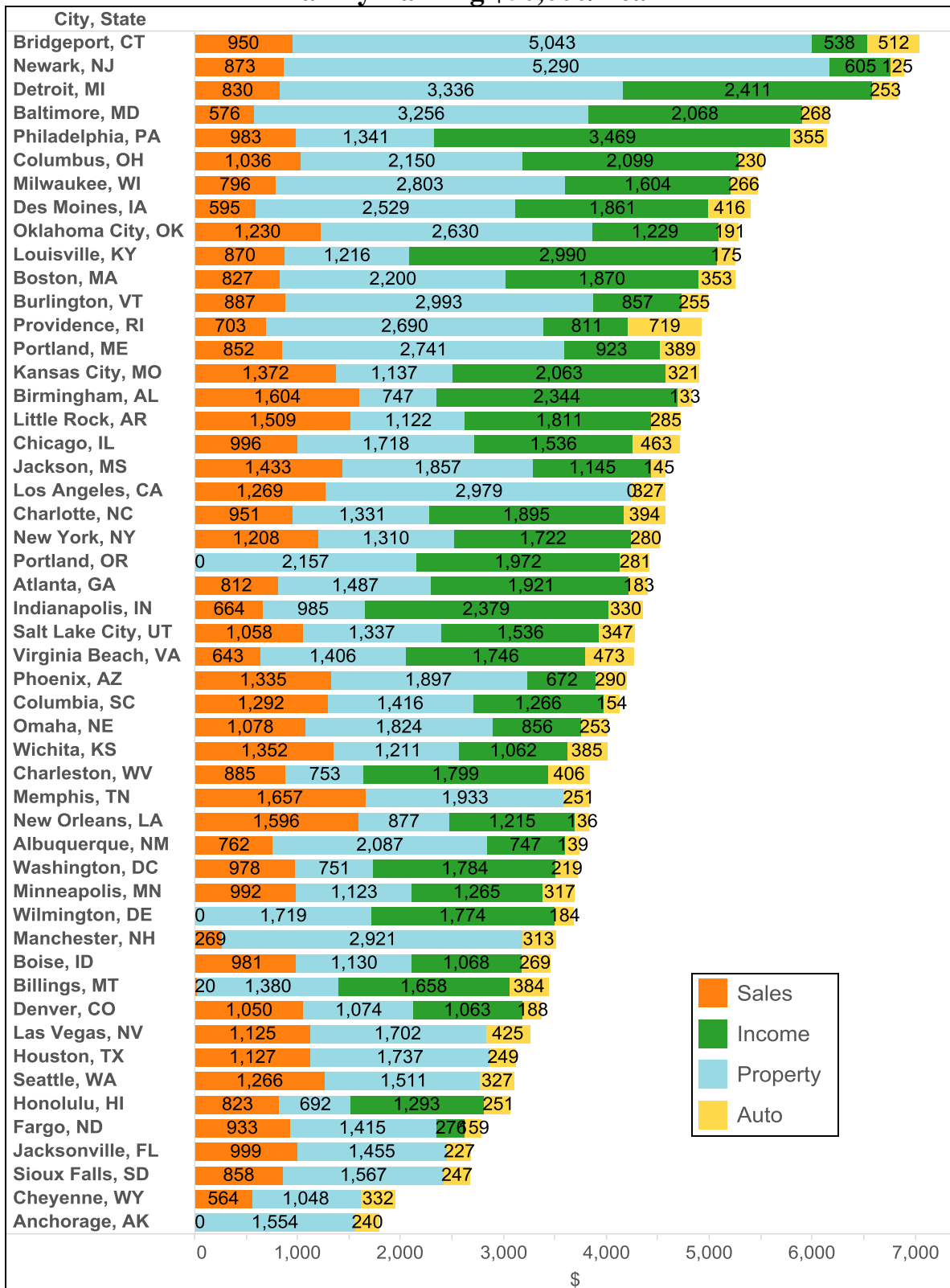
1/ Based on jurisdictions actually levying tax.

2/ Amounts in parentheses represent refundable State Earned Income Tax Credits. VT's negative burden also includes a renter's rebate through the income tax. States with dashes do not have an income tax.

3/ Based on 20 percent of estimated annual rent.

4/ States with dashes do not have a sales tax. MT and NH do not have a general sales tax, but some selective sales taxes apply to consumption items included.

Chart 1b: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$50,000/Year



Source: ORA analysis. See Table 1b on the following page for tax burdens as a percent of income.

Table 1b: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$50,000/Year

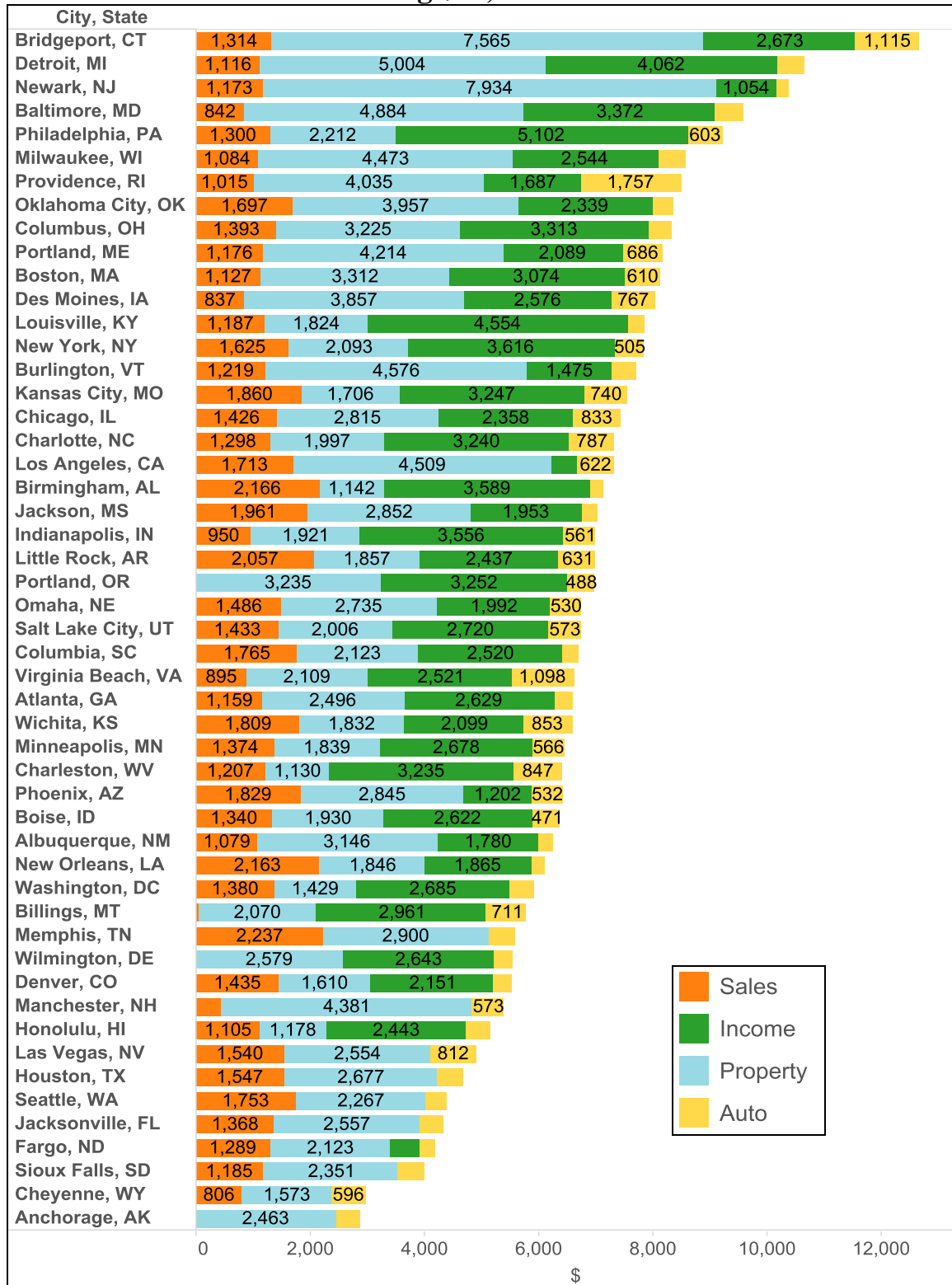
RANK	CITY	ST	TAXES				BURDEN	
			INCOME 2/	PROPERTY	SALES 3/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	538	5,043	950	512	7,043	14.1%
2	Newark	NJ	605	5,290	873	125	6,893	13.8%
3	Detroit	MI	2,411	3,336	830	253	6,830	13.7%
4	Baltimore	MD	2,068	3,256	576	268	6,168	12.3%
5	Philadelphia	PA	3,469	1,341	983	355	6,148	12.3%
6	Columbus	OH	2,099	2,150	1,036	230	5,515	11.0%
7	Milwaukee	WI	1,604	2,803	796	266	5,468	10.9%
8	Des Moines	IA	1,861	2,529	595	416	5,400	10.8%
9	Oklahoma City	OK	1,229	2,630	1,230	191	5,280	10.6%
10	Louisville	KY	2,990	1,216	870	175	5,252	10.5%
11	Boston	MA	1,870	2,200	827	353	5,249	10.5%
12	Burlington	VT	857	2,993	887	255	4,992	10.0%
13	Providence	RI	811	2,690	703	719	4,924	9.8%
14	Portland	ME	923	2,741	852	389	4,905	9.8%
15	Kansas City	MO	2,063	1,137	1,372	321	4,893	9.8%
16	Birmingham	AL	2,344	747	1,604	133	4,827	9.7%
17	Little Rock	AR	1,811	1,122	1,509	285	4,727	9.5%
18	Chicago	IL	1,536	1,718	996	463	4,712	9.4%
19	Jackson	MS	1,145	1,857	1,433	145	4,580	9.2%
20	Los Angeles	CA	0	2,979	1,269	327	4,574	9.1%
21	Charlotte	NC	1,895	1,331	951	394	4,571	9.1%
22	New York	NY	1,722	1,310	1,208	280	4,520	9.0%
23	Portland	OR	1,972	2,157	-	281	4,409	8.8%
24	Atlanta	GA	1,921	1,487	812	183	4,402	8.8%
25	Indianapolis	IN	2,379	985	664	330	4,359	8.7%
26	Salt Lake City	UT	1,536	1,337	1,058	347	4,279	8.6%
27	Virginia Beach	VA	1,746	1,406	643	473	4,267	8.5%
28	Phoenix	AZ	672	1,897	1,335	290	4,193	8.4%
29	Columbia	SC	1,266	1,416	1,292	154	4,128	8.3%
30	Wichita	KS	1,062	1,211	1,352	385	4,010	8.0%
31	Omaha	NE	856	1,824	1,078	253	4,010	8.0%
32	Charleston	WV	1,799	753	885	406	3,843	7.7%
33	Memphis	TN	-	1,933	1,657	251	3,841	7.7%
34	New Orleans	LA	1,215	877	1,596	136	3,824	7.6%
35	Albuquerque	NM	747	2,087	762	139	3,735	7.5%
36	Washington	DC	1,784	751	978	219	3,731	7.5%
37	Minneapolis	MN	1,265	1,123	992	317	3,697	7.4%
38	Wilmington	DE	1,774	1,719	-	184	3,677	7.4%
39	Manchester	NH	-	2,921	269	313	3,503	7.0%
40	Boise	ID	1,068	1,130	981	269	3,448	6.9%
41	Billings	MT	1,658	1,380	20	384	3,442	6.9%
42	Denver	CO	1,063	1,074	1,050	188	3,374	6.7%
43	Las Vegas	NV	-	1,702	1,125	425	3,252	6.5%
44	Houston	TX	-	1,737	1,127	249	3,113	6.2%
45	Seattle	WA	-	1,511	1,266	327	3,104	6.2%
46	Honolulu	HI	1,293	692	823	251	3,059	6.1%
47	Fargo	ND	276	1,415	933	159	2,783	5.6%
48	Jacksonville	FL	-	1,455	999	227	2,681	5.4%
49	Sioux Falls	SD	-	1,567	858	247	2,672	5.3%
50	Cheyenne	WY	-	1,048	564	332	1,944	3.9%
51	Anchorage	AK	-	1,554	-	240	1,794	3.6%
AVERAGE		1/	1,505	1,854	989	290	4,315	8.6%
MEDIAN			1,570	1,554	979	269	4,279	8.6%

1/ Based on jurisdictions actually levying tax.

2/ States with dashes do not have an income tax.

3/ States with dashes do not have a sales tax. MT and NH do not have a general sales tax, but some selective sales taxes apply to consumption items included.

Chart 1c: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$75,000/Year



Source: ORA analysis. See Table 1c on the following page for tax burdens as a percent of income.

Table 1c: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$75,000/Year

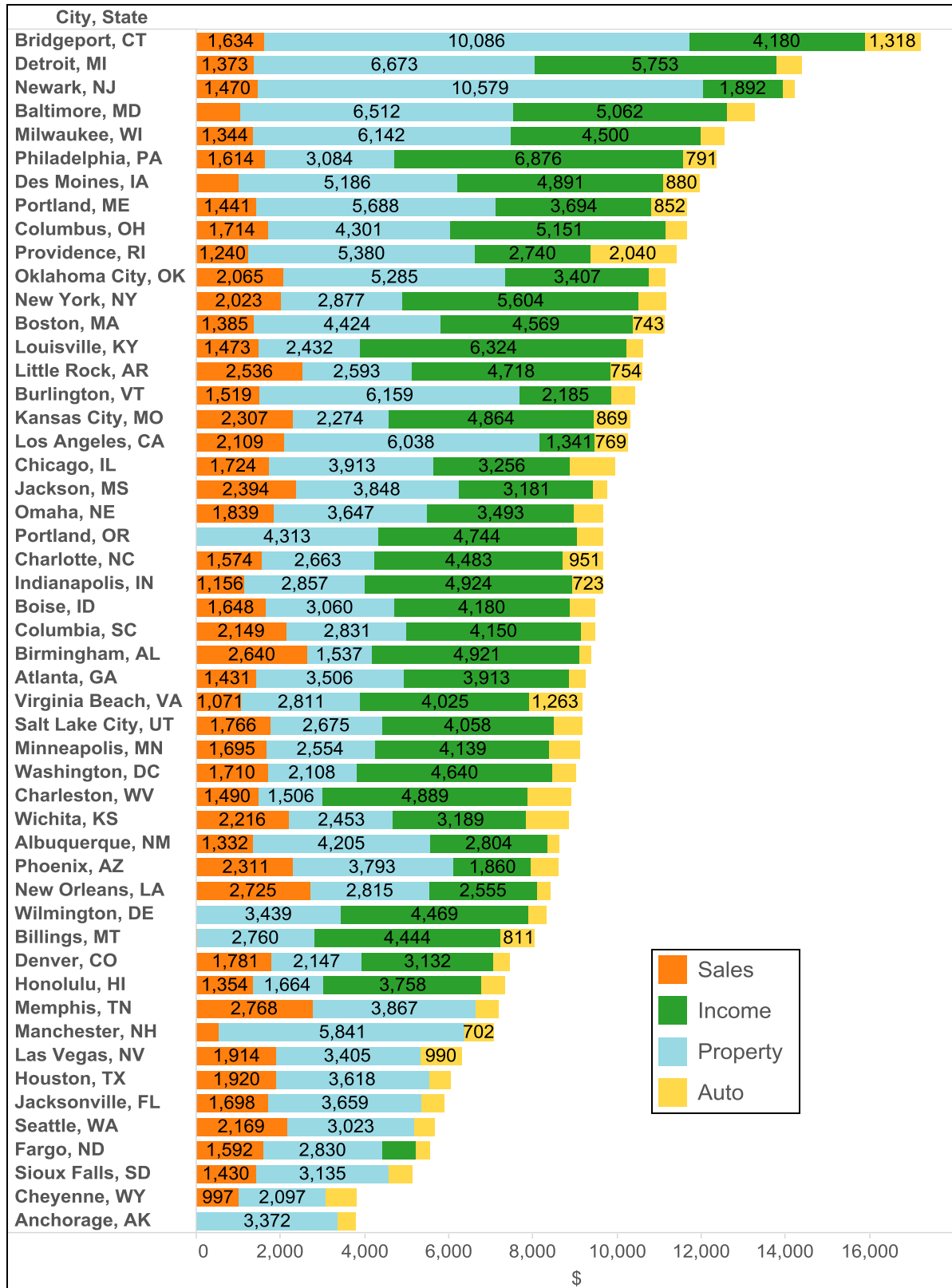
RANK	CITY	ST	TAXES				BURDEN	
			INCOME 2/	PROPERTY	SALES 3/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	2,673	7,565	1,314	1,115	12,667	16.9%
2	Detroit	MI	4,062	5,004	1,116	470	10,652	14.2%
3	Newark	NJ	1,054	7,934	1,173	215	10,376	13.8%
4	Baltimore	MD	3,372	4,884	842	495	9,593	12.8%
5	Philadelphia	PA	5,102	2,212	1,300	603	9,217	12.3%
6	Milwaukee	WI	2,544	4,473	1,084	468	8,569	11.4%
7	Providence	RI	1,687	4,035	1,015	1,757	8,494	11.3%
8	Oklahoma City	OK	2,339	3,957	1,697	349	8,342	11.1%
9	Columbus	OH	3,313	3,225	1,393	401	8,332	11.1%
10	Portland	ME	2,089	4,214	1,176	686	8,165	10.9%
11	Boston	MA	3,074	3,312	1,127	610	8,123	10.8%
12	Des Moines	IA	2,576	3,857	837	767	8,037	10.7%
13	Louisville	KY	4,554	1,824	1,187	298	7,864	10.5%
14	New York	NY	3,616	2,093	1,625	505	7,840	10.5%
15	Burlington	VT	1,475	4,576	1,219	448	7,718	10.3%
16	Kansas City	MO	3,247	1,706	1,860	740	7,553	10.1%
17	Chicago	IL	2,358	2,815	1,426	833	7,432	9.9%
18	Charlotte	NC	3,240	1,997	1,298	787	7,323	9.8%
19	Los Angeles	CA	468	4,509	1,713	622	7,312	9.7%
20	Birmingham	AL	3,589	1,142	2,166	240	7,138	9.5%
21	Jackson	MS	1,953	2,852	1,961	257	7,023	9.4%
22	Indianapolis	IN	3,556	1,921	950	561	6,988	9.3%
23	Little Rock	AR	2,437	1,857	2,057	631	6,983	9.3%
24	Portland	OR	3,252	3,235	-	488	6,975	9.3%
25	Omaha	NE	1,992	2,735	1,486	530	6,743	9.0%
26	Salt Lake City	UT	2,720	2,006	1,433	573	6,732	9.0%
27	Columbia	SC	2,520	2,123	1,765	285	6,693	8.9%
28	Virginia Beach	VA	2,521	2,109	895	1,098	6,623	8.8%
29	Atlanta	GA	2,629	2,496	1,159	311	6,595	8.8%
30	Wichita	KS	2,099	1,832	1,809	853	6,594	8.8%
31	Minneapolis	MN	2,678	1,839	1,374	566	6,456	8.6%
32	Charleston	WV	3,235	1,130	1,207	847	6,419	8.6%
33	Phoenix	AZ	1,202	2,845	1,829	532	6,407	8.5%
34	Boise	ID	2,622	1,930	1,340	471	6,363	8.5%
35	Albuquerque	NM	1,780	3,146	1,079	243	6,248	8.3%
36	New Orleans	LA	1,865	1,846	2,163	237	6,111	8.1%
37	Washington	DC	2,685	1,429	1,380	432	5,926	7.9%
38	Billings	MT	2,961	2,070	32	711	5,774	7.7%
39	Memphis	TN	-	2,900	2,237	457	5,593	7.5%
40	Wilmington	DE	2,643	2,579	-	319	5,541	7.4%
41	Denver	CO	2,151	1,610	1,435	329	5,526	7.4%
42	Manchester	NH	-	4,381	435	573	5,389	7.2%
43	Honolulu	HI	2,443	1,178	1,105	434	5,160	6.9%
44	Las Vegas	NV	-	2,554	1,540	812	4,906	6.5%
45	Houston	TX	-	2,677	1,547	456	4,681	6.2%
46	Seattle	WA	-	2,267	1,753	375	4,395	5.9%
47	Jacksonville	FL	-	2,557	1,368	400	4,325	5.8%
48	Fargo	ND	506	2,123	1,289	270	4,188	5.6%
49	Sioux Falls	SD	-	2,351	1,185	472	4,008	5.3%
50	Cheyenne	WY	-	1,573	806	596	2,975	4.0%
51	Anchorage	AK	-	2,463	-	393	2,856	3.8%
AVERAGE		1/	2,592	2,862	1,358	547	6,822	9.1%
MEDIAN			2,599	2,496	1,327	488	6,732	9.0%

1/ Based on jurisdictions actually levying tax.

2/ States with dashes do not have an income tax.

3/ States with dashes do not have a sales tax. MT and NH do not have a general sales tax, but some selective sales taxes apply to consumption items included.

Chart 1d: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$100,000/Year



Source: ORA analysis. See Table 1d on the following page for tax burdens as a percent of income.

Table 1d: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$100,000/Year

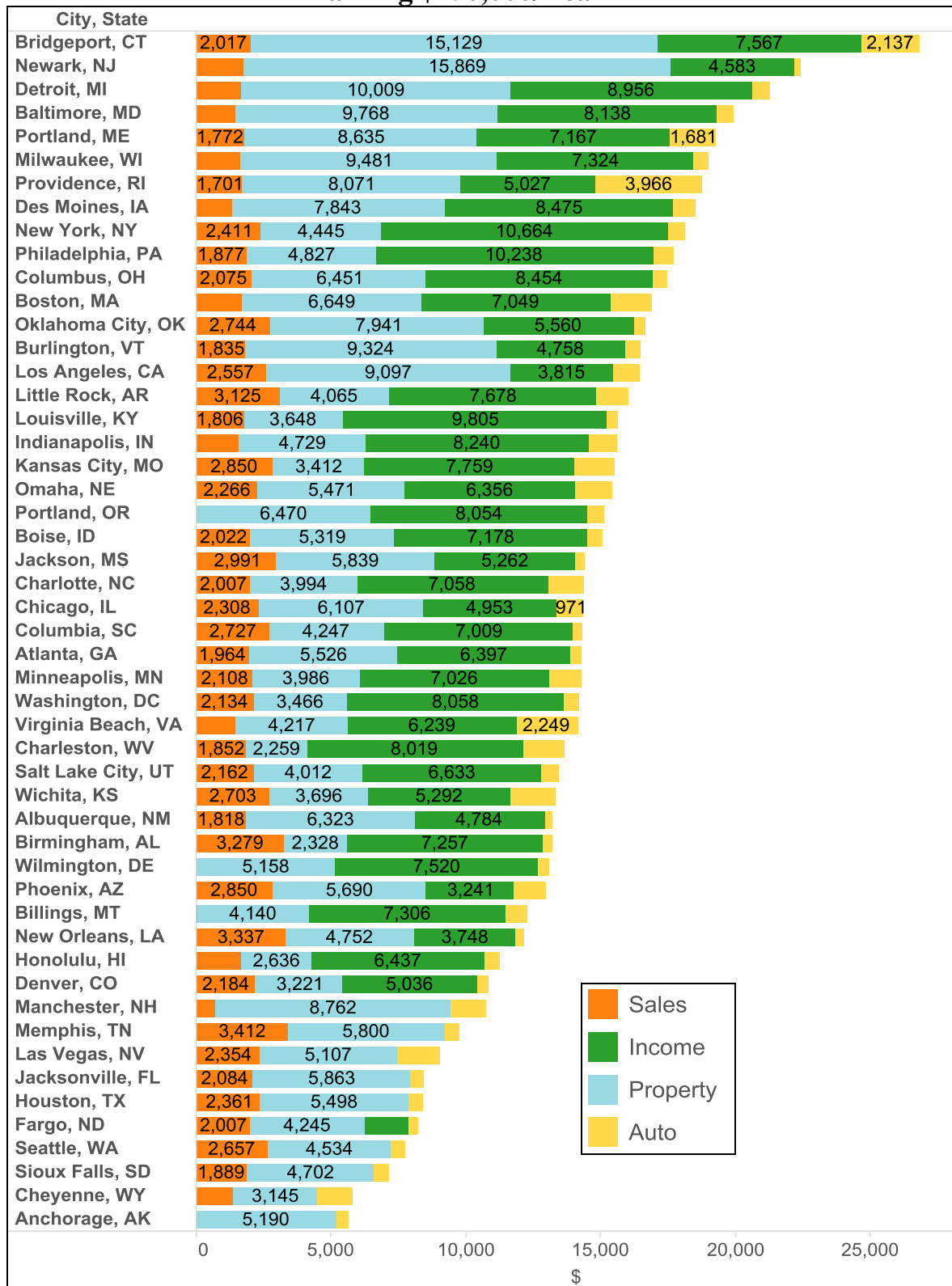
RANK	CITY	ST	TAXES				BURDEN	
			INCOME 2/	PROPERTY	SALES 3/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	4,180	10,086	1,634	1,318	17,219	17.2%
2	Detroit	MI	5,753	6,673	1,373	586	14,385	14.4%
3	Newark	NJ	1,892	10,579	1,470	279	14,219	14.2%
4	Baltimore	MD	5,062	6,512	1,035	640	13,248	13.2%
5	Milwaukee	WI	4,500	6,142	1,344	580	12,566	12.6%
6	Philadelphia	PA	6,876	3,084	1,614	791	12,365	12.4%
7	Des Moines	IA	4,891	5,186	1,014	880	11,971	12.0%
8	Portland	ME	3,694	5,688	1,441	852	11,674	11.7%
9	Columbus	OH	5,151	4,301	1,714	504	11,670	11.7%
10	Providence	RI	2,740	5,380	1,240	2,040	11,401	11.4%
11	Oklahoma City	OK	3,407	5,285	2,065	408	11,165	11.2%
12	New York	NY	5,604	2,877	2,023	644	11,148	11.1%
13	Boston	MA	4,569	4,424	1,385	743	11,122	11.1%
14	Louisville	KY	6,324	2,432	1,473	389	10,618	10.6%
15	Little Rock	AR	4,718	2,593	2,536	754	10,601	10.6%
16	Burlington	VT	2,185	6,159	1,519	557	10,420	10.4%
17	Kansas City	MO	4,864	2,274	2,307	869	10,315	10.3%
18	Los Angeles	CA	1,341	6,038	2,109	769	10,257	10.3%
19	Chicago	IL	3,256	3,913	1,724	1,047	9,940	9.9%
20	Jackson	MS	3,181	3,848	2,394	324	9,747	9.7%
21	Omaha	NE	3,493	3,647	1,839	697	9,676	9.7%
22	Portland	OR	4,744	4,313	-	618	9,675	9.7%
23	Charlotte	NC	4,483	2,663	1,574	951	9,672	9.7%
24	Indianapolis	IN	4,924	2,857	1,156	723	9,659	9.7%
25	Boise	ID	4,180	3,060	1,648	589	9,476	9.5%
26	Columbia	SC	4,150	2,831	2,149	344	9,474	9.5%
27	Birmingham	AL	4,921	1,537	2,640	302	9,400	9.4%
28	Atlanta	GA	3,913	3,506	1,431	407	9,257	9.3%
29	Virginia Beach	VA	4,025	2,811	1,071	1,263	9,171	9.2%
30	Salt Lake City	UT	4,058	2,675	1,766	664	9,163	9.2%
31	Minneapolis	MN	4,139	2,554	1,695	713	9,101	9.1%
32	Washington	DC	4,640	2,108	1,710	561	9,020	9.0%
33	Charleston	WV	4,889	1,506	1,490	1,020	8,905	8.9%
34	Wichita	KS	3,189	2,453	2,216	1,008	8,866	8.9%
35	Albuquerque	NM	2,804	4,205	1,332	306	8,647	8.6%
36	Phoenix	AZ	1,860	3,793	2,311	653	8,617	8.6%
37	New Orleans	LA	2,555	2,815	2,725	312	8,406	8.4%
38	Wilmington	DE	4,469	3,439	-	404	8,312	8.3%
39	Billings	MT	4,444	2,760	39	811	8,054	8.1%
40	Denver	CO	3,132	2,147	1,781	410	7,470	7.5%
41	Honolulu	HI	3,758	1,664	1,354	555	7,332	7.3%
42	Memphis	TN	-	3,867	2,768	536	7,171	7.2%
43	Manchester	NH	-	5,841	521	702	7,065	7.1%
44	Las Vegas	NV	-	3,405	1,914	990	6,309	6.3%
45	Houston	TX	-	3,618	1,920	530	6,068	6.1%
46	Jacksonville	FL	-	3,659	1,698	523	5,880	5.9%
47	Seattle	WA	-	3,023	2,169	478	5,670	5.7%
48	Fargo	ND	779	2,830	1,592	355	5,556	5.6%
49	Sioux Falls	SD	-	3,135	1,430	575	5,140	5.1%
50	Cheyenne	WY	-	2,097	997	725	3,818	3.8%
51	Anchorage	AK	-	3,372	-	423	3,795	3.8%
AVERAGE 1/			3,994	3,876	1,674	669	9,409	9.4%
MEDIAN			4,165	3,405	1,641	618	9,474	9.5%

1/ Based on jurisdictions actually levying tax.

2/ States with dashes do not have an income tax.

3/ States with dashes do not have a sales tax. MT and NH do not have a general sales tax, but some selective sales taxes apply to consumption items included.

Chart 1e: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$150,000/Year



Source: ORA analysis. See Table 1e on the following page for tax burdens as a percent of income.

Table 1e: 2015 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$150,000/Year

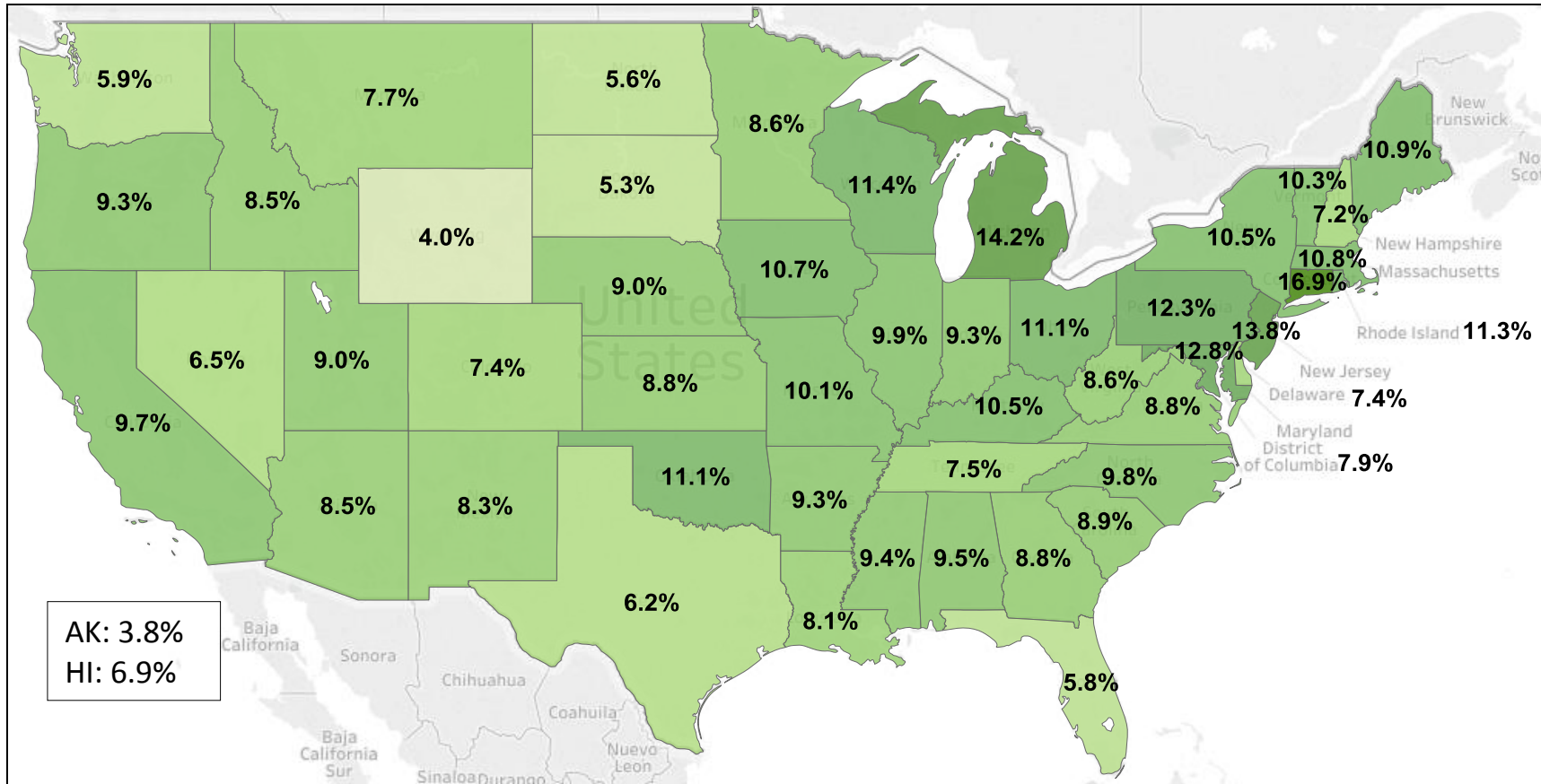
RANK	CITY	ST	TAXES				BURDEN	
			INCOME 2/	PROPERTY	SALES 3/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	7,567	15,129	2,017	2,137	26,851	17.9%
2	Newark	NJ	4,583	15,869	1,733	248	22,432	15.0%
3	Detroit	MI	8,956	10,009	1,663	669	21,296	14.2%
4	Baltimore	MD	8,138	9,768	1,423	622	19,950	13.3%
5	Portland	ME	7,167	8,635	1,772	1,681	19,255	12.8%
6	Milwaukee	WI	7,324	9,481	1,646	563	19,014	12.7%
7	Providence	RI	5,027	8,071	1,701	3,966	18,764	12.5%
8	Des Moines	IA	8,475	7,843	1,369	863	18,551	12.4%
9	New York	NY	10,664	4,445	2,411	623	18,143	12.1%
10	Philadelphia	PA	10,238	4,827	1,877	763	17,705	11.8%
11	Columbus	OH	8,454	6,451	2,075	488	17,469	11.6%
12	Boston	MA	7,049	6,649	1,687	1,547	16,931	11.3%
13	Oklahoma City	OK	5,560	7,941	2,744	399	16,644	11.1%
14	Burlington	VT	4,758	9,324	1,835	541	16,458	11.0%
15	Los Angeles	CA	3,815	9,097	2,557	960	16,429	11.0%
16	Little Rock	AR	7,678	4,065	3,125	1,191	16,058	10.7%
17	Louisville	KY	9,805	3,648	1,806	375	15,635	10.4%
18	Indianapolis	IN	8,240	4,729	1,579	1,071	15,618	10.4%
19	Kansas City	MO	7,759	3,412	2,850	1,508	15,528	10.4%
20	Omaha	NE	6,356	5,471	2,266	1,345	15,438	10.3%
21	Portland	OR	8,054	6,470	-	598	15,122	10.1%
22	Boise	ID	7,178	5,319	2,022	571	15,091	10.1%
23	Jackson	MS	5,262	5,839	2,991	332	14,424	9.6%
24	Charlotte	NC	7,058	3,994	2,007	1,308	14,367	9.6%
25	Chicago	IL	4,953	6,107	2,308	971	14,340	9.6%
26	Columbia	SC	7,009	4,247	2,727	335	14,318	9.5%
27	Atlanta	GA	6,397	5,526	1,964	392	14,280	9.5%
28	Minneapolis	MN	7,026	3,986	2,108	1,155	14,274	9.5%
29	Washington	DC	8,058	3,466	2,134	548	14,206	9.5%
30	Virginia Beach	VA	6,239	4,217	1,437	2,249	14,141	9.4%
31	Charleston	WV	8,019	2,259	1,852	1,542	13,673	9.1%
32	Salt Lake City	UT	6,633	4,012	2,162	650	13,457	9.0%
33	Wichita	KS	5,292	3,696	2,703	1,652	13,343	8.9%
34	Albuquerque	NM	4,784	6,323	1,818	296	13,222	8.8%
35	Birmingham	AL	7,257	2,328	3,279	329	13,193	8.8%
36	Wilmington	DE	7,520	5,158	-	391	13,070	8.7%
37	Phoenix	AZ	3,241	5,690	2,850	1,188	12,969	8.6%
38	Billings	MT	7,306	4,140	56	796	12,297	8.2%
39	New Orleans	LA	3,748	4,752	3,337	321	12,158	8.1%
40	Honolulu	HI	6,437	2,636	1,653	537	11,263	7.5%
41	Denver	CO	5,036	3,221	2,184	398	10,839	7.2%
42	Manchester	NH	-	8,762	698	1,307	10,766	7.2%
43	Memphis	TN	-	5,800	3,412	524	9,736	6.5%
44	Las Vegas	NV	-	5,107	2,354	1,577	9,038	6.0%
45	Jacksonville	FL	-	5,863	2,084	506	8,452	5.6%
46	Houston	TX	-	5,498	2,361	519	8,378	5.6%
47	Fargo	ND	1,621	4,245	2,007	342	8,215	5.5%
48	Seattle	WA	-	4,534	2,657	525	7,716	5.1%
49	Sioux Falls	SD	-	4,702	1,889	559	7,150	4.8%
50	Cheyenne	WY	-	3,145	1,370	1,314	5,829	3.9%
51	Anchorage	AK	-	5,190	-	468	5,658	3.8%
AVERAGE		1/	6,708	5,904	2,095	897	14,297	9.5%
MEDIAN			7,054	5,190	2,020	622	14,318	9.5%

1/ Based on jurisdictions actually levying tax.

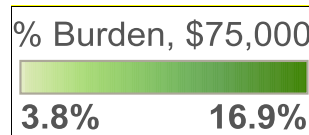
2/ States with dashes do not have an income tax.

3/ States with dashes do not have a sales tax. MT and NH do not have a general sales tax, but some selective sales taxes apply to consumption items included.

**Map 1: Total 2015 Tax Burdens (Income, Property, Sales, & Auto) as a % of Income
(Family Earning \$75,000/Year)**



The lighter the green in the map, the lower the tax burden as a percentage of income.



CHAPTER III

Comparing Specific Tax Burdens for a Hypothetical Family of Three in the Largest City in Each State

Individual Income Tax

Residents of 44 of the 51 cities in the study are subject to some type of individual income tax at the state and/or local levels. Individual income tax burdens vary widely due to factors such as differences in tax base, tax rates, exemptions, deductions, and treatment of federal taxes. These variations are reflected in the individual income tax burdens shown in Table 3 (page 27) and Chart 2 (page 24).

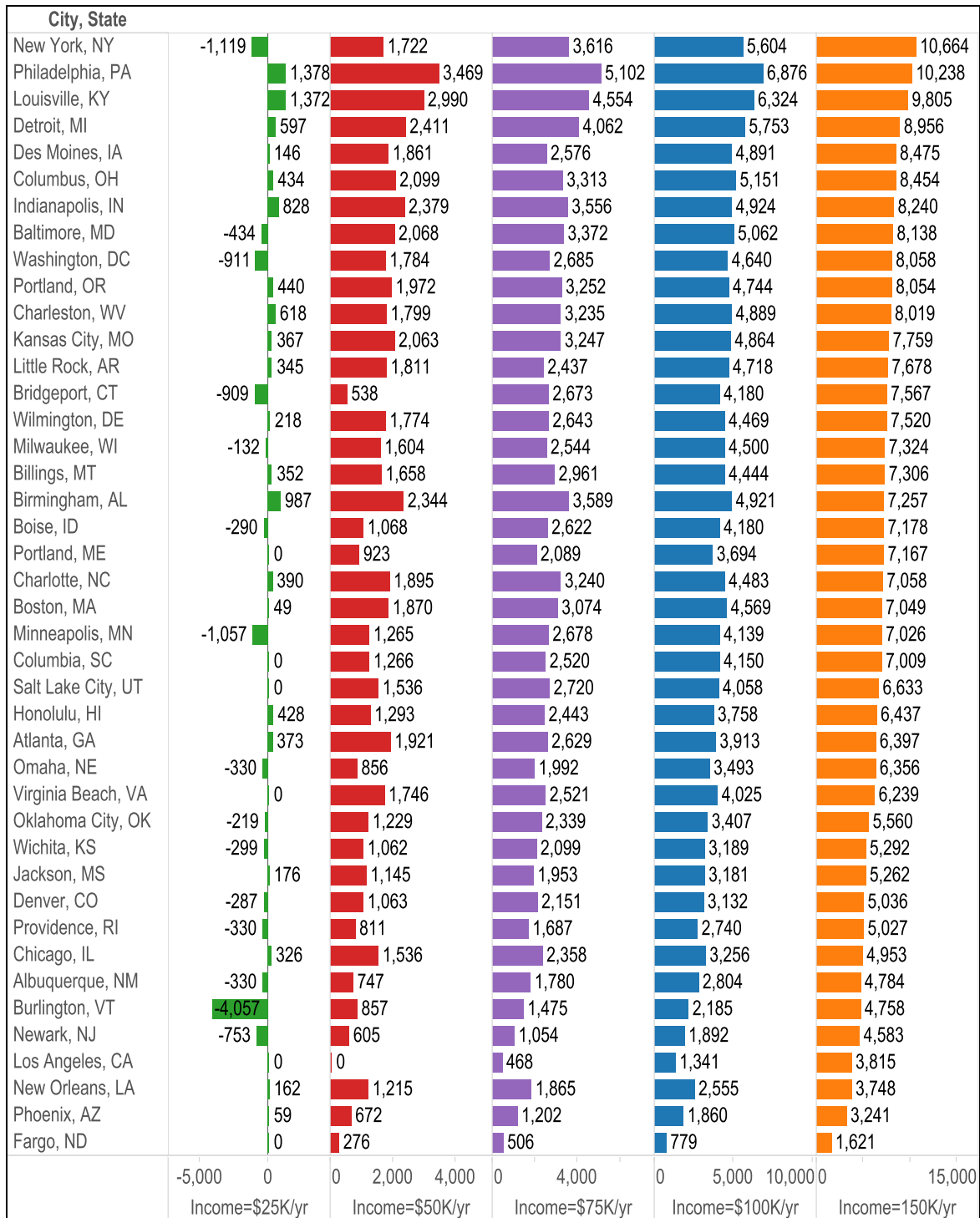
In twenty one of the cities which are in states that levy an income tax, the percentage of income paid in individual income taxes by residents at the income level of \$25,000 is zero percent (or less than zero due to refundable credits). At this income level, the highest income tax burden is 5.5 percent in Philadelphia, Pennsylvania, and Louisville, Kentucky. At the \$150,000 income level, the burden ranges from a low of 1.1 percent of income in Fargo, North Dakota, to 7.1 percent in New York City, New York. It should be noted that the New Hampshire and Tennessee income tax is applicable only to interest and dividend income and the exemptions are high enough to eliminate individual income taxes at all income levels used in the study.

Chart 2 provides the hypothetical income tax burdens on each family, sorted by the family earning \$150,000 per year. Viewing the data this way allows for assessing how income tax burdens differ between the low- and high- income families in a particular city and state. Map 2 presents the income tax burdens for the family earning \$75,000/year.

Several state individual income tax systems are indexed. Indexing takes several forms and is used to keep individuals from being taxed at higher rates if their income rises less than the rate of inflation. Thus, only the "real" income gain above the inflation rate is subject to higher tax rates. States that tax a percentage of federal net taxable income or a percentage of the federal liability implicitly accept the federal indexing of tax brackets, exemptions, and the standard deduction. Table 2 summarizes the various portions that are indexed.

As Table 3 indicates, there are several types of individual income tax systems including graduated state and local rates, graduated state and flat local rates, flat state and local rates, graduated state tax rates and flat state rates with exemptions. The most common system is the graduated state tax rate, which applies to taxpayers in 26 of the cities. Taxpayers of six cities are subject to a flat state tax rate with exemptions. Eleven states have either graduated or flat state rates and flat local rates. New York City residents are subject to separate state and local income taxes, both of which are characterized by graduated rate schedules.

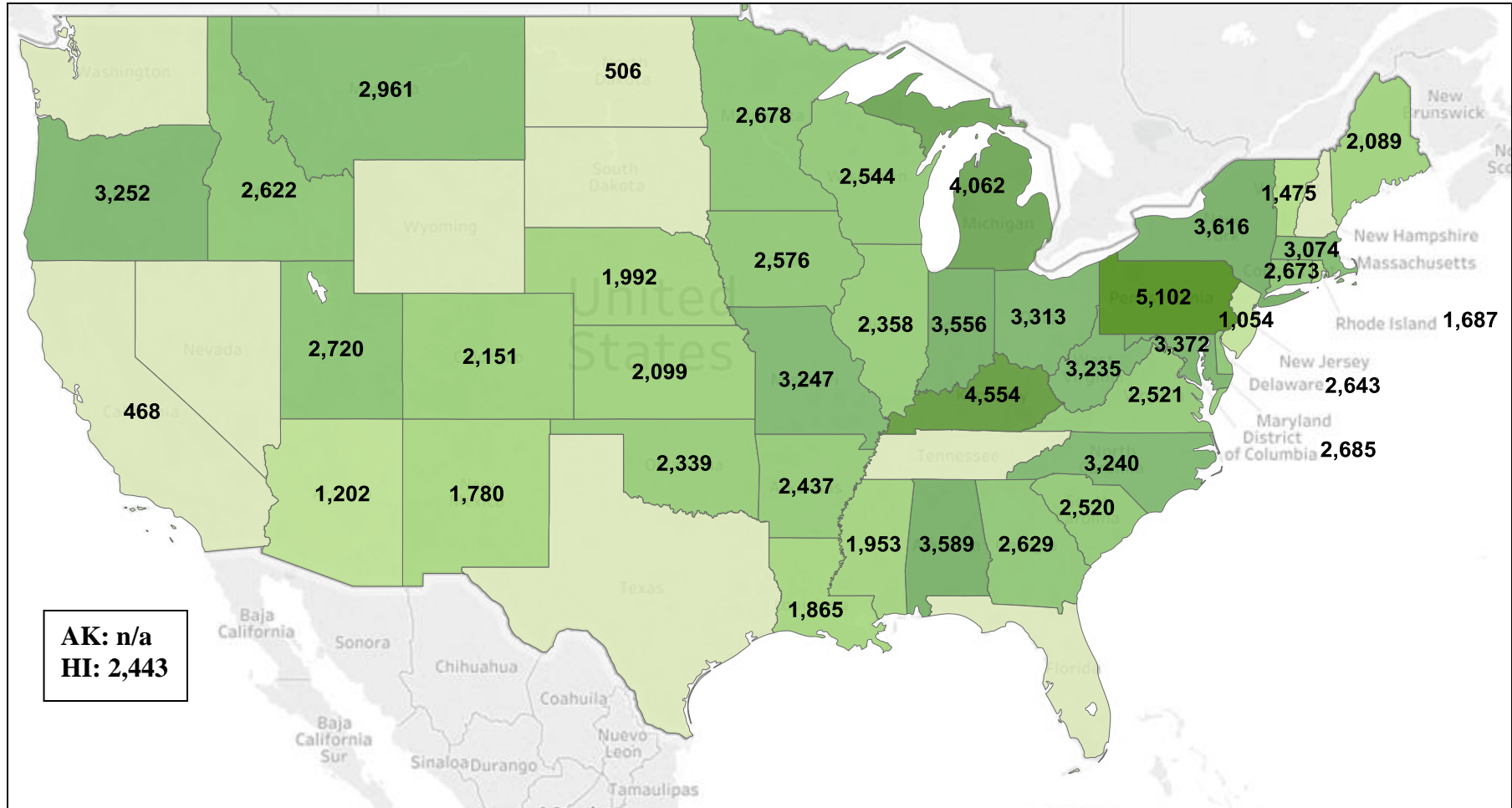
Chart 2: 2015 Income Tax Burdens for All Income Levels, Sorted by the \$150,000/Year Income Level



Source: ORA analysis; see description on page 6-8 for data sources and methodology.

Note: Negative bars represent tax refunds due to state EITC or other refundable credits. Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming do not have an income tax. Tennessee and New Hampshire tax interest and dividend income but the exemptions are high enough to eliminate individual income taxes at all income levels used in the study.

Map 2: 2015 Income Tax Burdens for Family Earning \$75,000/Year (\$)



Source: ORA Analysis. Note: The lighter the green shading, the lower the tax burden. States with no number do not have an income tax.

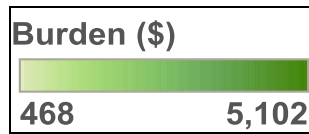


Table 2: States That Index Some Part of Their Individual Income Tax, 2015

STATE	INDEXED PORTION
Arkansas	Tax brackets
Arizona	Standard deduction, brackets
California	Tax brackets, exemption (credit), standard deduction
Colorado*	Tax brackets, standard deduction, personal exemption
Connecticut	Standard deduction
Idaho	Tax brackets, standard deduction, personal exemption
Illinois	Tax brackets, standard deduction, personal exemption
Indiana	Tax brackets, standard deduction
Iowa	Tax brackets, standard deduction
Kentucky	Standard deduction
Maine	Tax brackets (indexing suspended for 2014-15), standard deduction
Massachusetts	Tax brackets, standard deduction,
Michigan	Tax brackets, standard deduction, personal exemption
Minnesota*	Tax brackets, exemptions, standard deduction
Missouri*	Standard deduction
Montana	Tax brackets, exemptions, standard deduction
Nebraska	Tax brackets, standard deduction, personal exemption
New Hampshire	Tax brackets, standard deduction
New Jersey	Standard deduction
New Mexico*	Standard deduction, personal exemption
New York	Tax brackets, standard deduction
North Carolina	Tax brackets, personal exemption
North Dakota*	Tax brackets, exemptions, standard deduction
Ohio	Tax brackets, standard deduction, personal exemption
Oklahoma*	Standard deduction
Oregon	Tax brackets (up to \$125,000), exemptions credit, standard deduction credit
Pennsylvania	Tax brackets, standard deduction, personal exemption
Rhode Island	Tax brackets, standard deduction, personal exemption
South Carolina*	Tax brackets, standard deduction, personal exemption
Utah*	Tax brackets, standard deduction, personal exemption
Vermont	Tax brackets, standard deduction, personal exemption
Washington, D.C.	Standard deduction, personal exemptions
West Virginia	Standard deduction
Wisconsin	Tax brackets, standard deduction

Sources: Federation of Tax Administrators, "State Individual Income Tax Rates (as of January 1, 2016)"; Wolters Kluwer/CCH 2016 State Tax Handbook; Institute for Taxation and Economic Policy, "Who Pays?", January 2015; Urban Brookings Tax Policy Center, "State Income Tax Standard Deductions 2003, 2006-2012;" Tax Foundation, "2015 Business Tax Climate Index," pg. 63; and Tax Foundation, "2017 Business Tax Climate Index." pg. 67.

* Colorado, Idaho, Minnesota, Missouri, New Mexico, North Dakota, Oklahoma, South Carolina, Utah, and Vermont use the federal standard deduction, which is indexed to inflation.

Table 3: Income Tax Burden as Percent of Income in the Largest Cities by Type of Income Tax For a Hypothetical Family of Three, 2015

CITIES WITH:	ST	INCOME LEVELS:				
		\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
GRADUATED STATE AND LOCAL TAX RATES						
New York City	NY	-4.5%	3.4%	4.8%	5.6%	7.1%
GRADUATED STATE AND FLAT LOCAL RATES						
Birmingham	AL	3.9%	4.7%	4.8%	4.9%	4.8%
Wilmington	DE	0.9%	3.5%	3.5%	4.5%	5.0%
Louisville	KY	5.5%	6.0%	6.1%	6.3%	6.5%
Baltimore	MD	-1.7%	4.1%	4.5%	5.1%	5.4%
Kansas City	MO	1.5%	4.1%	4.3%	4.9%	5.2%
Newark 1/	NJ	-3.0%	1.2%	1.4%	1.9%	3.1%
Columbus	OH	1.7%	4.2%	4.4%	5.2%	5.6%
Portland 1/	OR	1.8%	3.9%	4.3%	4.7%	5.4%
FLAT STATE AND LOCAL TAX RATES						
Indianapolis	IN	3.3%	4.8%	4.7%	4.9%	5.5%
Detroit	MI	2.4%	4.8%	5.4%	5.8%	6.0%
Philadelphia	PA	5.5%	6.9%	6.8%	6.9%	6.8%
GRADUATED STATE TAX RATE						
Phoenix	AZ	0.2%	1.3%	1.6%	1.9%	2.2%
Little Rock	AR	1.4%	3.6%	3.2%	4.7%	5.1%
Los Angeles	CA	0.0%	0.0%	0.6%	1.3%	2.5%
Bridgeport	CT	-3.6%	1.1%	3.6%	4.2%	5.0%
WASHINGTON	DC	-3.6%	3.6%	3.6%	4.6%	5.4%
Atlanta	GA	1.5%	3.8%	3.5%	3.9%	4.3%
Honolulu	HI	1.7%	2.6%	3.3%	3.8%	4.3%
Boise	ID	-1.2%	2.1%	3.5%	4.2%	4.8%
Des Moines	IA	0.6%	3.7%	3.4%	4.9%	5.7%
Wichita	KS	-1.2%	2.1%	2.8%	3.2%	3.5%
New Orleans	LA	0.6%	2.4%	2.5%	2.6%	2.5%
Portland	ME	0.0%	1.8%	2.8%	3.7%	4.8%
Minneapolis	MN	-4.2%	2.5%	3.6%	4.1%	4.7%
Jackson	MS	0.7%	2.3%	2.6%	3.2%	3.5%
Billings	MT	1.4%	3.3%	3.9%	4.4%	4.9%
Omaha	NE	-1.3%	1.7%	2.7%	3.5%	4.2%
Albuquerque	NM	-1.3%	1.5%	2.4%	2.8%	3.2%
Charlotte	NC	1.6%	3.8%	4.3%	4.5%	4.7%
Fargo	ND	0.0%	0.6%	0.7%	0.8%	1.1%
Oklahoma City	OK	-0.9%	2.5%	3.1%	3.4%	3.7%
Providence	RI	-1.3%	1.6%	2.2%	2.7%	3.4%
Columbia	SC	0.0%	2.5%	3.4%	4.2%	4.7%
Virginia Beach	VA	0.0%	3.5%	3.4%	4.0%	4.2%
Burlington	VT	-16.2%	1.7%	2.0%	2.2%	3.2%
Charleston 1/	WV	2.5%	3.6%	4.3%	4.9%	5.3%
Milwaukee	WI	-0.5%	3.2%	3.4%	4.5%	4.9%
FLAT STATE TAX RATE WITH EXEMPTIONS						
Denver	CO	-1.1%	2.1%	2.9%	3.1%	3.4%
Chicago	IL	1.3%	3.1%	3.1%	3.3%	3.3%
Boston	MA	0.2%	3.7%	4.1%	4.6%	4.7%
Manchester	NH	0.0%	0.0%	0.0%	0.0%	0.0%
Memphis	TN	0.0%	0.0%	0.0%	0.0%	0.0%
Salt Lake City	UT	0.0%	3.1%	3.6%	4.1%	4.4%
AVERAGE	2/	-0.1%	2.5%	2.9%	3.4%	3.8%

No income tax: Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming.

Note: Negative numbers result from refundable state credits.

Source for classifications: Survey of State Revenue Department Officials; State Department of Revenue web sites; FTA, "State Individual Income Tax Rates as of January 1, 2016"; and Tax Foundation, "State Individual Income Tax Rates and Brackets for 2016"; percentages at each income level are effective tax rates calculated by ORA using the assumptions and methodologies specific to this report.

1/ Imposed on employers.

2/ Based on jurisdictions actually levying tax.

Real Property Tax

All 51 cities in the study levy a property tax on residential property located within the city. The real property tax is a function of housing values, real estate tax rates, assessment levels, homeowner exemptions, and credits. Nominal rates used in Table 4 (page 30), represent the "announced" rates levied by the jurisdiction, while effective rates consider the various assessment levels in the cities. Effective rates range from a high of \$3.46 per \$100 of assessed value in Detroit, Michigan, to \$0.02 per \$100 of assessed value in Jackson, Mississippi. Assessment levels vary dramatically from 1.38 percent of assessed value in Billings, Montana, to 100 percent assessment in thirteen cities, including the District of Columbia. Local assessors, state tax and county officials, and state and local websites provided the assessment level and nominal rates used in the cities. The District's effective property tax rate (net of assessment value) is among the lowest of the 51 cities, ranking 44th. Chart 3 (page 31) provides a graphic of these rates.

The assumed housing values in the 51 cities at each of the five income levels are presented in Table 5 (page 32). Housing values at the same income level vary a great deal based on housing markets in each city. As previously mentioned, these housing values are extrapolated from Census data and represent a hypothetical house value for each income level. In addition, several jurisdictions allow tax exemptions and credits in the calculation of the property tax. These exemptions and credits are noted in Table 6 (page 33). This study does not model the impact of property tax caps that are available in some jurisdictions.

Table 1 indicates that, based on the particular assumptions used in this report, the property tax is *generally* the highest of the four taxes at each income level (though not always the case). However, it is important to note that the main purpose of this report is to make comparisons across the 51 cities within a specific type of tax. As previously noted, these are hypothetical tax burdens based on various assumptions made in the report, and comparisons across tax types should be made with caution.

At all four of the income levels for which home ownership is assumed (\$50,000 to \$150,000), Newark, New Jersey;⁸ Bridgeport, Connecticut; Detroit, Michigan; and Baltimore, Maryland have the highest property tax burdens, in that order. For these cities, this is due primarily to a combination of high real estate tax rates and high housing values, as can be seen in Table 4 (page 30) and Table 5 (page 32).

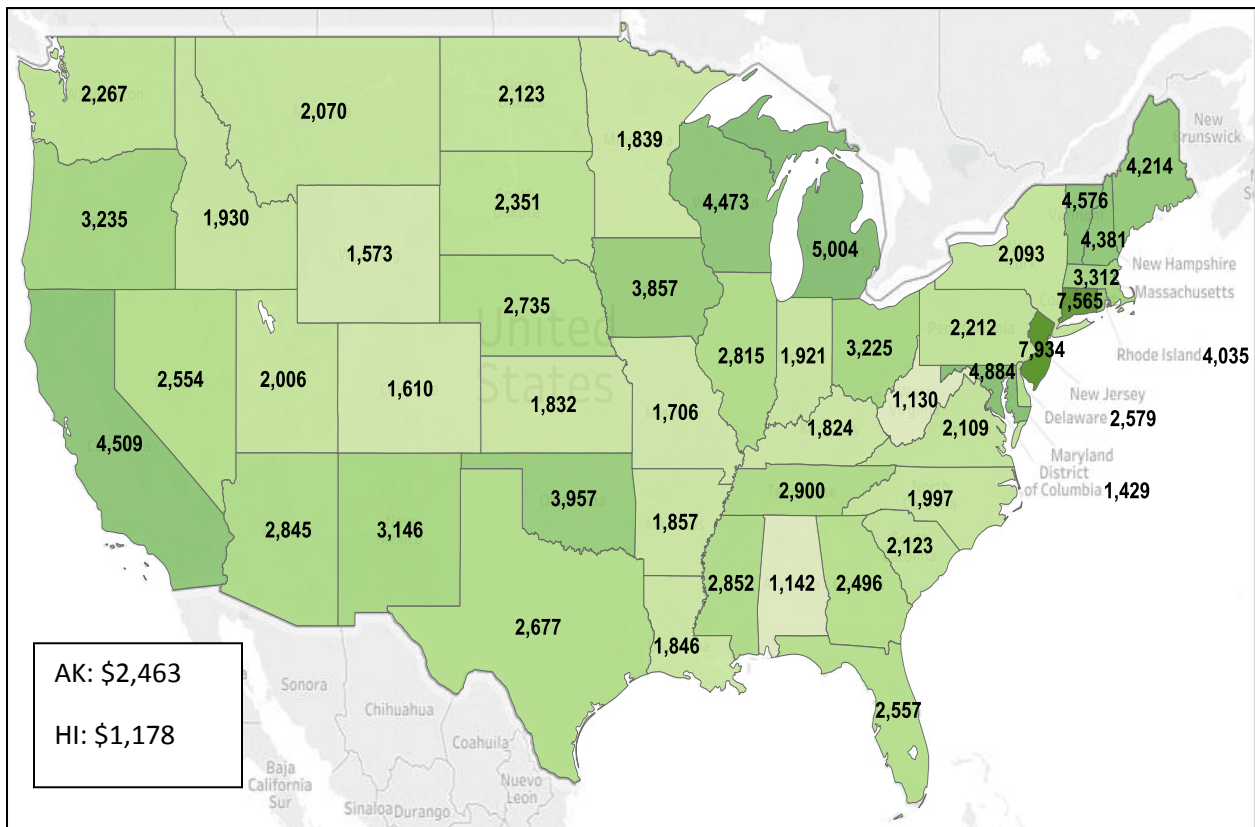
At the \$50,000 income level, the lowest property tax burdens can be found in Honolulu, Hawaii; and Birmingham, Alabama. At the \$75,000, \$100,000 and \$150,000 income levels, the lowest are in Charleston, West Virginia; and Birmingham, Alabama. These low real estate tax burdens result from a combination of a low effective real estate tax rate, below average housing values, or an exemption program.

⁸ Newark, NJ, is in the New York City (NYC) Metropolitan Statistical Area, thus the data used for Newark are the same as for NYC. See page 55 of the 2013 Tax Rates and Tax Burdens Report for a sensitivity analysis of how several cities' (including Newark's) property tax burdens would change using city-level data.

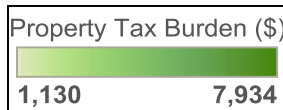
At the \$25,000 income level, it is assumed that the families rent rather than own a home. At this level, New York City, New York; Honolulu, Hawaii; Washington, D.C.; and Boston, Massachusetts have the highest property tax burdens (as a portion of rent). This trend is solely due to the high cost of housing in these metropolitan areas, as actual property tax rates are not applied in the case of rental housing (as previously mentioned, 20 percent of the annual rent is assumed to go toward paying the property tax).

Map 3 below illustrates the range of property tax burdens for a family earning \$75,000 a year. The darker the green shading in a state, the higher the burden is. Chart 4 (page 34) presents property tax burdens at each income level on one chart, sorted by the (rental) burden on the family earning \$25,000 per year. Viewing the data this way illustrates the differing burdens on renters versus homeowners (however it is important to keep in mind that the methodology for calculating the property tax burdens on the lowest income group (using the property tax equivalent of rent) is different than the property tax burden calculations for the other four income groups).

**Map 3: 2015 Property Tax Burdens (\$)
(Family earning \$75,000 /year)**



Source: ORA Analysis. The lighter the green shading, the lower the tax burden.



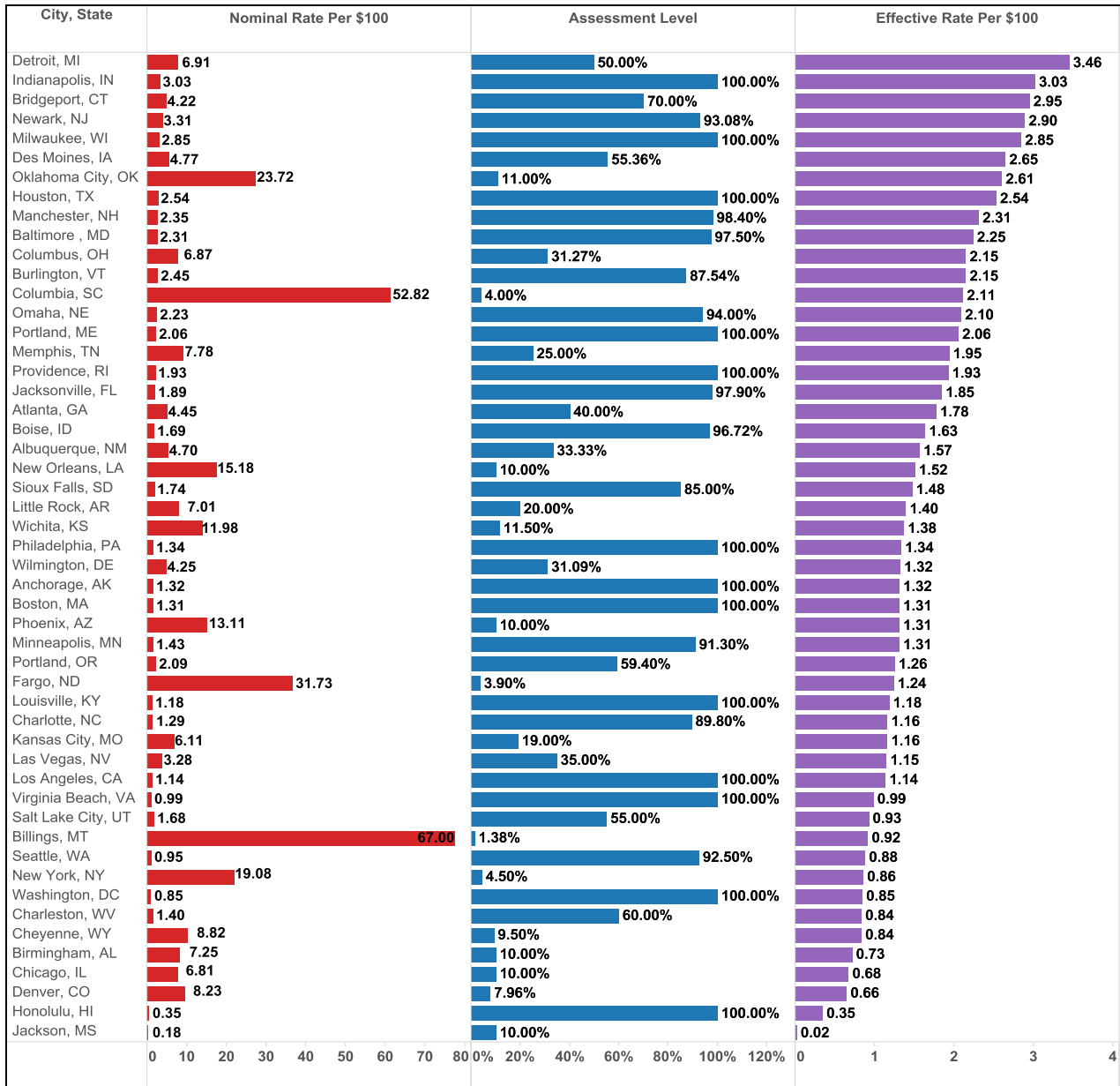
**Table 4: Residential Property Tax Rates in the Largest City in Each State
2015**

RANK	CITY	ST	NOMINAL RATE PER \$100	ASSESSMENT LEVEL	EFFECTIVE RATE PER \$100
1	Detroit	MI	6.91	50.00%	3.46
2	Indianapolis	IN	3.03	100.00%	3.03
3	Bridgeport	CT	4.22	70.00%	2.95
4	Newark	NJ	3.31	93.08%	2.90
5	Milwaukee	WI	2.85	100.00%	2.85
6	Des Moines	IA	4.77	55.36%	2.65
7	Oklahoma City	OK	23.72	11.00%	2.61
8	Houston	TX	2.54	100.00%	2.54
9	Manchester	NH	2.35	98.40%	2.31
10	Baltimore	MD	2.31	97.50%	2.25
11	Columbus	OH	6.87	31.27%	2.15
12	Burlington	VT	2.45	87.54%	2.15
13	Columbia	SC	52.82	4.00%	2.11
14	Omaha	NE	2.23	94.00%	2.10
15	Portland	ME	2.06	100.00%	2.06
16	Memphis	TN	7.78	25.00%	1.95
17	Providence	RI	1.93	100.00%	1.93
18	Jacksonville	FL	1.89	97.90%	1.85
19	Atlanta	GA	4.45	40.00%	1.78
20	Boise	ID	1.69	96.72%	1.63
21	Albuquerque	NM	4.70	33.33%	1.57
22	New Orleans	LA	15.18	10.00%	1.52
23	Sioux Falls	SD	1.74	85.00%	1.48
24	Little Rock	AR	7.01	20.00%	1.40
25	Wichita	KS	11.98	11.50%	1.38
26	Philadelphia	PA	1.34	100.00%	1.34
27	Wilmington	DE	4.25	31.09%	1.32
28	Anchorage	AK	1.32	100.00%	1.32
29	Boston	MA	1.31	100.00%	1.31
30	Phoenix	AZ	13.11	10.00%	1.31
31	Minneapolis	MN	1.43	91.30%	1.31
32	Portland	OR	2.09	59.40%	1.26
33	Fargo	ND	31.73	3.90%	1.24
34	Louisville	KY	1.18	100.00%	1.18
35	Charlotte	NC	1.29	89.80%	1.16
36	Kansas City	MO	6.11	19.00%	1.16
37	Las Vegas	NV	3.28	35.00%	1.15
38	Los Angeles	CA	1.14	100.00%	1.14
39	Virginia Beach	VA	0.99	100.00%	0.99
40	Salt Lake City	UT	1.68	55.00%	0.93
41	Billings	MT	67.00	1.38%	0.92
42	Seattle	WA	0.95	92.50%	0.88
43	New York	NY	19.08	4.50%	0.86
44	Washington	DC	0.85	100.00%	0.85
45	Charleston	WV	1.4	60.00%	0.84
46	Cheyenne	WY	8.82	9.50%	0.84
47	Birmingham	AL	7.25	10.00%	0.73
48	Chicago	IL	6.81	10.00%	0.68
49	Denver	CO	8.23	7.96%	0.66
50	Honolulu	HI	0.35	100.00%	0.35
51	Jackson	MS	0.18	10.00%	0.02
UNWEIGHTED AVERAGE			7.33	59.06%	1.58
MEDIAN			2.85	60.00%	1.34

NOTE: All rates and percentages in this table are rounded and include state and local property taxes levied by multiple taxing authorities as identified by state survey respondents. Effective tax rates listed here are net of assessment value and do not reflect any exemptions or credits noted in Table 6, or any other property tax credits, deductions, or exemptions offered by the state or locality.

Source: Data collected from surveys to State Revenue Department officials, and state web sites.

**Chart 3: Residential Property Tax Rates in the Largest City in Each State
2015**



Source: ORA Analysis of data from State Revenue Officials and State Department of Revenue Web sites.

Note: All values in the chart are positive values. Rates include state and local property taxes levied by multiple taxing authorities as identified by state survey respondents.

Table 5: Housing Value Assumptions, 2015

CITY	ST	HOUSING VALUE ASSUMPTIONS AT INDICATED INCOME LEVELS:				
		TAX ON RENT \$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Anchorage	AK	2,078	137,725	206,587	275,449	413,174
Birmingham	AL	1,428	109,034	163,551	218,068	327,102
Little Rock	AR	1,373	105,113	157,669	210,225	315,338
Phoenix	AZ	1,488	144,779	217,169	289,559	434,338
Los Angeles	CA	2,383	267,862	401,792	535,723	803,585
Denver	CO	1,735	163,822	245,733	327,644	491,466
Bridgeport	CT	2,105	170,729	256,094	341,459	512,188
WASHINGTON	DC	3,024	159,711	239,567	319,423	479,134
Wilmington	DE	1,954	130,065	195,097	260,129	390,194
Jacksonville	FL	1,610	118,917	178,376	237,835	356,752
Atlanta	GA	1,812	113,607	170,410	227,213	340,820
Honolulu	HI	3,024	277,761	416,641	555,521	833,282
Des Moines	IA	1,339	100,203	150,304	200,405	300,608
Boise	ID	1,068	138,643	207,964	277,285	415,928
Chicago	IL	1,949	121,151	181,727	242,303	363,454
Indianapolis	IN	1,318	95,031	142,546	190,062	285,093
Wichita	KS	1,130	90,039	135,059	180,079	270,118
Louisville	KY	1,296	102,714	154,071	205,428	308,142
New Orleans	LA	1,658	127,619	191,428	255,237	382,856
Boston	MA	2,791	169,290	253,935	338,580	507,870
Baltimore	MD	1,999	144,834	217,252	289,669	434,503
Portland	ME	1,867	142,851	214,276	285,701	428,552
Detroit	MI	1,315	101,823	152,734	203,646	305,469
Minneapolis	MN	1,639	120,097	180,146	240,194	360,291
Kansas City	MO	1,342	98,038	147,057	196,076	294,114
Jackson	MS	1,198	111,046	166,568	222,091	333,137
Billings	MT	1,229	149,242	223,864	298,485	447,727
Charlotte	NC	1,634	114,547	171,821	229,095	343,642
Fargo	ND	1,157	114,114	171,172	228,229	342,343
Omaha	NE	1,222	91,062	136,594	182,125	273,187
Manchester	NH	1,630	126,304	189,456	252,608	378,912
Newark	NJ	2,647	182,271	273,407	364,543	546,814
Albuquerque	NM	1,303	135,127	202,691	270,255	405,382
Las Vegas	NV	1,606	148,376	222,564	296,752	445,129
New York City	NY	3,175	182,271	273,407	364,543	546,814
Columbus	OH	1,277	100,060	150,090	200,120	300,180
Oklahoma City	OK	1,289	101,778	152,667	203,556	305,334
Portland	OR	1,718	171,165	256,748	342,330	513,495
Philadelphia	PA	1,954	130,065	195,097	260,129	390,194
Providence	RI	1,774	139,750	209,624	279,499	419,249
Columbia	SC	1,553	106,210	159,315	212,420	318,629
Sioux Falls	SD	1,212	105,974	158,962	211,949	317,923
Memphis	TN	1,582	99,399	149,099	198,798	298,198
Houston	TX	1,536	92,263	138,395	184,527	276,790
Salt Lake City	UT	1,531	144,510	216,765	289,020	433,530
Virginia Beach	VA	2,146	141,994	212,991	283,987	425,981
Burlington	VT	1,997	147,381	221,071	294,761	442,142
Seattle	WA	2,527	171,978	257,967	343,956	515,935
Milwaukee	WI	1,390	116,957	175,435	233,913	350,870
Charleston	WV	1,356	89,660	134,491	179,321	268,981
Cheyenne	WY	1,250	125,131	187,697	250,262	375,394
AVERAGE		1,718	133,139	199,709	266,278	399,417
MEDIAN		1,606	126,304	189,456	252,608	378,912

Source for "Tax on Rent": Rental cost data are from the U.S. Department of Housing and Urban Development, for median fair market rents by MSA. Rents for a studio apartments were selected. The property tax equivalent of rent is assumed to be 20 percent of annual rent.

Source for all other columns: ORA Calculations. Data on MSA median household incomes and MSA median house values of mortgage holders for 2015 were retrieved from the Census Bureau's ACS 2015. A multiplier was applied to each income based on the relationship of median income to median home value. Newark, NJ is in the same MSA as NYC, thus the same house value and income data are used for both. Similarly, Wilmington, DE, is in the same MSA as Philadelphia, thus the same house value and income data are used for both.

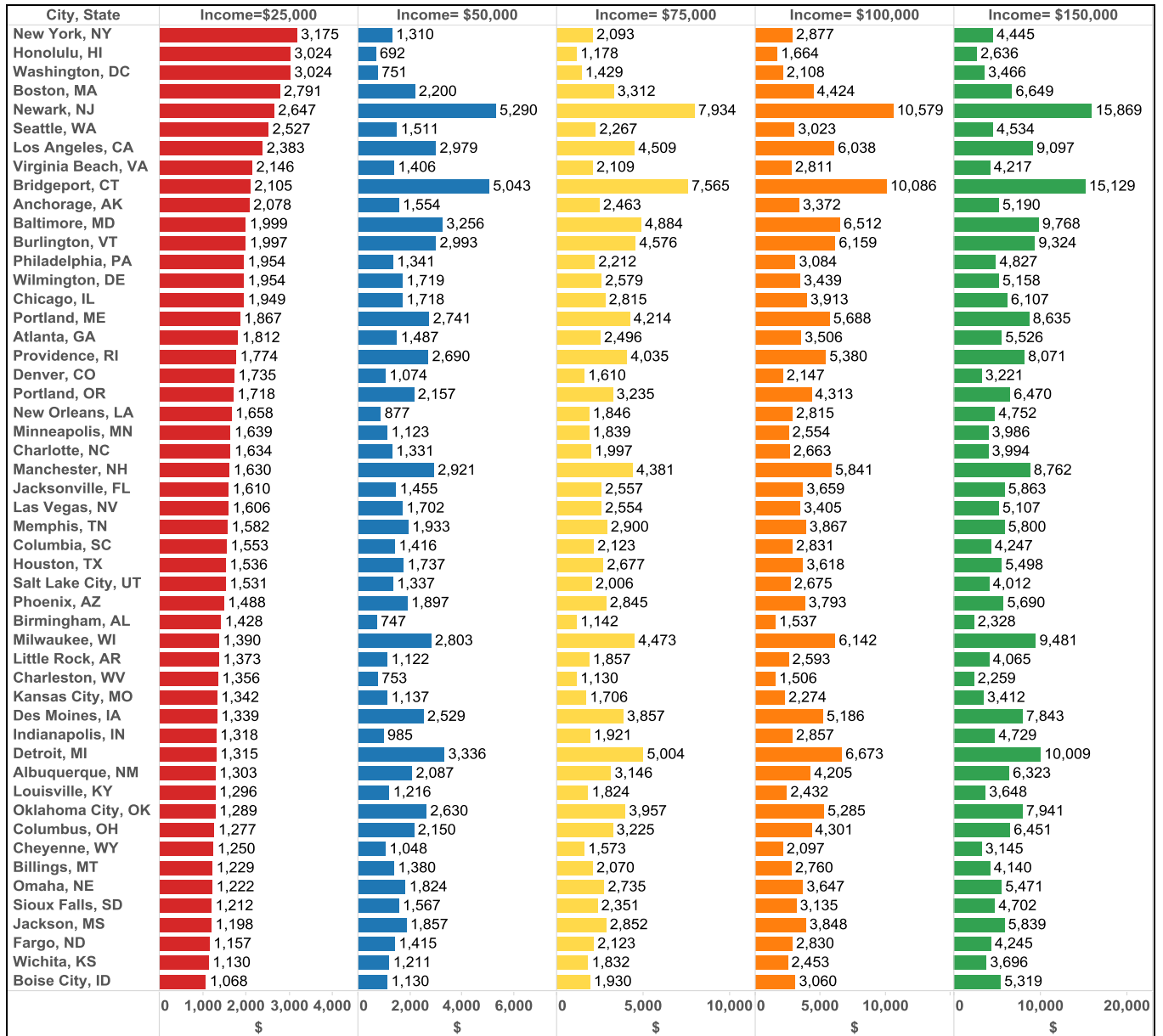
Table 6: Cities That Allow Exemptions or Reduced Rates in the Calculation of Real Estate Taxes for Homeowners, 2015

CITY	STATE	EXEMPTION OR TAX REDUCTION AMOUNT	BASIS OF TAX REDUCTION OR EXEMPTION
Anchorage	AK	10% up to \$20,000 maximum	Assessed Value
Birmingham	AL	Up to \$4,000 (local option to exempt \$2,000 to \$4,000)	Assessed Value-Homestead
Little Rock	AR	\$350 Credit against Homestead for Homeowners	Tax Credit
Phoenix	AZ	45.003% Exemption on School Tax Rates up to \$600	Assessed Value
Los Angeles	CA	\$7,000 Exemption	Assessed Value
WASHINGTON 1/	DC	\$71,400 Exemption	Assessed Value-Homestead
Jacksonville	FL	\$25,000 Homestead Exemption for all property taxes; Up to \$25,000 for non-School taxes only	Assessed Value
Atlanta	GA	\$30,000 Exemption	Assessed Value
Honolulu	HI	\$80,000 Exemption	Assessed Value
Des Moines	IA	\$4,850 Exemption	Assessed Value
Boise	ID	50% of Assessed Value, up to \$89,580 Exemption	Assessed Value and Homestead up to 1 acre
Chicago	IL	\$7,000 Exemption	Assessed Value- Homestead
Indianapolis	IN	60% Deduction (maximum of \$45,000) Supplemental deduction of 35% deduction of AV less than \$600,000; 25% deduction of AV greater than \$600,000.	Assessed Value-Homestead
Wichita	KS	\$20,000 on Appraised Value; \$2,300 on Assessed Value; up to a maximum tax exempted of \$46	Assessed Value
New Orleans	LA	\$7,500 Exemption	Assessed Value
Boston	MA	\$1,879.53 Homeowner Exemption	Assessed Value
Portland	ME	\$10,000 Homestead Exemption	Assessed Value
Detroit	MI	Homestead Property Exempt From Up to 18 mills of Local School Operating Millage Tax	Taxable Value
Minneapolis	MN	Market Value Homestead Exclusion = (40%*MV of first \$76,000) minus (9%*MV of the value over \$76,000)	Market Value
Jackson	MS	\$7,500 Exemption, limit of \$300 of actual exempted tax dollars	Assessed Value
Omaha	NE	Real property tax credit = reduction in tax bill of \$94.09 per 100,000 assessed value	Assessed Value
Albuquerque	NM	\$2,000 Household Head Exemption	Taxable Value
New York City	NY	\$30,000 Exemption on Primary Residence	Equalized Assessed Value
Columbus	OH	10% Credit	Assessed Value
Oklahoma City	OK	\$1,000 Exemption	Assessed Value-Homestead
Columbia	SC	Owner occupied residential exempt from approximately 65% of school operating taxes	Property Tax Relief Fund
Houston	TX	20% County Exemption on Value -Plus \$15,000 Exemption on School District Taxes Only -Plus various exemptions on local levies, between 10% - 20% of assessed value	Assessed Value
Salt Lake City	UT	45% Residential (included in 55% assessment in Table 4)	Taxable Value
Burlington	VT	Up to \$8,000 reduction for those with incomes up to \$137,500	Household Income
Milwaukee	WI	For \$150,000 home: -\$324.91 School Levy Credit; -\$130.98 Lottery Credit; -\$81.09 1st Dollar Credit	Equalized Assessed Value Equalized Assessed Value Equalized Assessed Value

Source: Data collected from surveys to State Revenue Department officials and review of State Revenue Department Web Sites.

1/ DC's exemption amount increased to \$71,700 on October 1, 2015 (effective for D.C.'s Real Property Tax Year 2016).

Chart 4: 2015 Property Tax Burdens for All Income Levels, Sorted by Lowest Income Level



Source: ORA analysis; see description on page 8-9 for data sources and methodology. Note: the methodology for calculating burdens for the \$25,000/year income earning family differ from the calculations for the other four income groups.

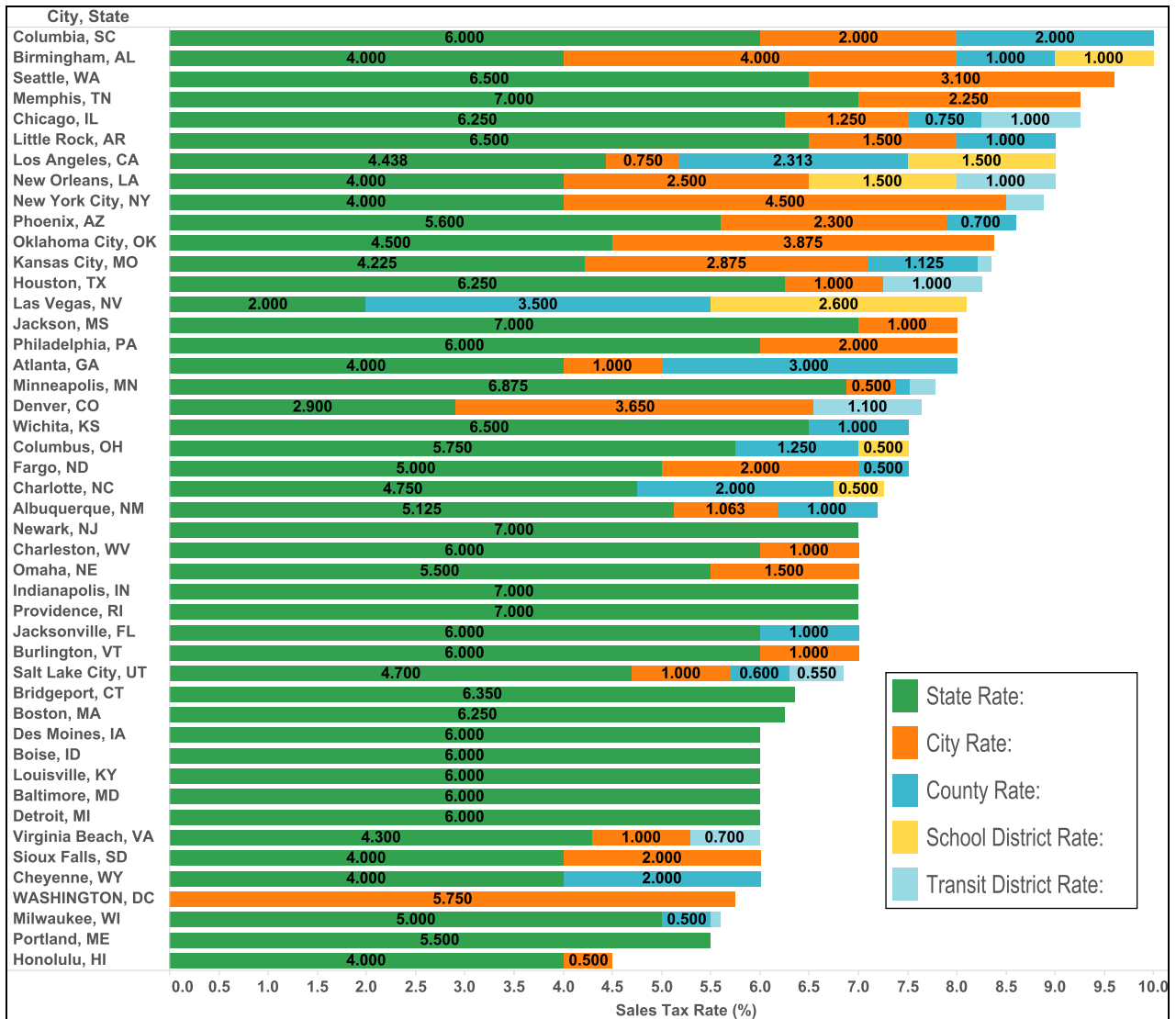
Sales and Use Tax

Residents of 46 of the 51 cities in this study are subject to some form of sales and use tax. The combined sales tax rates range from 10 percent in Columbia, South Carolina; and Birmingham, Alabama, to 4.5 percent in Honolulu, Hawaii, as illustrated in Chart 5, page 36, and also presented in Table 7, page 37. The highest state sales tax rate is 7 percent in Indiana, Mississippi, New Jersey, Rhode Island, and Tennessee; while the lowest state rate of 2 percent is found in Nevada. Sales taxes are levied by 28 of the 51 cities (in addition to state sales taxes) with the highest city rate at 5.75 percent in Washington, D.C. (followed by 4.5 percent in New York City). The lowest city rates were 0.5 percent in both Honolulu, Hawaii; and Minneapolis, Minnesota. Of the 19 counties levying a sales tax, the highest rate (3.5 percent) is in Clark County (Las Vegas, Nevada), followed by 3.0 percent in Fulton County (Atlanta, Georgia). Seven school districts and nine transit districts also levy sales taxes, with transit district rates ranging from 0.125 percent in Kansas City, Missouri; to 1.1 percent in Denver, Colorado.

According to Table 1, and based on the assumptions made in the report, the average sales tax burden is the second highest of the four major tax types at the \$25,000 income level. For families subject to a general sales tax, the highest sales tax burdens across each of the income levels are in Memphis, Tennessee; Birmingham, Alabama; New Orleans, Louisiana; Little Rock, Arkansas; and Jackson, Mississippi.

Cities and states that levy a general sales tax and that have the lowest sales tax burdens at all income levels include Cheyenne, Wyoming; Baltimore, Maryland; Des Moines, Iowa; and Virginia Beach, Virginia. (In Table 1, Billings, Montana, and Manchester, New Hampshire have lower sales tax burdens than these four cities. However, the Billings and Manchester sales tax burdens are due to selective sales taxes that apply to certain consumption items that are included in the calculations for this report. However, these two jurisdictions do not have a general sales tax and are therefore excluded from any of the counts on this page, as well as Charts 4 and 5, and Table 7.)

Chart 5: State and Local General Sales Tax Rates in Each of The 51 Cities as of December 31, 2015



Source: ORA analysis of data collected from a survey of State Revenue Department Officials.

Cities with no state or local general sales tax: Anchorage, AK; Billings, MT; Manchester, NH; Portland, OR; and Wilmington, DE.

* The 0.700 "transit district rate" in Virginia is a regional sales tax that is dedicated to a transportation fund.

Table 7: State and Local General Sales Tax Rates in Each of the 51 Cities as of December 31, 2015

CITY	STATE	TOTAL RATE (%)	STATE RATE (%)	CITY RATE (%)	COUNTY RATE (%)	SCHOOL/ OTHER RATE (%)	TRANSIT RATE (%)
Columbia	SC	10.000	6.000	2.000	2.000		
Birmingham	AL	10.000	4.000	4.000	1.000	1.000	
Seattle	WA	9.600	6.500	3.100			
Memphis	TN	9.250	7.000	2.250			
Chicago	IL	9.250	6.250	1.250	0.750		1.000
Little Rock	AR	9.000	6.500	1.500	1.000		
Los Angeles	CA	9.000	4.438	0.750	2.313	1.500	
New Orleans	LA	9.000	4.000	2.500		1.500	1.000
New York City	NY	8.875	4.000	4.500			0.375
Phoenix	AZ	8.600	5.600	2.300	0.700		
Oklahoma City	OK	8.375	4.500	3.875			
Kansas City	MO	8.350	4.225	2.875	1.125		0.125
Houston	TX	8.250	6.250	1.000			1.000
Las Vegas	NV	8.100	2.000		3.500	2.600	
Jackson	MS	8.000	7.000	1.000			
Philadelphia	PA	8.000	6.000	2.000			
Atlanta	GA	8.000	4.000	1.000	3.000		
Minneapolis	MN	7.775	6.875	0.500	0.150		0.250
Denver	CO	7.650	2.900	3.650			1.100
Wichita	KS	7.500	6.500		1.000		
Columbus	OH	7.500	5.750		1.250	0.500	
Fargo	ND	7.500	5.000	2.000	0.500		
Charlotte	NC	7.250	4.750		2.000	5.000	
Albuquerque	NM	7.188	5.125	1.625	1.000		
Newark	NJ	7.000	7.000				
Charleston	WV	7.000	6.000	1.000			
Omaha	NE	7.000	5.500	1.500			
Indianapolis	IN	7.000	7.000				
Providence	RI	7.000	7.000				
Jacksonville	FL	7.000	6.000		1.000		
Burlington	VT	7.000	6.000	1.000			
Salt Lake City	UT	6.850	4.700	1.000	0.600		0.550
Bridgeport	CT	6.350	6.350				
Boston	MA	6.250	6.250				
Des Moines	IA	6.000	6.000				
Boise	ID	6.000	6.000				
Louisville	KY	6.000	6.000				
Baltimore	MD	6.000	6.000				
Detroit	MI	6.000	6.000				
Virginia Beach	VA	6.000	4.300	1.000			0.700*
Sioux Falls	SD	6.000	4.000	2.000			
Cheyenne	WY	6.000	4.000		2.000		
WASHINGTON	DC	5.750		5.750			
Milwaukee	WI	5.600	5.000		0.500	0.100	
Portland	ME	5.500	5.500				
Honolulu	HI	4.500	4.000	0.500			
UNWEIGHTED AVERAGE		7.387	5.417	2.031	1.336	1.100	0.678
MEDIAN		7.219	6.000	1.750	1.000	1.000	0.700

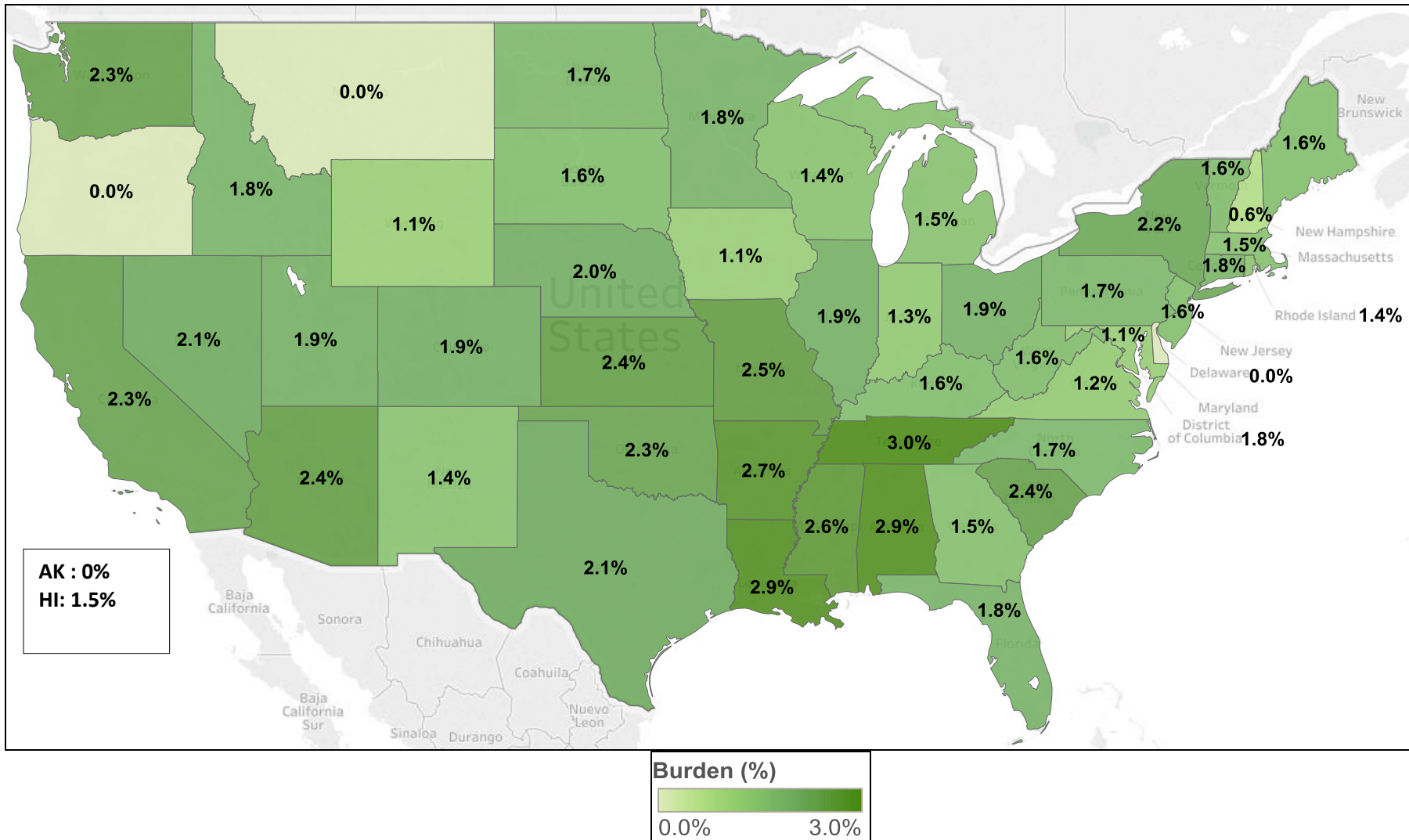
Source: Survey of State Revenue Department Officials.

Cities with no state or local general sales tax: Anchorage, AK; Billings, MT; Manchester, NH; Portland, OR; and Wilmington, DE.

Note: Unweighted average includes only those jurisdictions with a sales tax.

* The 0.700 "transit district rate" in Virginia is a regional sales tax that is dedicated to a transportation fund.

Map 4: 2015 Sales Tax Burdens, Family Earning \$75,000/Year



Automobile Taxes

Residents of all 51 cities in this study are subject to gasoline taxes and some type of automobile registration fee or tax. The automobile taxes included in this study are gasoline taxes, motor vehicle registration fees, excise taxes, and personal property taxes. Thirteen of the cities levy a personal property tax based on the value of motor vehicles owned by a taxpayer. Gasoline tax rates in each of the 51 cities as of December 31, 2015, are compared in Table 8, page 40. The total gasoline tax rates vary from a high of 50.5 cents per gallon in Philadelphia, Pennsylvania; 44.5 in Seattle, Washington; and 44.0 in Chicago, Illinois, to a low of 8.0 cents per gallon in Anchorage, Alaska. Nine states apply a sales tax to gasoline, and those rates are included in the rates in the table and noted.

Automobile registration fees and taxes are usually either flat per-vehicle rates or excise taxes based on either vehicle weight or value. The types of registration and other automobile taxes to which residents of the 51 cities are subject are summarized in Table 9, page 41.

The thirteen cities that levy personal property taxes on automobiles use various methods. Some cities use a combination of assessment levels and tax rates, which may or may not be the same as is used for other personal property or for real property. Others use the same assessment system and property tax rate for automobiles as they do for personal residences.

The vehicle assumptions used for calculating automobile personal property taxes, excise taxes, the gasoline tax, and registration fees are presented in Table 10, page 41.

The lowest tax burdens for a specific tax at all income levels in this study are the automobile tax burdens (except in those states that offer refundable EITCs through the income tax at the \$25,000 income level). Providence, Rhode Island; Bridgeport, Connecticut; and Virginia Beach, Virginia are the cities with the highest automobile tax burdens across all income levels. These cities levy either a personal property tax or a high excise tax. Newark, New Jersey; Albuquerque, New Mexico; New Orleans, Louisiana; Birmingham, Alabama; and Jackson, Mississippi, and have the lowest automobile tax burdens at each income level. Each of these cities have flat registration rates or registration by weight, moderate gasoline tax rates, and no personal property or excise tax (or low rates in the case of Mississippi).

**Table 8: Gasoline Tax Rates in the 51 Cities, as of December 31, 2015
(State and Local Rates Per Gallon)**

CITY	ST	TOTAL RATE	STATE RATE	LOCAL RATE
Philadelphia	PA	50.50	50.50	0.00
Seattle	WA	44.50	44.50	0.00
Chicago	IL	44.00	33.00	11.00
Bridgeport	CT	36.00	36.00	0.00
Charlotte	NC	36.00	36.00	0.00
Los Angeles	CA	35.00	35.00	0.00
Portland	OR	35.00	30.00	5.00
New York City	NY	34.75	34.75	0.00
Charleston	WV	34.60	34.60	0.00
Providence	RI	33.00	33.00	0.00
Honolulu	HI	32.50	16.00	16.50
Baltimore	MD	32.10	32.10	0.00
Boise	ID	32.00	32.00	0.00
Las Vegas	NV	32.00	23.00	9.00
Detroit	MI	31.50	31.50	0.00
Des Moines	IA	30.80	30.80	0.00
Jacksonville	FL	30.60	17.30	13.30
Milwaukee	WI	30.50	30.50	0.00
Indianapolis	IN	30.20	30.20	0.00
Portland	ME	30.00	30.00	0.00
Burlington	VT	29.60	29.60	0.00
Minneapolis	MN	28.50	28.50	0.00
Columbus	OH	28.00	28.00	0.00
Sioux Falls	SD	28.00	28.00	0.00
Billings	MT	27.00	27.00	0.00
Omaha	NE	26.10	26.10	0.00
Atlanta	GA	26.00	26.00	0.00
Louisville	KY	24.60	24.60	0.00
Salt Lake City	UT	24.50	24.50	0.00
Wichita	KS	24.00	24.00	0.00
Boston	MA	24.00	24.00	0.00
Washington	DC	23.50	23.50	0.00
Wilmington	DE	23.00	23.00	0.00
Fargo	ND	23.00	23.00	0.00
Cheyenne	WY	23.00	23.00	0.00
Manchester	NH	22.20	22.20	0.00
Denver	CO	22.00	22.00	0.00
Little Rock	AR	21.50	21.50	0.00
New Orleans	LA	20.00	20.00	0.00
Memphis	TN	20.00	20.00	0.00
Houston	TX	20.00	20.00	0.00
Phoenix	AZ	18.00	18.00	0.00
Jackson	MS	18.00	18.00	0.00
Kansas City	MO	17.00	17.00	0.00
Albuquerque	NM	17.00	17.00	0.00
Virginia Beach	VA	16.20	1/	2.1%
Birmingham	AL	16.00	16.00	0.00
Oklahoma City	OK	16.00	16.00	0.00
Columbia	SC	16.00	16.00	0.00
Newark	NJ	10.50	10.50	0.00
Anchorage	AK	8.00	8.00	0.00
UNWEIGHTED AVERAGE		26.60	25.72	1.10
MEDIAN		26.10	24.55	0.00

Source: Survey of State Revenue Department Officials; Wolters Kluwer/CCH 2016 State Tax Handbook; and Federation of Tax Administrators, "State Motor Fuel Tax Rates, as of January 1, 2016."

1/ There is a regional Fuels Wholesale Sales Tax imposed in the Northern Virginia and Hampton Roads regions (which includes Virginia Beach). The tax rate is 2.1% of the sales prices of motor fuels sold to retail dealers for sale in the regions; it is not included in the Total Rate column here.

**Table 9: Summary of Types of Automobile Registration Taxes 2015
(50 states + D.C.)**

<u>TYPE OF REGISTRATION</u>	<u>NUMBER OF STATES</u>
Flat Rate Only	22
Weight Only	13
Weight and Age	5
Horsepower Only	1
Age Only	3
Value Only	2
Value and Age	3
Value, Age, and Weight	<u>2</u>
	51
 <u>OTHER AUTO TAXES (INCLUDING LOCAL)*</u>	
Personal Property	13
Excise:	
Value Based	30
Flat fee	1

*Based on State Survey responses; an excise tax is only applied in auto tax calculation if it is an annual tax.

Table 10: Automobile Tax Assumptions 2015

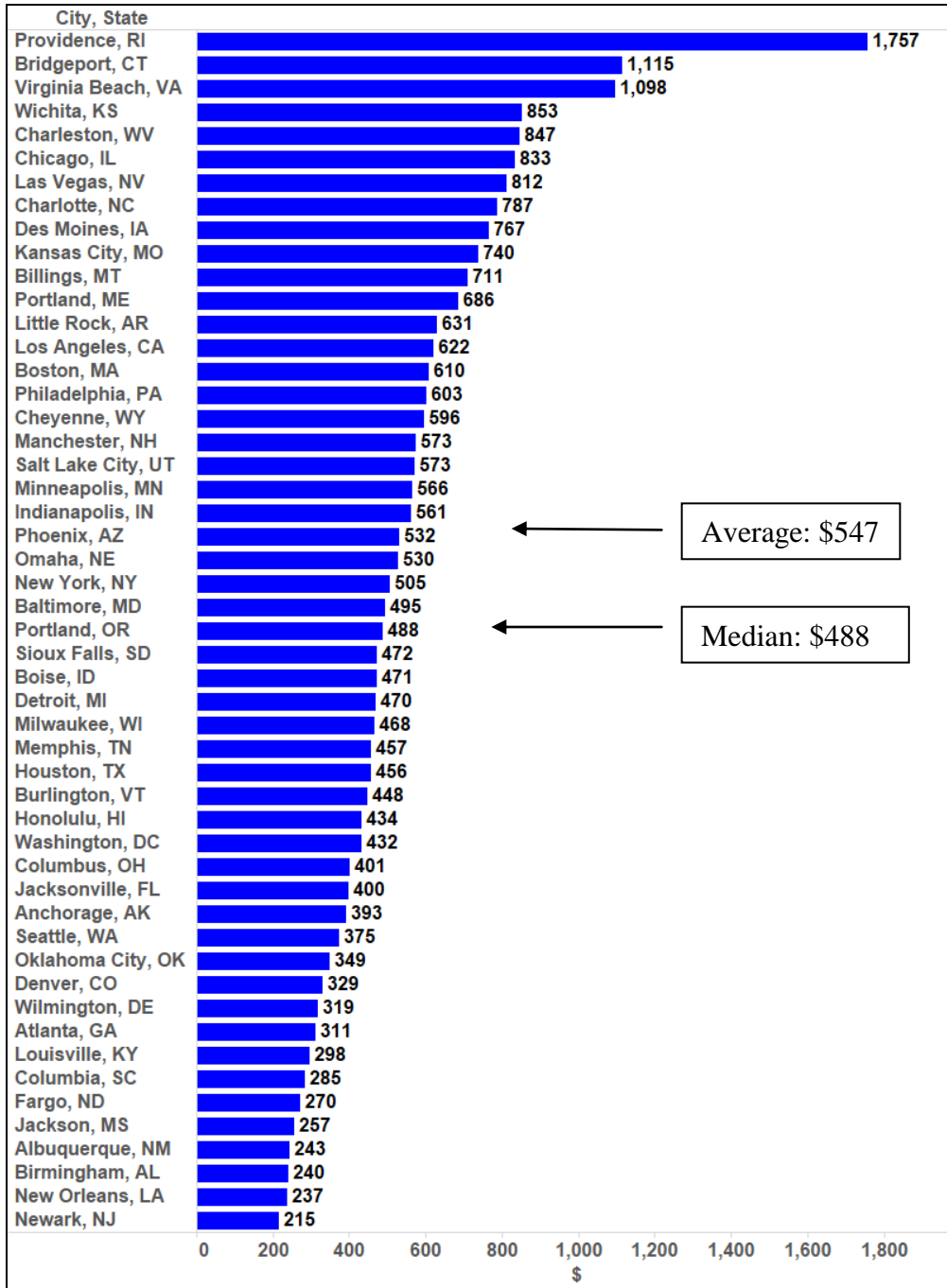
Income Level	Description Of Auto	Engine Size Liters 1/	Weight 2/	Year	Market Values			Estimated Mileage Per Gallon 1/	Estimated Annual Gasoline Usage 3/
					Retail Price 2/	Trade-In Value 2/	Loan Value 2/		
\$ 25,000	Sedan, 4 Door 4 cylinder, Manual	2.0	2,997 lbs	2012	\$11,700	\$9,200	\$11,583	27	556 gallons
\$ 50,000	Sedan, 4 Door 4 Cylinder, Manual	2.0	2,804 lbs	2014	\$11,525	\$9,525	\$11,410	24	625 gallons
\$ 75,000	Sedan, 4 Door 4 Cylinder, Automatic	2.5	3,270 lbs	2014	\$17,750	\$14,925	\$17,573	25	600 gallons
	4WD Utility, 4 Door 6 Cylinder, Automatic	3.5	4,178 lbs	2008	\$13,350	\$10,575	\$13,217	17	441 gallons*
\$100,000	Sedan, 4 Door 6 Cylinder, Automatic	3.6	3,770 lbs	2014	\$20,800	\$18,200	\$20,592	18	833 gallons
	4WD Utility, 4 Door 6 Cylinder, Automatic	4.0	4,606 lbs	2009	\$12,975	\$10,000	\$12,845	13	577 gallons*
\$150,000	Sedan, 4 Door 6 Cylinder, Automatic	3.6	3,984 lbs	2015	49,725	\$46,325	\$49,228	16	938 gallons
	AWD Utility, 4 Door 6 Cylinder, Automatic	3.5	4,265 lbs	2011	\$17,150	\$14,275	\$16,979	18	417 gallons*

1/ Gas Mileage Guide, EPA fuel economy estimates for city driving, U.S. Department of Energy. <http://www.fueleconomy.gov/>

2/ National Automobile Dealers Association Used Car Guide. <http://www.nadaguides.com>

3/ Assumes 15,000 miles driven for primary car; 7,500 for secondary car (secondary car denoted with an asterisk).

Chart 6: 2015 Auto Tax Burdens, Family Earning \$75,000/ year



Source: ORA Analysis. See pages 39-41 for methodology and assumptions.

CHAPTER IV

How Do Tax Burdens in Washington, D.C. Compare with Those in the Largest City in Each State?

The nation's capital, Washington, D.C., is unique in many respects. It has a special status in which the day-to-day activities and functions of state, county, city, and special districts are combined in one governmental unit. The Mayor and the 13-member District of Columbia Council combine the functions of a state legislature, a county board of commissioners, and a city council. Due to this combination of responsibilities, the District has the taxing powers of a state, a county, and a municipality, although these powers are limited by actions of the federal government. The graduated income tax, the general sales and use tax, and the per gallon gasoline tax are all comparable in form to those levied by most states. The property tax based on assessed value is similar to the type levied in cities and counties. As a result, the tax burden of District residents should be compared to the combined state and local burdens borne by residents of other large cities.

The District of Columbia has a relatively high percentage of low-income taxpayers, which limits the District's revenue-raising capacity. Despite these limitations, the District of Columbia must perform and provide funding for functions usually provided at both state and local levels of government. The non-municipal functions include responsibility for welfare programs, physical and mental health care, and maintenance of the public education and state university systems.

The burden of each of the four major taxes for Washington, D.C., is compared with the 51-city average at all income levels in Table 11, page 46 and the individual tax comparisons are described in more detail in the following sections. Further, Chart 7, on page 47 illustrates the comparisons between D.C.'s overall combined burden and the 51-city average at each income level.

Individual Income Tax

According to Table 11 and based on the assumptions made in this report, the individual income tax burden for Washington, D.C. is below the 51-city average at the \$25,000 level (the average is based on the cities and states that levy an income tax). The income tax burden at the \$50,000, \$75,000, \$100,000, and \$150,000 income levels is slightly higher in D.C. than for the average of the cities levying an income tax. This is due to the District's more progressive income tax. Washington, D.C. levied an individual income tax with five rates in tax year 2015: 4.0 percent on the first \$10,000 of taxable income; 6.0 percent on the next \$30,000 of taxable income; 7.0 percent on taxable income over \$40,000 up to \$60,000; 8.5 percent on taxable

income over \$60,000 up to \$350,000; 8.95 percent on taxable income greater than \$350,000. For tax year 2015, personal exemptions of \$1,775 per dependent were allowed, as well as a \$1,775 exemption for the filer and spouse, respectively. A standard deduction of \$8,350 for joint married filers (\$5,200 for married-filing separately), and indexed to the CPI, was in effect for the period of this study.⁹ Itemized deductions are the same as those allowed in computing the federal income tax, but the District does not allow the deduction of its own individual income tax. Washington, D.C. also has "circuit-breaker" property tax relief programs for both elderly and non-elderly qualified homeowners and renters, through which a credit can be claimed against a taxpayers income tax liability (though this is not taken into account for calculations in this study). The District's low-income credit eliminates the District income tax for taxpayers with no federal income tax liability.

Even though the rates have decreased in general over the last several years, the higher income tax burden for the higher income levels is due in part to restrictions on the individual income tax base of the District. Federal law prohibits Washington, D.C. from taxing the earnings of non-residents working within the city, a restriction not imposed on any other city in the nation. As a result of this, the District of Columbia taxes residents at a higher rate than would otherwise be the case since approximately 60 percent of the wages and salaries earned in the District of Columbia are earned by non-residents.¹⁰

Real Property Tax

As previously noted, and based on the assumptions in this report, the property tax burdens in the District of Columbia are below the 51-city average at the \$50,000, \$75,000, \$100,000 and \$150,000 income levels. The property tax burden, as calculated in this study, is higher at the \$25,000 income level in Washington, D.C. than the average for the other 51 cities, which reflects the high cost of rental housing in the District. In spite of the fact that the District's house values are higher than the 51-city average at each income level, these rankings highlight the District's low property tax burden for homeowners, as compared to the other 50 cities.

The tax on residential property in the District of Columbia is based on the assessed value of the property, which is assessed at a statutory level of 100 percent of its estimated market value. The tax rate on residential owner-occupied property in the District is \$0.85 per \$100 of assessed value for 2015. D.C. homeowners may deduct a homestead exemption of \$71,400 from the assessed base before calculation of the property tax for all owner-occupied dwellings. The District has capped the growth of property assessments at 10 percent, when calculating the tax due. The calculations in this study do not adjust for capped growth.

Sales Tax

According to Table 11, the sales tax burden in the District of Columbia is lower than the 51-city average at the lowest two income levels, and just over the average at the highest three

⁹ "Notice of Increases in the 2015 Standard Deduction, Personal Exemption, Homestead Deduction and Trash Collection Credit Amounts." Government of the District of Columbia. Office of the Chief Financial Officer, Office of Revenue Analysis. Washington, D.C.: 2014. p. 1.

¹⁰ "District of Columbia Economic and Revenue Trends: September 2015." Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis. Washington, D.C.: 2015. p. 1

income levels (averages are based on cities actually levying tax). In 2015, the District levied a sales tax with five different rates. This rate structure is used, in part, to take advantage of the District's special status as a tourist center and to increase the contribution of non-residents working in the city. These differential rates illustrate the concept of tax exporting. The following table details the sales tax rates in effect at the end of 2015. Items exempt from the District of Columbia sales tax include groceries and prescription drugs.

ITEMS	2015 SALES TAX RATE
Retail rate for sales of certain tangible personal property and selected services, non-alcoholic soft drinks, food, or drinks sold in vending machines	5.75%
Medical marijuana	6.0%
Restaurant meals, liquor sold for consumption on and off the premises, rental vehicles, prepaid telephone cards, tickets sold for baseball games, merchandise sold at the baseball stadium, tickets sold for events at the Verizon Center and merchandise sold at the Verizon Center	10.0%
Hotels (transient accommodations)	14.5%
Parking motor vehicles in commercial lots	18.0%

Source: "D.C. Tax Facts 2015." Government of D.C., Office of the Chief Financial Officer, Office of Revenue Analysis, p. 27.

Automobile Taxes

Washington, D.C., automobile tax burdens are below the 51-city average for all income levels, as shown in Table 11, indicating the District's competitive auto tax rates. Washington, D.C. taxes gasoline at 23.5 cents per gallon, and requires registration fees for automobile owners. Fees are \$72 on cars weighing less than 3,500 pounds; \$115 on cars equal to or greater than 3,500 pounds and less than 5,000 pounds; and \$155 on automobiles weighing more than 5,000 pounds. The District of Columbia does not impose an annual excise tax or personal property tax on automobiles.

Summary

As noted above, the tax burden of the District of Columbia is influenced by many factors. One of the major reasons the District of Columbia income tax burden is above the average at the \$150,000 income level is the restriction on the District's taxing authority mandated by Congress. Factors such as the prohibition on taxing non-resident income, plus the large percentage of tax-exempt properties (fifty-six percent of District acreage is tax exempt¹¹), have combined to create difficult conditions under which to raise revenues to operate the city. Some of the positive factors, which tend to increase the District tax base, include substantial tourist activity as well as the large volume of business and lobbying activity generated by the federal presence.

¹¹ "D.C. Tax Facts 2016." Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis, p. 41.

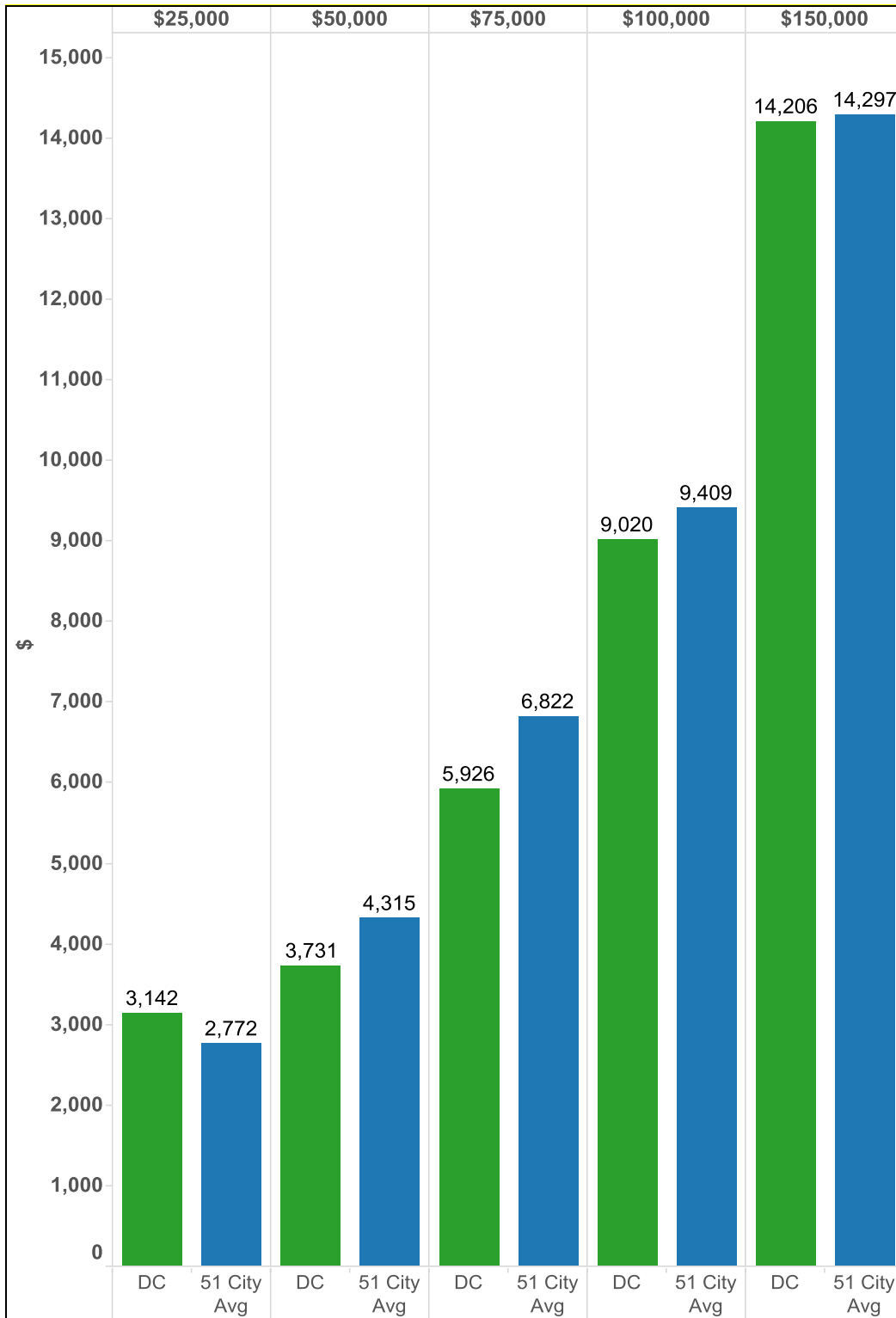
Table 11: Tax Burdens in Washington, D.C. for a Hypothetical Family Compared With The Average for the Largest City in Each State by Income Level, 2015

TAX	DISTRICT OF COLUMBIA	AVERAGE FOR CITIES LEVYING TAX ^{1/}	DIFFERENCE (D.C. Minus Average)
\$25,000 INCOME LEVEL			
Income	(\$911)	(\$34)	(\$877)
Property	3,024	1,718	1,306
Sales	827	872	(45)
Auto	203	261	(59)
TOTAL	\$3,142	\$2,772	\$370
\$50,000 INCOME LEVEL			
Income	\$1,784	\$1,505	\$279
Property	751	1,854	(1,103)
Sales	978	989	(11)
Auto	219	290	(71)
TOTAL	\$3,731	\$4,315	(\$584)
\$75,000 INCOME LEVEL			
Income	\$2,685	\$2,592	\$93
Property	1,429	2,862	(1,433)
Sales	1,380	1,358	22
Auto	432	547	(116)
TOTAL	\$5,926	\$6,822	(\$896)
\$100,000 INCOME LEVEL			
Income	\$4,640	\$3,994	\$646
Property	2,108	3,876	(1,768)
Sales	1,710	1,674	36
Auto	561	669	(108)
TOTAL	\$9,020	\$9,409	(\$389)
\$150,000 INCOME LEVEL			
Income	\$8,058	\$6,708	\$1,350
Property	3,466	5,904	(2,438)
Sales	2,134	2,095	39
Auto	548	897	(349)
TOTAL	\$14,206	\$14,297	(\$91)

^{1/} Income and sales averages are based on cities actually levying tax. As a result, the overall average is not equal to the sum of the averages for each separate tax type. Averages for Income and Sales taxes do not include cities/states with no income or sales tax.

Note: While using the median of the 51 cities results in slightly different dollar amounts, the results are the same in that DC's overall burden is slightly higher than the 51-city median at the \$25,000 income level, and lower than the median at the other four income levels.

**Chart 7: Combined Tax Burdens at Each Income Level:
Comparison of DC and the Average of the 51 Cities**



Source: ORA Analysis. Averages for Income and Sales taxes do not include cities/states with no income or sales tax.

Note: While using the median of the 51 cities results in slightly different dollar amounts, the results are the same in that DC's overall burden is slightly higher than the 51-city median at the \$25,000 income level, and lower than the median at the other four income levels.

Part II

**A Comparison of Selected
Tax Rates in the
District of Columbia
with Those in the 50 States
as of January 1, 2016**

Tax Rate Comparisons at a Glance

Below is a review of how D.C.'s tax rates compare to the other jurisdictions in the report that levy each tax. Of the 12 taxes compared, tax categories for which District rates are higher than in most of the states include: cigarette; corporate income; individual income; deed recordation; motor vehicle excise; and motor vehicle registration fees. In four tax categories – insurance premiums, beer, light wine, and distilled spirits -- the District has lower tax rates than most states. Motor vehicle fuel has twenty-six states higher than the District, and twenty-four states lower than the District. Similarly, twenty-four states have a higher sales tax than D.C. and twenty states are lower.

Table 12: Comparison of Selected State Tax Rates

TAX	LEVYING TAX 1/	NUMBER OF JURISDICTIONS		
		LOWER THAN D.C.	SAME AS D.C.	HIGHER THAN D.C.
Individual Income	43 2/	37 3/	1	5 3/
Corporate Income	44	40	0	4
Insurance	50	17	0	33
Sales and Use	45	20	1	24
Beer	50	7	1	42
Light Wine	46	5	3	38
Distilled Spirits	33	0	1	32
Cigarette	50	42	0	8
Motor Fuel	50	24	0	26
Motor Vehicle Excise				
Cars < 3,500 lbs.	46	24	7	15
Motor Vehicle Registration	50	47	0	3
Deed Recordation	36	36	0	0

1/ This count excludes D.C.

2/ Includes two states that tax dividends and/or interest only.

3/ Comparisons are based on highest comparable rate in each jurisdiction. Those based on federal liability are not included.

Table 13: Individual Income Tax Washington Metropolitan Area

PERSONAL EXEMPTIONS	EXEMPTIONS	TAXABLE INCOME 5/	RATES
DISTRICT OF COLUMBIA			
Single	\$1,775	\$0 - \$10,000	4.0%
Married Filing Separately	\$3,550	\$10,001-\$40,000	\$400 + 6.0% of excess > \$10,000
Married Filing Jointly	\$3,550	\$40,001-\$60,000	\$2,200 + 6.5% of excess > \$40,000
Head of Household	\$1,775	\$60,001-\$350,000	\$3,500 + 8.5% of excess > \$60,000
Dependent (additional)	\$1,775	\$350,000-\$1,000,000	\$28,150 + 8.75% of excess > \$350,000
Blind (additional)	\$1,775	Over \$1,000,000	\$85,025, plus 8.95% of the excess above \$1,000,000
Age 65 and over (additional)	\$1,775		
Standard Deduction	1/		
MARYLAND 2/			
Single	\$3,200	\$0 - \$1,000	2.0%
Married Filing Separately	\$6,400	\$1,001-\$2,000	\$ 20 + 3.00% of excess > \$1,000
Married Filing Jointly	\$6,400	\$2,001-\$3,000	\$ 50 + 4.00% of excess > \$2,000
Head of Household	\$3,200	\$3,001-\$150,000	\$ 90 + 4.75% of excess > \$3,000
Dependent (additional)	\$3,200	\$150,001-\$175,000	\$7,072.50 + 5% of excess > \$150,000
Blind (additional)	\$1,000	\$175,001-\$225,000	\$8,322.50 + 5.25% of excess > \$175,000
Age 65 and over (additional)	\$1,000	\$225,001-\$300,000	\$10,947.50 + 5.5% of excess > \$225,000
Standard Deduction	3/	Over \$300,000	\$15,072.50 + 5.75% of excess > \$300,000
VIRGINIA			
Single	\$ 930	\$0 - \$3,000	2.0%
Married Filing Separately	\$ 930	\$3,001-\$5,000	\$60 + 3.00% of excess > \$ 3,000
Married Filing Jointly	\$1,860	\$5,001-\$17,000	\$120 + 5.00% of excess > \$ 5,000
Head of Household	\$ 930	Over \$17,000	\$720 + 5.75% of excess > \$17,000
Dependent (additional)	\$ 930		
Blind (additional)	\$ 800		
Age 65 and over (additional)	\$ 800		
Standard Deduction	4/		

Source: Survey of State Revenue Department Officials; State Web Sites; and 2016 State Tax Handbook, Wolters Kluwer/ CCH Group, 2015.

1/ Married persons filing separately - \$5,200; Married filing jointly - \$8,350; Head of household - \$6,500.

2/ Maryland rates do not include local rates that may be as low as 1.75% in Worcester County and as much as 3.20% in Howard, Montgomery and Prince George's Counties, among others. Baltimore City, which is used in this study, has a local rate of 3.20%.

3/ 15% of Maryland AGI not to exceed \$2,000 (\$4,000 for joint and head of household returns and those filing as qualifying widow(er) with dependent child). The minimum is \$1,500 for single, married filing separately and dependent taxpayers. All others are allowed a minimum of \$3,000.

4/ Single - \$3,000; married persons filing separately - \$3,000; and married persons filing jointly or combined separate - \$6,000.

5/ Brackets and rates are for married filing jointly.

**Table 14: Individual Income Tax
43 States and the District of Columbia**

PERSONAL EXEMPTIONS (CREDITS)			RATES AND TAXABLE INCOME BRACKETS				
SINGLE	MARRIED FILING JOINT	DEPENDENTS	TYPE OF RETURN	MINIMUM		MAXIMUM	
				RATE	UP TO	RATE	OVER
ALABAMA ^{1/}							
\$1,500	\$3,000	\$500 ^{1/}	S,HH,M M/J	2.0% 2.0%	\$ 500 1,000	5.0% 5.0%	\$ 3,000 6,000
ARIZONA							
\$2,100	\$4,200	\$2,300	S,M/S M/J,HH	2.59% 2.59%	\$10,163 20,326	4.54% 4.54%	\$152,434 304,868
ARKANSAS							
(\$26)	(\$52)	(\$26)	S,HH,M, M/J	0.9%	\$ 4,299	6.9%	\$ 35,100
CALIFORNIA ^{2/}							
(\$109)	(\$218)	(\$337)	S,M/S HH M/J	1.0% 1.0% 1.0%	\$ 7,850 15,710 15,700	12.3% 12.3% 12.3%	\$526,443 715,963 1,052,886
COLORADO							
\$4,050	\$8,100	\$4,050	4.63% of federal taxable income with certain modifications.				
CONNECTICUT							
\$14,500	\$24,000	\$0	S,M/S HH M/J	3.0% 3.0% 3.0%	\$ 10,000 16,000 16,000	6.99% 6.99% 6.99%	\$ 500,000 800,000 800,000
DELAWARE							
(\$110)	(\$220)	(\$110)	S, M/S, M/J	0.0%	\$ 2,000	6.60%	\$ 60,000
DISTRICT OF COLUMBIA							
\$1,775	\$3,550	\$1,775	S,M/S, M/J, HH	4.00%	\$ 10,000	8.95%	\$1,000,000
GEORGIA							
\$2,700	\$5,400	\$3,000	M/S S HH, M/J	1.0% 1.0% 1.0%	\$ 500 750 1,000	6.00% 6.00% 6.00%	\$ 5,000 7,000 10,000
HAWAII							
\$1,144	\$2,288	\$1,144	M/S,S HH M/J, SS	1.40% 1.40% 1.40%	\$ 2,400 3,600 4,800	8.25% 8.25% 8.25%	\$48,000 300,000 96,000

1/ Does not include various local income taxes. Alabama's personal exemption is \$1,000 for taxpayers with an AGI less than \$20,000, and \$300 for those with an AGI greater than \$100,000.

2/ California imposes a Mental Health Services Tax at a rate of 1 percent on income over \$1,000,000.

Table 14 (Continued)
Individual Income Tax
43 States and the District of Columbia

PERSONAL EXEMPTIONS (CREDITS)			RATES AND TAXABLE INCOME BRACKETS				
SINGLE	MARRIED FILING JOINT	DEPENDENTS	TYPE OF RETURN	MINIMUM		MAXIMUM	
				RATE	UP TO	RATE	OVER
IDAHO ^{1/}							
\$4,050	\$8,100	\$4,050	S,M/S HH,M/J	1.60% 1.60%	\$ 1,452 2,904	7.40% 7.40%	\$ 10,890 21,780
ILLINOIS							
\$2,000	\$4,000	\$2,000				3.75% of taxable net income.	
INDIANA ^{2/ 3/}							
\$1,000	\$2,000	\$2,500 ^{3/}				3.30% of federal adjusted gross income.	
IOWA							
(\$40)	(\$80)	(\$40)	S, M/J	0.36%	\$ 1,554	8.98%	\$ 69,930
KANSAS							
\$2,250	\$4,500	\$2,250	S, M/S M/J	2.7% 2.7%	\$ 15,000 30,000	4.6% 4.6%	\$ 15,000 30,000
KENTUCKY							
(\$10)	(\$10)	(\$10)		2.0%	\$ 3,000	6.0%	\$ 75,000
LOUISIANA							
\$4,500	\$9,000	\$1,000	S, M/S, HH M/J	2.0% 2.0%	\$ 12,500 25,000	6.0% 6.0%	\$ 50,000 \$100,000
MAINE							
\$4,050	\$8,100	\$4,050	S, M/S HH M/J	5.80%	\$ 21,050 31,550 42,100	7.15%	\$ 37,499 56,250 75,000
MARYLAND ^{2/}							
\$3,200	\$6,400	\$3,200	S,M/S, M/J, HH	2.0% 2.0%	\$ 1,000 1,000	5.75% 5.75%	\$250,000 300,000
MASSACHUSETTS							
\$4,400	\$8,800	\$1,000				5.10% of taxable income.	
MICHIGAN ^{2/}							
\$4,000	\$4,000	n/a				4.25% of taxable income.	

1/ Does not include filing fee of \$10.

2/ Does not include various local income taxes.

3/ In Indiana, includes an additional \$1,500 exemption for certain dependent children.

Table 14 (Continued)
Individual Income Tax
43 States and the District of Columbia

PERSONAL EXEMPTIONS (CREDITS)			RATES AND TAXABLE INCOME BRACKETS					
SINGLE	MARRIED FILING JOINT	DEPENDENTS	TYPE OF RETURN	MINIMUM		MAXIMUM		
				RATE	UP TO	RATE	OVER	
MINNESOTA								
\$4,000	\$8,000	\$4,000	S	5.35%	\$ 25,180	9.85%	\$ 155,650	
			M/S	5.35%	18,410	9.85%	129,710	
			HH	5.35%	31,010	9.85%	207,540	
			M/J	5.35%	36,820	9.85%	259,420	
MISSISSIPPI								
\$6,000	\$12,000	\$1,500	S, M/J, HH	3.0%	\$ 5,000	5.0%	\$ 10,000	
MISSOURI ^{1/}								
\$2,100	\$4,200	\$1,200	S, M/J, HH, M/S	1.5%	\$ 1,000	6.0%	\$ 9,000	
MONTANA								
\$2,330	\$4,660	\$2,330	S, M/J, HH	1.0%	\$ 2,300	6.9%	\$ 17,100	
NEBRASKA								
(\$131)	(\$262)	(\$131)	M/S,S	2.46%	\$ 3,060	6.84%	\$ 29,590	
			HH		5,710		43,880	
			M/J		6,120		59,180	
NEW HAMPSHIRE								
\$2,400	\$4,800	---	5.0% on dividend and interest income over personal exemption.					
NEW JERSEY								
\$1,000	\$2,000	\$1,500	S,M/S, HH,M/J	1.4%	\$ 20,000	8.97%	\$ 500,000	
NEW MEXICO								
\$4,000	\$8,000	\$4,000	S,M/S	1.7%	\$ 5,500	4.9%	\$ 16,000	
			HH, M/J	1.7%	8,000	4.9%	24,000	
NEW YORK								
---	---	\$1,000	M/S,S	4.0%	\$ 8,450	8.82%	\$1,070,350	
			HH	4.0%	12,750	8.82%	1,605,650	
			M/J	4.0%	17,050	8.82%	2,140,900	
NORTH CAROLINA								
---	---	---	5.75%					
NORTH DAKOTA								
\$4,050	\$8,100	\$4,050	S	1.10%	\$ 37,650	2.90%	\$ 413,350	
			HH	1.10%	50,400	2.90%	413,350	
			M/J	1.10%	62,900	2.90%	413,350	

^{1/} Does not include various local income taxes.

Table 14 (Continued)
Individual Income Tax
43 States and the District of Columbia

PERSONAL EXEMPTIONS (CREDITS)			RATES AND TAXABLE INCOME BRACKETS					
SINGLE	MARRIED FILING JOINT	DEPENDENTS	TYPE OF RETURN	MINIMUM		MAXIMUM		
				RATE	UP TO	RATE	OVER	
OHIO ^{1/}								
\$2,200	\$4,400	\$1,700	S,M/J,M/S	0.495%	\$ 5,200	5.33%	\$208,500	
OKLAHOMA								
\$1,000	\$2,000	\$1,000	S,M/S HH,M/J	0.5% 0.5%	\$ 1,000 2,000	5.00% 5.00%	\$ 7,200 12,200	
OREGON ^{1/}								
(\$195)	(\$390)	(\$195)	S,M/S M/J	5.0% 5.0%	\$ 3,350 6,500	9.9% 9.9%	\$125,000 250,000	
PENNSYLVANIA ^{1/}								
---	---	---	3.07% of specified classes of taxable income is effective rate.					
RHODE ISLAND								
\$3,900	\$7,800	\$3,900	S,HH,M/S, M/J	3.75%	\$ 60,850	5.99%	\$ 138,300	
SOUTH CAROLINA								
\$4,000	\$8,000	\$4,000	S,M/S,M/J	0.0%	\$ 2,920	7.0%	\$ 14,600	
TENNESSEE								
\$1,250	\$2,500	---	6.0% on interest and dividend income.					
UTAH								
^{2/}			5.0% flat rate.					
VERMONT								
\$4,050	\$8,100	\$4,050	S M/S HH M/J	3.55%	\$39,900 31,300 50,200 69,900	8.95%	\$ 415,600 205,750 411,500 421,900	
VIRGINIA								
\$930	\$1,860	\$930	S,M/J	2.0%	\$ 3,000	5.75%	\$ 17,000	
WEST VIRGINIA								
\$2,000	\$4,000	\$2,000	S,M/J	3.0%	\$ 10,000	6.5%	\$ 60,000	
WISCONSIN								
\$700	\$1,400	\$700	S,HH M/J M/S	4.0% 4.0% 4.4%	\$ 11,150 14,820 7,410	7.65%	\$ 244,750 326,330 163,170	

Source: Survey of State Revenue Department Officials; State Department of Revenue web sites; Federation of Tax Administrators, "State Individual Income Tax Rates as of January 1, 2016"; and Tax Foundation, "State Individual Income Tax Rates and Brackets for 2016."

^{1/} Does not include various local income taxes. 2015 Rates.

^{2/} Utah provides a tax credit equal to 6% of the federal personal exemption amounts (and applicable standard deduction).

Table 15: Characteristics of State Individual Income Taxes

JURISDICTION	FEDERAL INCOME TAX DEDUCTIBLE	NO INCOME TAX	WITH-HOLDING	FEDERAL DEFINITION OF INCOME FOR STATE TAX BASE	STATE DEFINITION OF INCOME FOR STATE TAX BASE
ALABAMA	AL		AL		AL
ALASKA		AK			
ARIZONA			AZ	AZ	
ARKANSAS			AR		AR
CALIFORNIA			CA	CA	
COLORADO			CO	CO*	
CONNECTICUT			CT	CT	
DELAWARE			DE	DE	
DISTRICT OF COLUMBIA			DC	DC	
FLORIDA		FL			
GEORGIA			GA	GA	
HAWAII			HI	HI	
IDAHO			ID	ID*	
ILLINOIS			IL	IL	
INDIANA			IN	IN	
IOWA	IA		IA	IA	
KANSAS			KS	KS	
KENTUCKY			KY	KY	
LOUISIANA	LA		LA	LA	
MAINE			ME	ME	
MARYLAND			MD	MD	
MASSACHUSETTS			MA	MA	
MICHIGAN			MI	MI	
MINNESOTA			MN	MN*	
MISSISSIPPI			MS		MS
MISSOURI	MO		MO	MO	

Table 15 (Continued)
Characteristics of State Individual Income Taxes

JURISDICTION	FEDERAL INCOME TAX DEDUCTIBLE	NO INCOME TAX	WITH-HOLDING	FEDERAL DEFINITION OF INCOME FOR STATE TAX BASE	STATE DEFINITION OF INCOME FOR STATE TAX BASE
MONTANA 1/	MT		MT	MT	
NEBRASKA			NE	NE	
NEVADA		NV			
NEW HAMPSHIRE		NH 2/			
NEW JERSEY			NJ		NJ
NEW MEXICO			NM	NM	
NEW YORK			NY	NY	
NORTH CAROLINA			NC	NC	
NORTH DAKOTA			ND	ND*	
OHIO			OH	OH	
OKLAHOMA			OK	OK	
OREGON 3/	OR		OR	OR*	
PENNSYLVANIA			PA		PA
RHODE ISLAND			RI	RI	
SOUTH CAROLINA			SC	SC*	
SOUTH DAKOTA		SD			
TENNESSEE		TN 2/			
TEXAS		TX			
UTAH			UT	UT	
VERMONT			VT	VT*	
VIRGINIA			VA	VA	
WASHINGTON		WA			
WEST VIRGINIA			WV	WV	
WISCONSIN			WI	WI	
WYOMING		WY			

Source: Federation of Tax Administrators, "State Personal Income Taxes: Federal Starting Points," January 1, 2016 and "State Individual Income Taxes," January 1, 2016; Survey of State Revenue Department Officials; "2016 State Tax Handbook." Wolters Kluwer/CCH. 2015.

* 'Federal taxable income' is the definition of income for state base.

1/ Federal taxes used as a deduction are limited to \$5,000. Plus "additions" & "subtractions" to arrive at Montana Adjusted Gross Income.

2/ Tax only on interest and dividends.

3/ Federal deductibility is limited to \$6,100, and begins to phase out at a FAGI of \$125,000 for Single or Married Filing Separate or \$250,000 for Head of Household or Married Filing Joint.

**Table 16: State Corporation Income Tax Rates
(Maximum Rates)**

DISTRICT OF COLUMBIA: 9.20%

LOWER THAN THE DISTRICT 40 STATES			
Kansas 1/ North Carolina North Dakota Colorado Mississippi	4.00% 4.00% 4.31% 4.63% 5.00%	Tennessee West Virginia New Mexico Montana 2/ Rhode Island	6.50% 6.50% 6.60% 6.75% 7.00%
South Carolina Utah Arizona Florida Georgia	5.00% 5.00% 5.50% 5.50% 6.00%	Idaho Connecticut Oregon Illinois 4/ Nebraska	7.40% 7.50% 7.60% 7.75% 7.81%
Kentucky Michigan Oklahoma Virginia Missouri	6.00% 6.00% 6.00% 6.00% 6.25%	Wisconsin Louisiana Massachusetts Maryland New Hampshire	7.90% 8.00% 8.00% 8.25% 8.50%
Hawaii Alabama Arkansas Indiana 3/ New York	6.40% 6.50% 6.50% 6.50% 6.50%	Vermont Delaware California Maine New Jersey	8.50% 8.70% 8.84% 8.93% 9.00%
HIGHER THAN THE DISTRICT 4 STATES			
Alaska Minnesota	9.40% 9.80%	Pennsylvania Iowa	9.99% 12.00%
NO TAX 6 STATES			
Ohio 5/ Nevada South Dakota		Texas Washington Wyoming	

Source: Survey of State Revenue Department Officials; Wolters Kluwer/CCH 2016 State Tax Handbook; and Federation of Tax Administrators, "Range of State Corporate Income Tax Rates, January 1, 2016."

1/ Kansas rate does not include a 3.0% surtax on taxable income in excess of \$50,000.

2/ Montana's rate is 7% for corporations making a "water's edge" election.

3/ Indiana rate is scheduled to decrease to 6.25% on July 1, 2016.

4/ Includes 2.5% Personal Property Replacement Tax.

5/ Ohio's Commercial Activity Tax (CAT) is imposed on the privilege of doing business in Ohio, measured by gross receipts.

**Table 17: State Gross Premiums Tax Rates on Foreign Life Insurers
(Maximum Rates)**

DISTRICT OF COLUMBIA: 1.7%

LOWER THAN THE DISTRICT 17 STATES			
Illinois ^{1/}	0.50%	Ohio	1.40%
New York ^{2/}	0.70%	Idaho	1.50%
South Carolina	0.75%	Kentucky	1.50%
Wyoming	0.75%	Minnesota	1.50%
Iowa	1.00%	Connecticut	1.75%
Nebraska	1.00%	Florida	1.75%
Michigan	1.25%	Tennessee	1.75%
Indiana	1.30%	Texas	1.75%
		North Carolina ^{3/}	1.90%
HIGHER THAN THE DISTRICT 33 STATES			
Arizona	1.99%	Georgia	2.25%
Colorado	2.00%	Louisiana	2.25%
Delaware	2.00%	Oklahoma	2.25%
Kansas	2.00%	Utah	2.25%
Maine	2.00%	Virginia	2.25%
Maryland	2.00%	Alabama	2.30%
Massachusetts	2.00%	California	2.35%
Missouri	2.00%	Arkansas	2.50%
New Hampshire	2.00%	South Dakota	2.50%
New Jersey	2.00%	Alaska	2.70%
North Dakota	2.00%	Hawaii	2.75%
Oregon	2.00%	Montana	2.75%
Pennsylvania	2.00%	Mississippi	3.00%
Rhode Island	2.00%	New Mexico	3.00%
Vermont	2.00%	West Virginia ^{4/}	3.00%
Washington	2.00%	Nevada	3.50%
Wisconsin	2.00%		

Source: Survey of State Revenue Department Officials; Wolters Kluwer/CCH 2016 State Tax Handbook.

1/ An additional 1% premium tax for fire or fire related insurance policies.

2/ Life insurers pay a franchise tax which is equal to the sum of the premiums tax and a tax based on the highest of four bases, plus a tax on subsidiary capital. The sum of the two components cannot be less than 1.5% or greater than 2% of premiums.

3/ An additional 6% insurance regulatory charge applied to premium tax liability. An additional 1.33% premium tax for fire related insurance policies.

4/ An additional 1% premium tax for fire and casualty insurance. There is also a surcharge on fire and casualty insurance policyholders that is equal to 1% of the gross direct premium paid on each policy.

Table 18: State General Sales and Use Tax Rates
(Maximum Local Rates in Parentheses)

DISTRICT OF COLUMBIA: 5.75%

LOWER THAN THE DISTRICT			
20 STATES			
Nevada (1.30%)	2.000%	Virginia (0.70%) 1/	4.300%
Colorado (8.0%)	2.900%	Oklahoma (6.5%)	4.500%
Alabama (7.0%)	4.000%	Utah (2.15%) 1/	4.700%
Georgia (4.0%)	4.000%	North Carolina (2.75%)	4.750%
Louisiana (7.0%)	4.000%	North Dakota (3.5%)	5.000%
Hawaii (0.50%)	4.000%	Wisconsin (1.75%)	5.000%
New York (4.875%)	4.000%	New Mexico (3.56%)	5.125%
South Dakota (2.0%)	4.000%	Maine	5.500%
Wyoming (2.0%)	4.000%	Nebraska (2.0%)	5.500%
Missouri (5.0%)	4.225%	Arizona (5.3%)	5.600%
SAME AS THE DISTRICT			
1 STATE			
Ohio (2.25%)	5.75%		
HIGHER THAN THE DISTRICT			
24 STATES			
Florida (1.5%)	6.000%	Texas (2.0%)	6.250%
Idaho (3.0%)	6.000%	Connecticut	6.350%
Iowa (1.0%)	6.000%	Arkansas (5.13%)	6.500%
Kentucky	6.000%	California (2.50%) 1/	6.500%
Maryland	6.000%	Kansas (4.0%)	6.500%
Michigan	6.000%	Washington (3.40%)	6.500%
Pennsylvania (2.0%)	6.000%	Minnesota (1.5%)	6.875%
South Carolina (2.5%)	6.000%	Indiana	7.000%
Vermont (1.0%)	6.000%	Mississippi (1.0%)	7.000%
West Virginia (1.0%)	6.000%	New Jersey (3.5%)	7.000%
Illinois (4.75%)	6.250%	Rhode Island	7.000%
Massachusetts	6.250%	Tennessee (2.75%)	7.000%
NO TAX			
5 STATES			
Alaska (7.5%)		New Hampshire	
Delaware		Oregon	
Montana 2/			

Source: Survey of State Revenue Department Officials; State Revenue Department Web Sites; all maximum local rates from the Tax Foundation, "Table 1. State and Local Sales Rates, Midyear 2016."

1/ State rate in CA, VA, or UT does not include a mandatory local add-on tax of 1%, 1%, and 1.25%, respectively.

2/ Does not include sales taxes in some local resort areas.

**Table 19: State Beer Tax Rates
(Per Gallon, Alcoholic Content Of 4.5%)**

DISTRICT OF COLUMBIA: \$0.09

LOWER THAN THE DISTRICT 7 STATES			
Wyoming	\$.02	Kentucky	\$.08
Missouri	.06	Pennsylvania	.08
Wisconsin	.065	Oregon	.084
Colorado	.08		
SAME AS THE DISTRICT 1 STATE			
Maryland	\$.09		
HIGHER THAN THE DISTRICT 42 STATES			
Massachusetts	\$.107	Connecticut	\$.24
Rhode Island	.107	Virginia	.2565
Indiana	.12	Vermont	.265
New Jersey	.12	Washington 5/	.26
Montana 1/	.14	South Dakota	.27
New York	.14	New Hampshire	.30
Tennessee 2/	.14	Nebraska	.31
Minnesota 3/	.15	Louisiana	.32
Arizona	.16	Maine	.35
Delaware	.16	Oklahoma	.40
Nevada	.16	New Mexico 6/	.41
North Dakota 4/	.16	Utah 7/	.41
Kansas	.18	Mississippi	.4268
Ohio	.18	Idaho	.45
West Virginia	.18	Florida	.48
Iowa	.19	Georgia	.48
California	.20	Alabama	.53
Michigan	.20	North Carolina	.62
Texas	.20	South Carolina	.768
Illinois	.231	Hawaii 8/	.93
Arkansas	.234	Alaska	1.07

Source: Survey of State Revenue Department Officials; and Federation of Tax Administrators, "State Tax Rates on Beer. (January 1, 2016)."

1/ Montana taxes beer at different rates per size of brewer (< 5k barrels produced - \$.04 per gallon; 5k to 10k - \$.07 per gallon; 10k to 20k - \$.11 per gallon; and > 20k - \$.14 per gallon).

2/ Additional tax of 17% of wholesale price.

3/ Credit allowed to small brewers.

4/ \$0.08 per gallon for bulk beer.

5/ Credit allowed to small brewers.

6/ Rate is \$0.08 per gallon for microbrewer.

7/ In Utah, "beer" is not more than 4% of alcohol by volume. This is the rate shown. For "heavy beer" which is >4% in Utah, there is a higher tax rate above the landed case cost and is sold at State Liquor Stores.

8/ Rate is \$0.54 per gallon for draft beer.

**Table 20: State Light Wine Tax Rates
(Per Gallon, Alcoholic Content of 12%)**

DISTRICT OF COLUMBIA: \$0.30

MONOPOLY STATES 4 STATES			
New Hampshire Pennsylvania 1/		Utah 2/ Wyoming	
LOWER THAN THE DISTRICT 5 STATES			
Louisiana California Texas	\$.11 .20 .20	Wisconsin Colorado	\$.25 .28
SAME AS THE DISTRICT 3 STATES			
Kansas Minnesota	\$.30 .30	New York	\$.30
HIGHER THAN THE DISTRICT 38 STATES			
Ohio Mississippi Maryland Missouri Idaho	\$.32 .35 .40 .42 .45	New Jersey South Dakota Nebraska Delaware North Carolina	\$.88 .93 .95 .97 1.00
Indiana Kentucky North Dakota Michigan Massachusetts	.47 .50 .50 .51 .55	West Virginia Montana 3/ Georgia South Carolina Tennessee	1.00 1.02 1.02 1.08 1.21
Vermont Maine Oregon Nevada Connecticut	.55 .60 .67 .70 .72	Hawaii Illinois Rhode Island Virginia Alabama	1.38 1.39 1.40 1.51 1.70
Oklahoma Arkansas Arizona Washington	.72 .75 .84 .87	New Mexico Iowa Florida Alaska	1.70 1.75 2.25 2.50

Source: Survey of State Revenue Department Officials; Federation of Tax Administrators, "State Tax Rates on Wine, (January 1, 2016)."

1/ 18% wine & liquor tax on top of a 30% markup.

2/ Wine markup is currently 86% above the "landed case cost" (cost of the product, shipping cost, Dept. of Alcoholic Beverage Control Administration fee of \$0.9 per case).

3/ \$1.06 per gallon if sold to an agency owned liquor store.

**Table 21: State Distilled Spirits Tax Rates
(Per Gallon)**

DISTRICT OF COLUMBIA: \$1.50

CONTROL BOARD STATES 17 STATES			
Alabama		Ohio	
Idaho		Oregon	
Iowa 1/		Pennsylvania 4/	
Maine		Utah 5/	
Michigan		Vermont	
Mississippi		Virginia 6/	
Montana 2/		West Virginia	
New Hampshire		Wyoming	
North Carolina 3/			
SAME AS THE DISTRICT 1 STATE			
Maryland	\$ 1.50		
HIGHER THAN THE DISTRICT 32 STATES			
Georgia	\$1.89	Delaware 9/	\$3.75
Kentucky	1.92	Nebraska	3.75
Missouri	2.00	South Dakota	3.93
Colorado	2.28	Massachusetts	4.05
Texas	2.40	Tennessee	4.40
Arkansas 7/	2.50	Minnesota	5.03
Kansas	2.50	Connecticut	5.40
Louisiana	2.50	Rhode Island	5.40
North Dakota	2.50	New Jersey	5.50
Indiana	2.68	Oklahoma	5.56
South Carolina 8/	2.72	Hawaii	5.98
Arizona	3.00	New Mexico	6.06
Wisconsin	3.25	New York	6.43
California	3.30	Florida	6.50
Nevada	3.60	Illinois	8.55
		Alaska	12.80
		Washington	14.27

Source: Survey of State Revenue Department Officials; Federation of Tax Administrators, "State Tax Rates on Distilled Spirits, (January 1, 2016)."

1/ 50% markup.

2/ Excise Tax (16%) and License Tax (10%) on top of a 40% markup. Excise tax varies by size of producer.

3/ 30% Excise Tax. An additional 7% state sales tax.

4/ 18% wine & liquor tax on top of a 30% markup.

5/ Spirituous liquor is subject to a markup of 86% above the landed case cost.

6/ Virginia levies a tax of 20% of the price charged on alcoholic beverages.

7/ Containing more than 21% of alcohol by weight.

8/ Additionally, there is a \$1.79 case tax per gallon and a \$0.41 surtax, totalling \$4.92 per gallon.

9/ Distilled spirits with 25% or less ethyl alcohol at \$2.50 per gallon.

**Table 22: State Cigarette Tax Rates
(Per Pack of 20)**

DISTRICT OF COLUMBIA: \$2.91

LOWER THAN THE DISTRICT 42 STATES			
Missouri	.17	Kansas	1.29
Virginia	.30	Oregon	1.32
Georgia	.37	Florida	1.339
North Dakota	.44	Iowa	1.36
North Carolina	.45	Texas	1.41
West Virginia	.55	South Dakota	1.53
Idaho	.57	Delaware	1.60
South Carolina	.57	Ohio	1.60
Kentucky	.60	Pennsylvania	1.60
Wyoming	.60	New Mexico	1.66
Tennessee	.62	Montana	1.70
Nebraska	.64	Utah	1.70
Alabama	.675	New Hampshire	1.78
Mississippi	.68	Nevada	1.80
Colorado	.84	Illinois	1.98
Louisiana	.86	Alaska	2.00
California	.87	Arizona	2.00
Indiana	.995	Maine	2.00
Oklahoma	1.03	Maryland	2.00
Arkansas	1.15	Michigan	2.00
		Wisconsin	2.52
		New Jersey	2.70
HIGHER THAN THE DISTRICT 8 STATES			
Minnesota	3.00	Massachusetts	3.51
Washington	3.025	Connecticut	3.65
Vermont	3.08	Rhode Island	3.75
Hawaii	3.20	New York	4.35

Source: Survey of State Revenue Department Officials; Federation of Tax Administrators, "State Excise Tax Rates on Cigarettes, (January 1, 2016)."

**Table 23: Gasoline Excise Tax Rates
(Per Gallon)**

DISTRICT OF COLUMBIA: \$.235

LOWER THAN THE DISTRICT 24 STATES			
Alaska	\$.08	Illinois	\$.19
New Jersey	.105	Michigan	.19
Alabama	.16	Louisiana	.20
Hawaii	.16	Tennessee	.20
Oklahoma	.16	Texas	.20
South Carolina	.16	Arkansas	.215
Virginia	.162	Colorado	.22
Missouri	.17	New Hampshire	.222
New Mexico	.17	Delaware	.23
Arizona	.18	Nevada	.23
Indiana	.18	North Dakota	.23
Mississippi	.18	Wyoming	.23
HIGHER THAN THE DISTRICT 26 STATES			
Kansas	.24	Maine	.30
Massachusetts	.24	Oregon	.30
Kentucky	.246	Wisconsin	.305
Florida	.24725	Iowa	.308
Connecticut	.25	Idaho	.32
New York	.25	Maryland	.321
Georgia	.26	Rhode Island	.33
Nebraska	.268	West Virginia	.332
Montana	.27	North Carolina	.35
Ohio	.28	Washington	.445
South Dakota	.28	Pennsylvania	.503
Minnesota	.285		
Utah	.294		
Vermont	.296		
California	.30		

Source: Survey of State Revenue Department officials. Federation of Tax Administrators, "State Motor Fuel Rates, (January 1, 2016)."

Note: Tax rates do not include local option taxes (see Table 8). Additional inspection or environmental cleanup fees may apply.

**Table 24: Motor Vehicle Sales and Excise Taxes
Paid at Time of Sale or Titling**

46 States and D.C.

DISTRICT OF COLUMBIA: 1/ 6% of fair market value - 3,499 pounds or less 7% of fair market value - 3,500 pounds and less than 5,000 pounds 8% of fair market value – 5,000 pounds or more			
Alabama	2.0%	Ohio	5.75%
Colorado	2.9%	Florida 3/	6.0%
New Mexico	3.0%	Idaho	6.0%
North Carolina 2/	3.0%	Kentucky 3/	6.0%
Oklahoma	3.25%	Maryland	6.0%
Hawaii	4.0%	Michigan	6.0%
Louisiana 3/	4.0%	Pennsylvania 9/	6.0%
New York	4.0%	Vermont	6.0%
South Dakota	4.0%	Illinois	6.25%
Wyoming 3/	4.0%	Massachusetts 3/	6.25%
Virginia 4/	4.10%	Texas 7/	6.25%
Missouri	4.23%	Connecticut 10/	6.35%
Delaware 5/	4.25%	Arkansas 11/ 3/	6.50%
Utah	4.70%	Kansas 3/	6.5%
Iowa 6/	5.0%	Minnesota	6.5%
Mississippi 7/	5.0%	Washington 3/	6.5%
North Dakota	5.0%	Georgia 12/	7.0%
South Carolina 8/	5.0%	Indiana 3/	7.0%
West Virginia	5.0%	New Jersey 3/	7.0%
Wisconsin 3/	5.0%	Tennessee	7.0%
Maine 3/	5.5%	Rhode Island	7.0%
Nebraska	5.5%	California 3/	7.5%
Arizona	5.6%	Nevada 3/	8.1%
NO TAX 4 STATES			
Alaska		New Hampshire	
Montana		Oregon	

Source: Survey of State Revenue Department officials and review of State Web Sites.

- 1/ Tax does not apply to vehicles previously titled in another jurisdiction when owners move to the District. No excise tax on hybrid vehicles.
- 2/ Tax on sales price less trade-in allowance. The maximum tax is \$2,000 for each certificate of title issued for a Class A or Class B commercial motor vehicle and for each certificate of title issued for a recreational vehicle.
- 3/ No excise tax; vehicles charged sales tax at time of purchase.
- 4/ Goes up to 4.15% July 1, 2016.
- 5/ Called a document fee.
- 6/ This is a statewide levy, but it is collected by the counties.
- 7/ This is for GVW under 10,000 lbs.; Over is 3%.
- 8/ Maximum of \$300.00.
- 9/ Tax on sales price less trade-in allowance.
- 10/ State rate 7.75% on most vehicles with sales price of more than \$50,000.
- 11/ Local sales taxes are capped at \$25 per 1 percent of tax on a single transaction. Used cars below \$4,000 are exempt. Maximum local sales tax applied against transaction is \$62.50.
- 12/ Title Ad Valorem Tax collected at time of title application.

Table 25: State Motor Vehicle Registration Fees
 Automobile Costing \$27,900, Bought New and Weighing 3,522 Pounds
 (4-Door, 6-Passenger, 8-Cylinder)

DISTRICT OF COLUMBIA: \$115.00 ^{1/}

LOWER THAN THE DISTRICT 47 STATES			
Arizona ^{2/}	\$ 8.00	Delaware	\$ 40.00
Mississippi	14.00	South Carolina	40.00
Nebraska ^{3/}	15.00	Washington ^{9/}	40.00
Wyoming	15.00	Virginia	40.75
North Dakota	15.50	New Mexico ^{10/}	42.00
Georgia	20.00	Oregon	43.00
Kentucky	21.00	Florida	43.10
Missouri ^{4/}	21.00	New Hampshire	43.20
Indiana	21.35	Utah ^{11/}	44.00
Alabama	23.00	Hawaii	45.00
Tennessee ^{5/}	24.00	California	46.00
Arkansas	25.00	Alaska	50.00
North Carolina	28.00	Colorado ^{12/}	50.00
Louisiana ^{6/}	29.00	Michigan ^{12/}	56.50
Massachusetts	30.00	Texas	59.80
West Virginia	30.00	Rhode Island	61.50
Nevada	33.00	Maryland	67.50
New York	33.25	Idaho	69.00
Ohio ^{7/}	34.50	Vermont	70.00
Maine	35.00	South Dakota	72.00
Pennsylvania	36.00	Wisconsin	75.00
Kansas ^{8/}	39.00	New Jersey	84.00
Connecticut	40.00	Oklahoma	91.00
		Illinois	101.00
HIGHER THAN THE DISTRICT 3 STATES			
Montana ^{13/}	215.00	Iowa	223.00
		Minnesota ^{14/}	359.00

Source: Survey of State Revenue Department Officials; Review of State Motor Vehicle Registration Web Sites; and National Conference of State Legislators, "Registration and Title Fees by State."

1/ \$72 (<3,499 lbs.); \$115 (3,500 - 4,999 lbs.); \$155 (>5,000 lbs.); and \$36 (clean fuel or electric vehicle).

2/ There is also a \$1.50 fee earmarked for air quality research.

3/ Does not include local vehicle excise taxes levied in certain urban areas.

4/ Based on vehicle horsepower. Does not include \$1 insurance database fee.

5/ Does not include title fee, wheel tax, or city registration fees.

6/ Based on value of the vehicle.

7/ Local fees not included.

8/ Includes a \$4 modernization fee.

9/ Includes \$11.00 fee earmarked for Emergency Medical Services System.

10/ Registration fees range from \$27.00 to \$62.00 for a one (1) year registration.

11/ Includes \$1 insurance database fee.

12/ Varies based on age, weight, taxable value, purchase date, and plate type.

13/ There is an additional \$6 fee for Park access and a \$5 fee for police salaries.

14/ This fee is for the first registration, 1.25% of base vehicle value, plus \$10.

**Table 26: State Real Estate Deed Recordation and Transfer Tax Rates
(Per \$500 of Consideration)**

DISTRICT OF COLUMBIA: \$11.00 1/

LOWER THAN THE DISTRICT 36 STATES			
Colorado	\$.05	Minnesota	\$ 1.65
Alabama	.50	West Virginia 6/	1.65
Georgia 2/	.50	South Carolina	1.85
Hawaii 3/	.50	Tennessee	1.85
Illinois	.50	Arizona 7/	2.00
Kentucky	.50	New York	2.00
Maryland 4/	.50	New Jersey 8/	2.00
Ohio	.50	Rhode Island 9/	2.00
South Dakota	.50	Maine	2.20
Oklahoma	.75	Massachusetts	2.28
Iowa	.80	Florida	3.50
North Carolina	1.00	Michigan	3.75
Nevada 5/	1.25	New Hampshire	3.75
Virginia	1.25	Pennsylvania	5.00
Nebraska	1.125	Connecticut	6.25
Kansas	1.30	Vermont 10/	6.25
Wisconsin	1.50	Washington	6.40
Arkansas	1.65	Delaware	10.00
NO TAX 14 STATES			
Alaska		Montana	
California 11/		New Mexico	
Idaho		North Dakota	
Indiana		Oregon	
Louisiana		Texas	
Mississippi		Utah	
Missouri		Wyoming	

Source: Survey of State Revenue Department Officials, State web sites, and Wolters Kluwer/CCH 2016 State Tax Handbook.

1/ \$11.00 represents the deed recordation tax + the deed transfer tax per \$500. In D.C. 1.1% of consideration or fair market value for residential property transfers <\$400,000; 1.45% of consideration of fair market value on the entire amount if transfer is >\$400,000.

2/ \$1.00 for the first \$1,000 or fractional part thereof. Thereafter, \$0.10 per each \$100.00.

3/ Based on value, from \$0.10/\$100 for value less than \$600,000 up to \$1.25/\$100 for value over \$10 million.

4/ State transfer tax rate only. State recordation tax varies by county and is not reflected in this number.

5/ In county whose population is 700,000. Otherwise varies by population.

6/ State rate is \$1.10, county rate is \$0.55

7/ Flat fee per deed or contract.

8/ Based on value, from \$2/\$500 to \$6.05/\$500 of consideration.

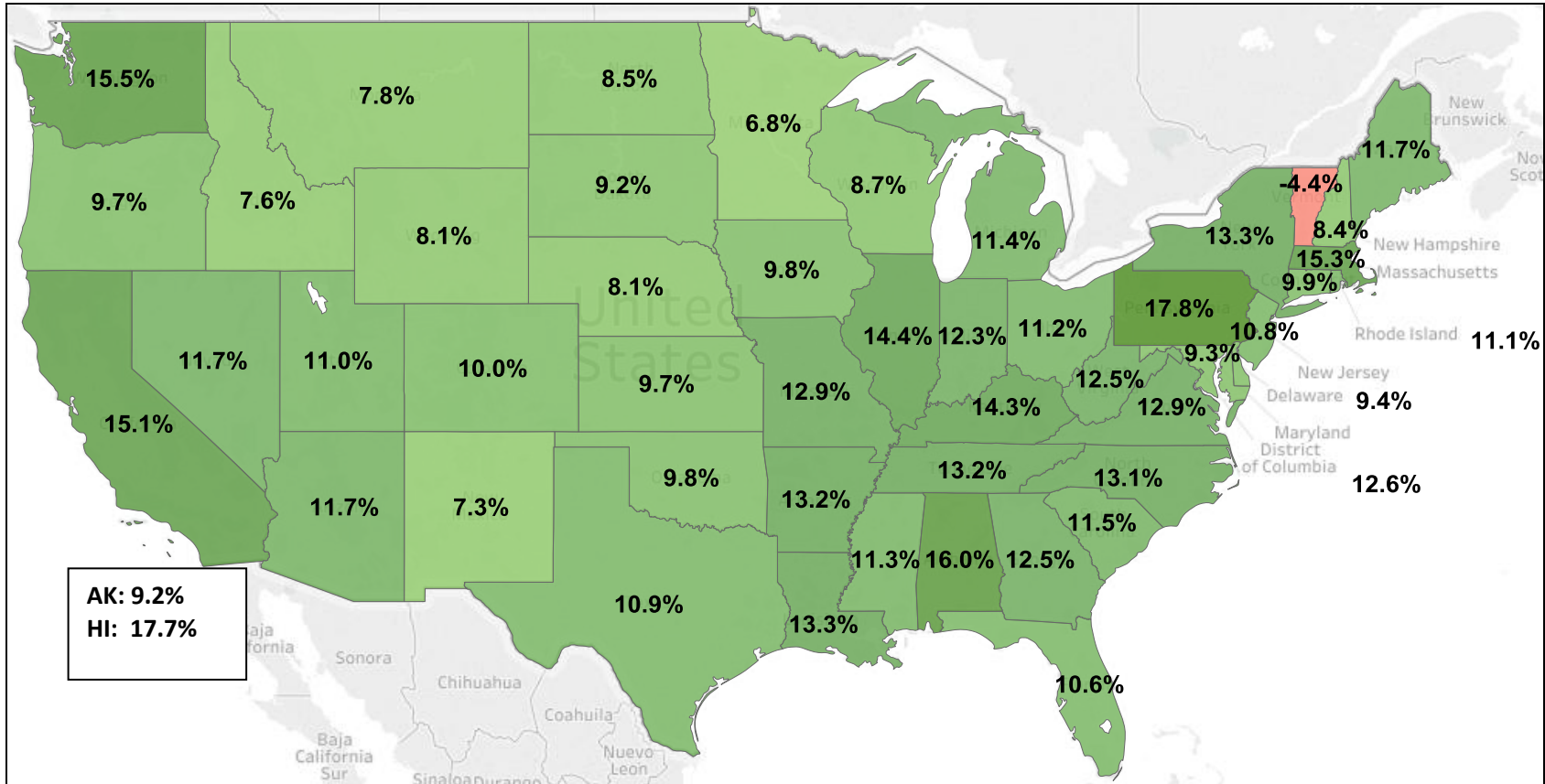
9/ State rate is \$0.90; local rate is \$1.10.

10/ Unless property is owner-occupied, in which case \$2.50/ \$500 on first \$100,000 in value and \$6.25/\$500 on value over \$100,000.

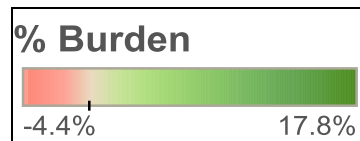
11/ Local option transfer tax \$.55/\$500 for counties.

Appendix

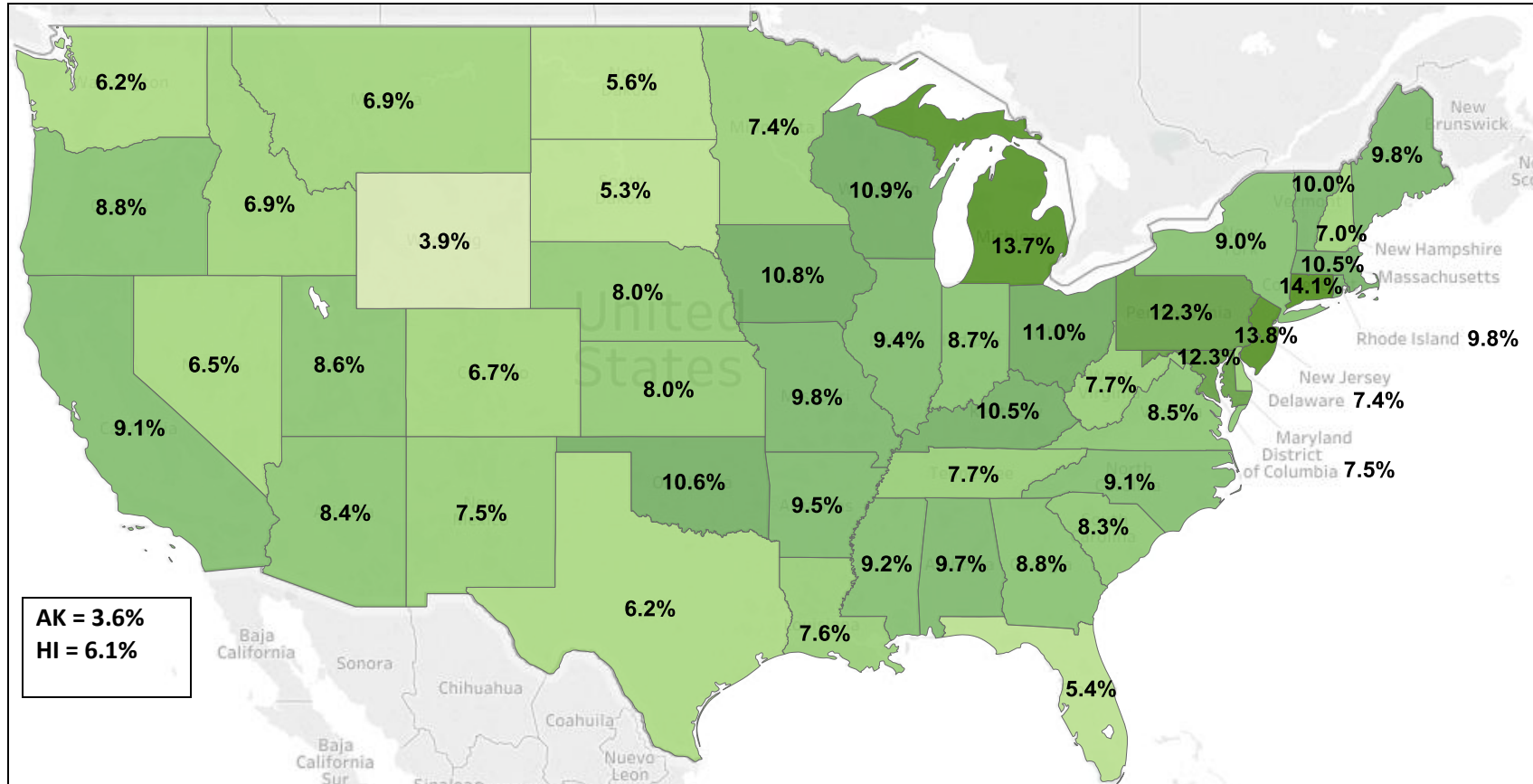
**Map 5: Combined 2015 Tax Burdens (Income, Property, Sales, & Auto) as a % of Income
(Family Earning \$25,000/Year)**



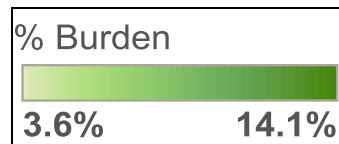
The lighter the green in the map, the lower the tax burden as a percentage of income. Red Indicates a negative burden.



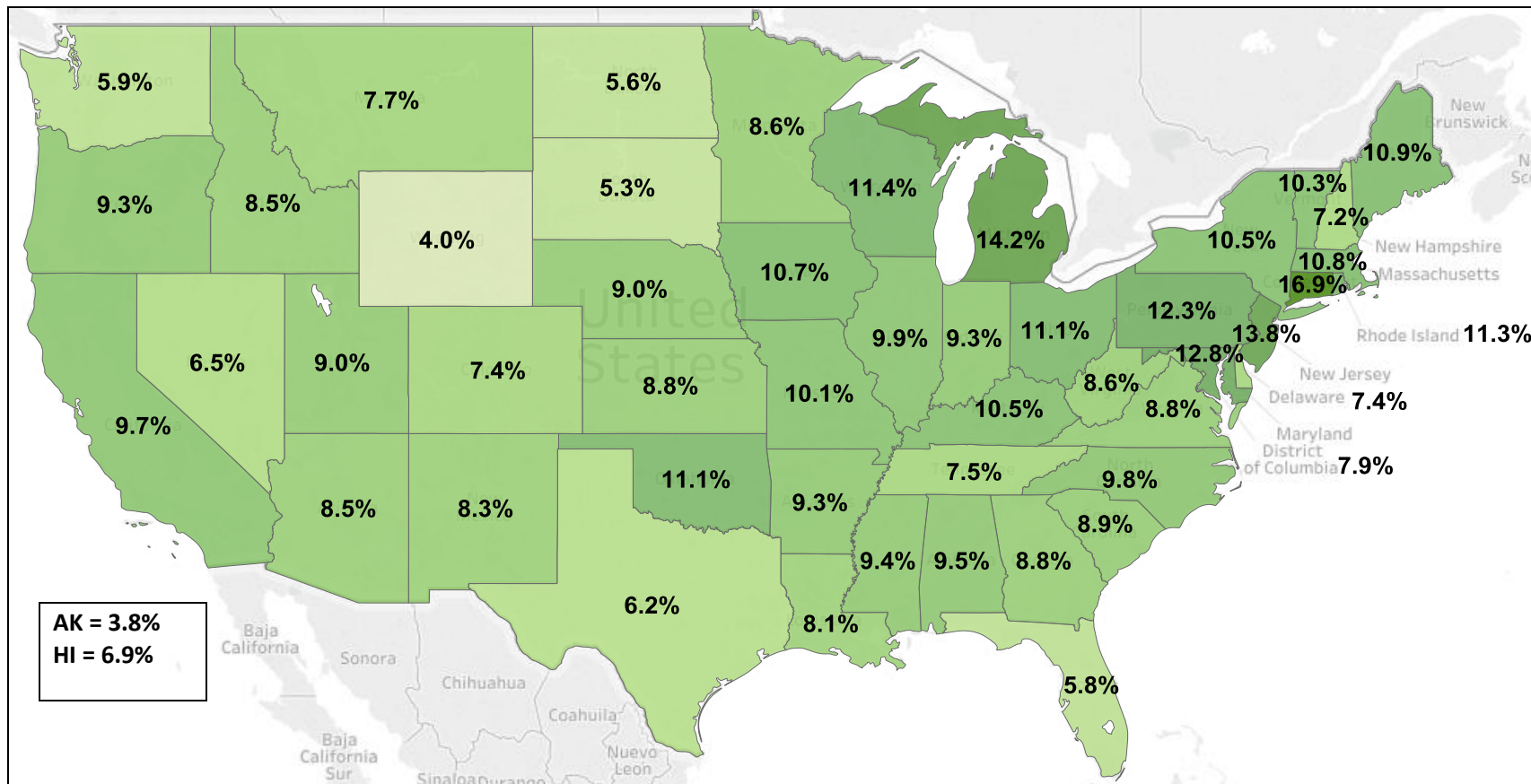
**Map 6: Combined 2015 Tax Burdens (Income, Property, Sales, & Auto) as a % of Income
(Family Earning \$50,000/Year)**



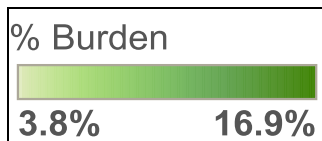
The lighter the green in the map, the lower the tax burden as a percentage of income.



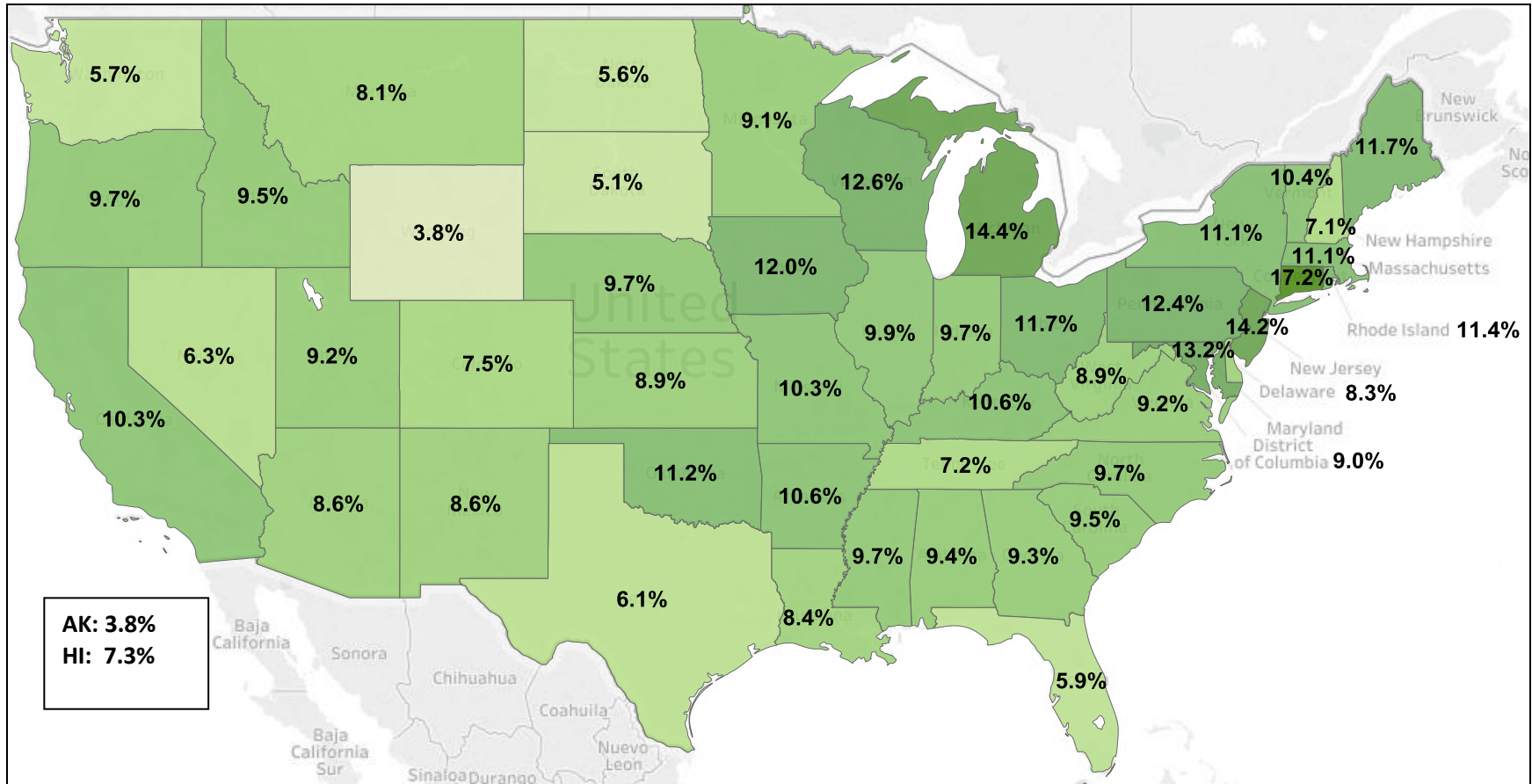
**Map 7: Combined 2015 Tax Burdens (Income, Property, Sales, & Auto) as a % of Income
(Family Earning \$75,000/Year)**



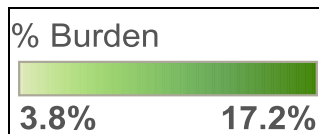
The lighter the green in the map, the lower the tax burden as a percentage of income.



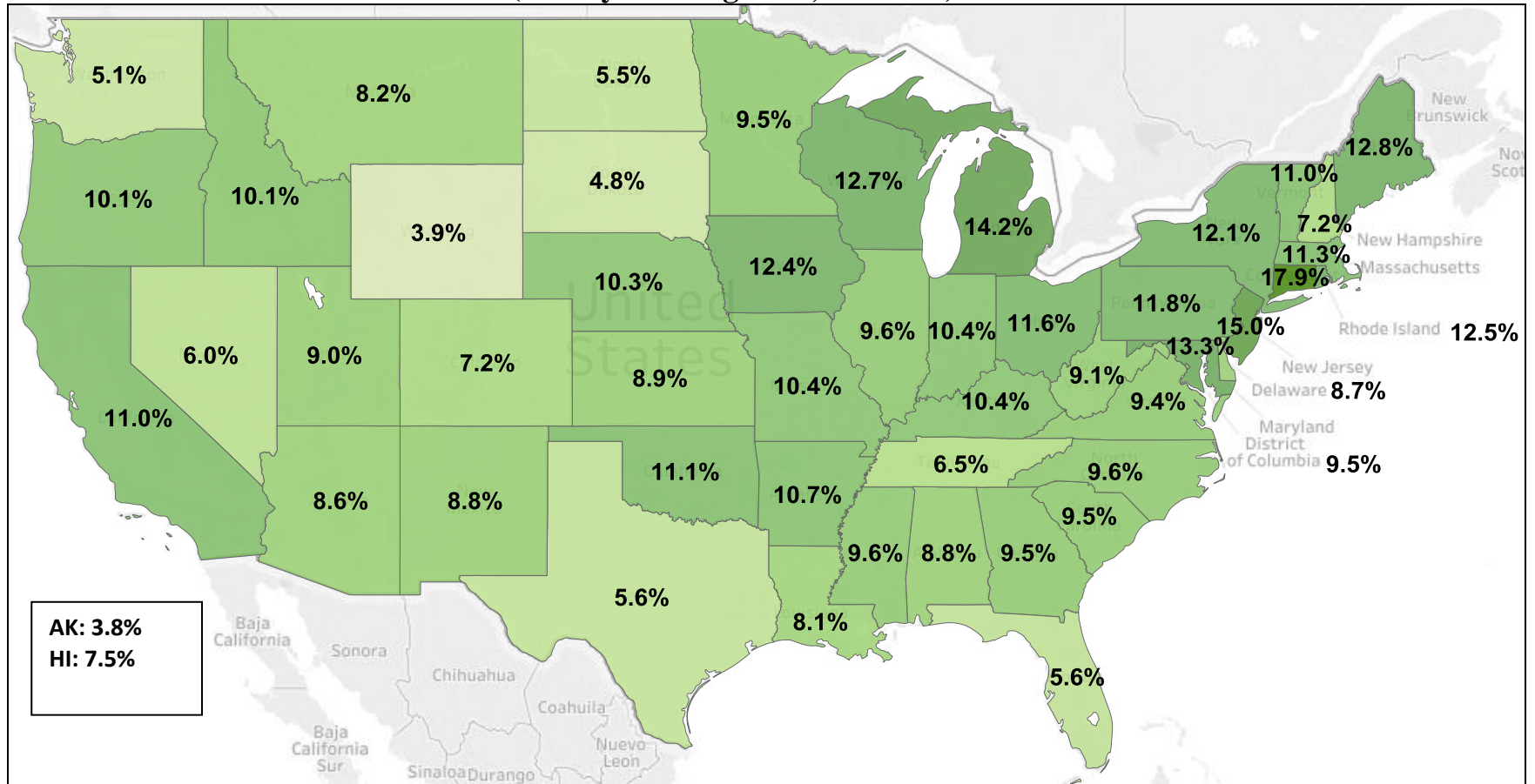
Map 8: Combined 2015 Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$100,000/Year)



The lighter the green in the map, the lower the tax burden as a percentage of income.



Map 9: Combined 2015 Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$150,000/Year)



The lighter the green in the map, the lower the tax burden as a percentage of income.

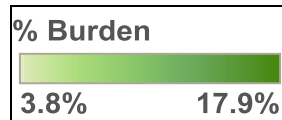
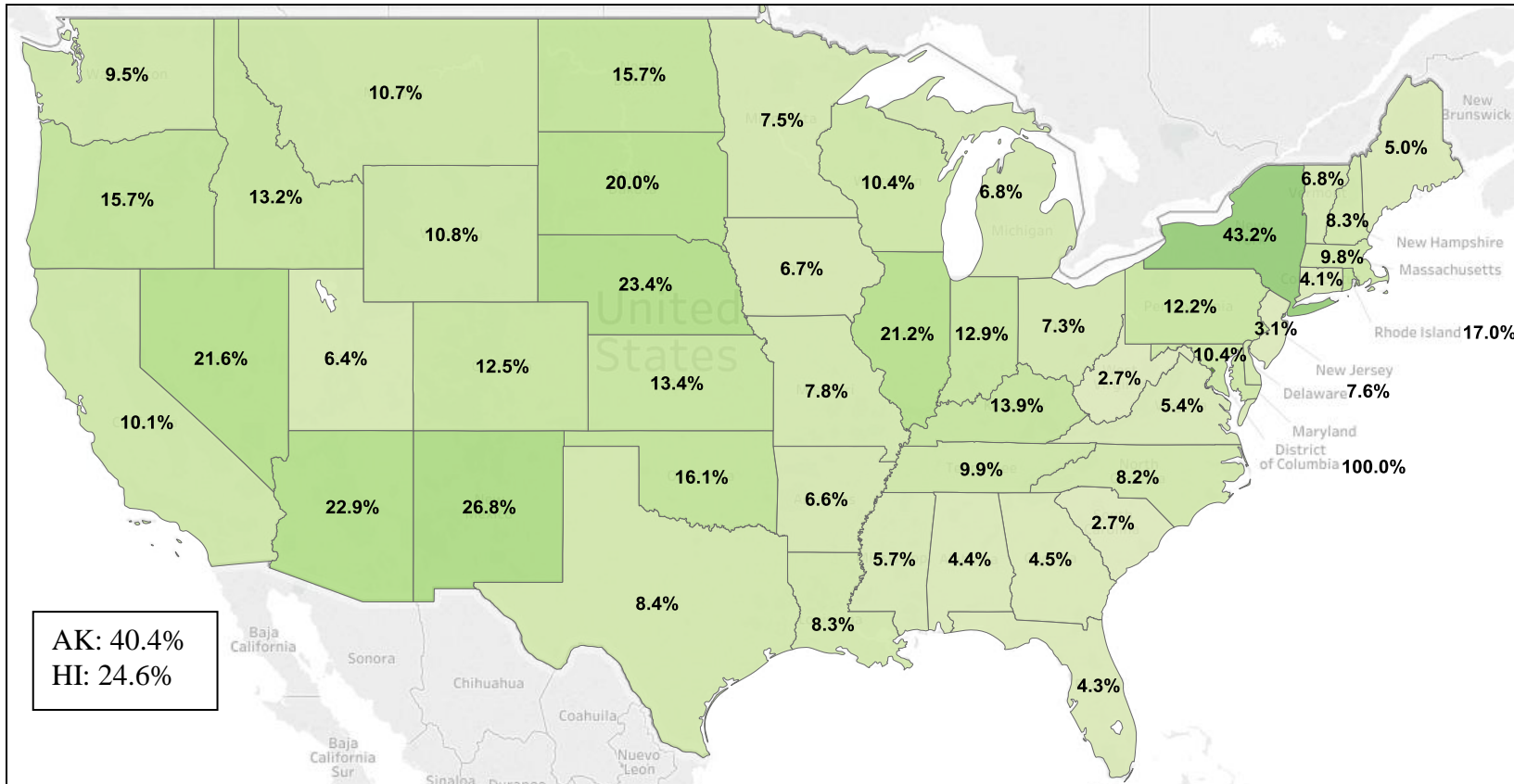


Table 27: Population Changes of the Largest City in Each State

City	State	2000 Population	2010 Population	2015 Population	% Difference 2010 to 2015
Birmingham	Alabama	242,820	212,026	212,461	0.21%
Anchorage	Alaska	260,283	293,405	298,695	1.80%
Phoenix	Arizona	1,321,045	1,450,267	1,563,025	7.77%
Little Rock	Arkansas	183,133	194,003	197,992	2.06%
Los Angeles	California	3,694,820	3,796,575	3,971,883	4.62%
Denver	Colorado	554,636	603,300	682,545	13.14%
Bridgeport	Connecticut	139,529	144,911	147,629	1.88%
Wilmington	Delaware	72,664	70,787	71,948	1.64%
Jacksonville	Florida	735,617	823,280	868,031	5.44%
Atlanta	Georgia	416,474	422,753	463,878	9.73%
Honolulu	Hawaii	371,657	338,680	352,769	4.16%
Boise	Idaho	185,787	206,355	218,281	5.78%
Chicago	Illinois	2,896,016	2,697,650	2,720,546	0.85%
Indianapolis	Indiana	791,926	821,632	853,173	3.84%
Des Moines	Iowa	198,682	204,573	210,330	2.81%
Wichita	Kansas	344,284	382,872	389,965	1.85%
Louisville	Kentucky	256,231	597,738	615,366	2.95%
New Orleans	Louisiana	484,674	347,900	389,617	11.99%
Portland	Maine	64,249	66,087	66,881	1.20%
Baltimore	Maryland	651,154	621,180	621,849	0.11%
Boston	Massachusetts	589,141	620,623	667,137	7.49%
Detroit	Michigan	951,270	711,049	677,116	-4.77%
Minneapolis	Minnesota	382,618	383,083	410,939	7.27%
Jackson	Mississippi	184,256	173,750	170,674	-1.77%
Kansas City	Missouri	441,545	460,732	475,378	3.18%
Billings	Montana	89,847	104,539	110,263	5.48%
Omaha	Nebraska	390,007	432,672	443,885	2.59%
Las Vegas	Nevada	478,434	584,780	623,747	6.66%
Manchester	New Hampshire	107,006	109,611	110,229	0.56%
Newark	New Jersey	273,546	277,347	281,944	1.66%
Albuquerque	New Mexico	448,607	547,092	559,121	2.20%
New York City	New York	8,008,278	8,192,426	8,550,405	4.37%
Charlotte	North Carolina	540,828	738,678	827,097	11.97%
Fargo	North Dakota	90,599	105,928	118,523	11.89%
Columbus	Ohio	711,470	790,694	850,106	7.51%
Oklahoma City	Oklahoma	506,132	582,118	631,346	8.46%
Portland	Oregon	529,121	585,427	632,309	8.01%
Philadelphia	Pennsylvania	1,517,550	1,528,338	1,567,442	2.56%
Providence	Rhode Island	173,618	178,114	179,207	0.61%
Columbia	South Carolina	116,278	130,430	133,803	2.59%
Sioux Falls	South Dakota	123,975	154,594	171,544	10.96%
Memphis	Tennessee	650,100	652,479	655,770	0.50%
Houston	Texas	1,953,631	2,114,761	2,296,224	8.58%
Salt Lake City	Utah	181,743	186,564	192,672	3.27%
Burlington	Vermont	38,889	42,417	42,452	0.08%
Virginia Beach	Virginia	425,257	439,038	452,745	3.12%
Seattle	Washington	563,374	610,383	684,451	12.13%
Charleston	West Virginia	53,421	51,400	49,736	-3.24%
Milwaukee	Wisconsin	596,974	595,120	600,155	0.85%
Cheyenne	Wyoming	53,011	59,901	63,335	5.73%
WASHINGTON, DC		572,059	605,126	672,228	11.09%

Source: U.S. Census Bureau. 2000 & 2010 data: Table DP-1. Profile of General Demographic Characteristics: 2010. 2015 Data: Annual Estimates of the Resident Population for Incorporated Places of 50,000 or More, Ranked by July 1, 2015 Population: April 1, 2010 to July 1, 2015 Release Date: May 2016. 2015 Estimates for Burlington, VT: Census Quick Facts, accessed October 26, 2016.

Map 10: Population of the Largest Cities as a % of the State's Total Population, 2015



Source: ORA Analysis of data from Table 27 and the U.S. Census Bureau, Population Division, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015.

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