Government of the District of Columbia


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# Tax Rates and Tax Burdens In the District of Columbia A Nationwide Comparison 


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## Executive Summary

State and local tax systems in the United States are widely diverse. The District of Columbia and governments in 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, 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 typically not a combination of both rates that would be applicable to residents 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 of three at five different income levels living in DC as well as the largest city in each state. The study includes four main tax types: 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 that the incidence of each tax is on the individual and makes other assumptions that affect the findings. These assumptions, the sources of data, and the steps taken to arrive at the tax burdens are laid out in the following pages.

The main findings are presented in Charts 1a-e and Tables 1a-e (pages 14-23), 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. DC's combined tax burdens are lower than the 50-city average for the lowest four income levels in the study, and higher than the average for the top income level.

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 30). 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 (or fees), graduated state tax rates, and flat state rates with exemptions. Income tax burdens in jurisdictions levying an income tax ranged from a low of negative $\$ 2,666$ in Burlington, Vermont, for a family earning $\$ 25,000$ (this negative amount represents an income tax refund due to a refundable Earned Income Tax Credit and renters property tax credit), to a high of $\$ 11,249$ for a family earning $\$ 150,000$ and living in New York, New York.

The District's 2019 income tax structure included six rates, with the highest rate of 8.95 percent applying to income over $\$ 1,000,000$. The District's income tax burden was below the average for the 44 states that levied an income tax for a family earning $\$ 25,000$ and $\$ 50,000$, and the second lowest overall at the $\$ 25,000$ income level due to a refundable Earned Income Tax Credit and renters property tax credit. The income tax burdens in DC were higher than the 44-city average for the highest three income levels, resulting from the progressive structure of the District's
income tax.
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 $\$ 4.27$ per $\$ 100$ of assessed value in Bridgeport, Connecticut, to a low of $\$ 0.35$ per $\$ 100$ of assessed value in Honolulu, Hawaii (Table 4, page 33). In addition, several jurisdictions allow tax exemptions and credits in the calculation of the real property tax liability (Table 6, page 36). Property tax burdens range from a low of $\$ 164$ on a family earning $\$ 50,000$ a year and living in Boston, Massachusetts (which has a generous homestead exemption/credit), to a high of $\$ 16,272$ on a family earning $\$ 150,000 /$ year and living in Newark, New Jersey.

In 2019, the District taxed residential property at a rate of $\$ 0.85$ per $\$ 100$ of assessed value; and offered a $\$ 74,850$ homestead deduction for owner-occupied residences. DC's property tax burdens were below the 50-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 (who are assumed to rent) was the third highest of all the cities (topped only by Boston and New York City). This is due to the high cost of rental housing, and the assumption that a portion of rental payments goes toward the property tax. (This does not include a property tax credit available to lower-income homeowners and renters called the Schedule H credit, which is administered through the income tax and thus reflected in the income tax burdens in this report.)

Sales tax: As shown in Table 7, page 40, residents in 46 of the 51 cities studied are subject to some form of sales and use tax. In 2019, the highest combined (state + local) sales tax rates were in Los Angeles, California (10.5 percent); Chicago, Illinois (10.25 percent); Seattle, Washington (10.1 percent); Birmingham, Alabama (10.0 percent); and New Orleans, Louisiana ( 9.45 percent). Residents of Honolulu, Hawaii; Portland, Maine; and Milwaukee, Wisconsin, have the lowest combined sales tax rates. These lowest rates range from 4.5 to 5.6 percent total. Sales tax burdens in jurisdictions levying a general sales tax ranged from a low of $\$ 779$ for a family earning $\$ 25,000$ in Boston, Massachusetts; to a high of $\$ 3,245$ for a family earning \$150,000 in Birmingham, Alabama.

The District's general sales tax of six percent is the fourth lowest of the rates in all 51 cities (the same as six other jurisdictions having the same rate), when looking at total state and local sales tax rates combined. Consequently, sales tax burdens in DC were lower than the 50city average at all five income levels.

Auto tax: Table 9 , page 44, 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 the vehicle. In addition, either state or local personal property taxes on automobiles are levied in 10 of the cities. Auto tax burdens ranged from a low of $\$ 103$ for a family earning $\$ 50,000$ in New Orleans, Louisiana, to a high of $\$ 3,279$ 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, DC does not charge an annual excise tax or personal property tax on automobiles. District gas tax rates were 23.5 cents per gallon, and DC auto tax burdens were below the 50-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 DC with those of the most populous city in each state, through December 31, 2019. Part II contains tax rate tables for DC and the 50 states for 12 different types of taxes as of January 1, 2020.

## 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 residents 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, DC Compared with Those in the Largest City in Each State, 2019 and (II) A Comparison of Selected Tax Rates in the District of Columbia with Those in the 50 States as of January 1, 2020. This information is requested annually by committees of the US Congress and the District of Columbia Council. It is provided pursuant to Public Law 93-407.

Correspondence concerning "Tax Rates and Tax Burdens in the District of Columbia - A Nationwide Comparison" should be addressed to Lori Metcalf, Fiscal Analyst, Economic Affairs Administration, Office of Revenue Analysis, $11014^{\text {th }}$ Street, SW, Suite W770, Washington, DC 20024, telephone (202) 727-7775.

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 conducted the research and prepared this document, and Kevin Hundelt, Farhad Niami, Charlotte Otabor, and Bob Zuraski who offered editing assistance.

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## Part

## Tax Burdens in Washington, DC Compared with <br> Those in the Largest City in Each State

## 2019

## 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 considering its unique situation of having taxes that both a city and a state normally levy. Therefore, a primary goal of this study is to add the nominal state and local tax rates in a consistent way 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 combined tax rates presented 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. Further, 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.

Further, the report does not include all taxes levied in each jurisdiction, as there are state and/or local taxes not captured in the calculations here. However, the report makes every effort

[^0]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, Las Vegas, New York City, and Washington, DC, 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, residents 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, DC, can restrict the tax base. The tax base can also be defined by the scope of a 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 to raise enough 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.

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 should be studied in the context of these differing conditions, in addition to the assumptions and methodologies used.

In addition to these factors which may apply to any jurisdiction, the District's circumstances further set it apart from other state and local governments. 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 higher 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-the District cannot tax the income of non-residents who work in the city, and as of Tax Year 2019 property assessments, 31 percent of the land value in the District is tax exempt. ${ }^{3}$ In spite of these restrictions, GAO notes that the District has a high revenue capacity. The city's economic and fiscal situation has changed over the past two decades; however, these factors remain relevant when considering the District's tax structure and its tax burdens.

[^1]
## CHAPTERI

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

Many 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, DC, with the burden for the households in the largest city in each of the 50 states for 2019. 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 income is assumed to have been earned in the city. The wage and salary split is assumed to be 70-30 between the two spouses. 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 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 2019 study are based on data from the US 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 2019 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 2014.
- 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 cities around the country, the assumption that families earning $\$ 25,000$ per year rent may be 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. In previous versions of this report, capital gains and interest income were included, as well as the assumptions of major itemized deductions on the following page. However, capital gains and interest income are not included in the current report to remove some of the variation that inconsistently changed the original income levels used, with little methodological benefit. (See the following page for more information on the itemized deductions that continue to be included in this report.) The following income levels are used for the income tax starting point in each state and the District of Columbia, where Spouse 1 is assumed to earn 70 percent of the total income and Spouse 2 is assumed to earn 30 percent.

| Gross <br> Income: | $\underline{\$ 25,000}$ | $\underline{\mathbf{5 0 , 0 0 0}}$ | $\underline{\mathbf{\$ 7 5 , 0 0 0}}$ | $\underline{\mathbf{\$ 1 0 0 , 0 0 0}}$ | $\underline{\mathbf{1 5 0 , 0 0 0}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Spouse 1: | $\$ 17,500$ | $\$ 35,000$ | $\$ 52,500$ | $\$ 70,000$ | $\$ 105,000$ |
| Spouse 2: | 7,500 | 15,000 | 22,500 | 30,000 | 45,000 |

Total itemized deductions used for calculating state and local income taxes, which are also used in the federal tax computation, are shown below. The methodology for two of the itemized deductions-the medical and dental expenses deduction and the charitable contribution deduction-have changed for the current report. In the past, the amounts for these deductions were based on actual average deduction amounts for taxpayers within a range around each income level for Washington, DC, taxpayers who were married filing jointly and had itemized deductions. However, the pool of married taxpayers filing jointly that also itemized was insufficient at the lower income levels to produce representative deduction amounts (perhaps
resulting from the Tax Cuts and Jobs Act of 2017 (TCJA) leading more taxpayers to take the standard deduction). Therefore, in the current report, Internal Revenue Service (IRS) data for all itemizers in tax year 2018 are used to calculate the average percent of AGI reflected by each of these deductions, respectively. For the gross medical deduction, the average share is eight percent of AGI. For charitable contributions, the level of four percent of AGI is applied across incomes. These changes in the methodology make the inputs in the income tax calculations more consistent across incomes and conform more closely to the methodology across the other tax types (which do not rely on DC-specific data).

Gross Income Level

| Deduction | $\mathbf{\$ 2 5 , 0 0 0}$ | $\mathbf{\$ 5 0 , 0 0 0}$ | $\mathbf{\$ 7 5 , 0 0 0}$ | $\mathbf{\$ 1 0 0 , 0 0 0}$ | $\mathbf{\$ 1 5 0 , 0 0 0}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Medical (Gross) 1/ | 2,000 | 4,000 | 6,000 | 8,000 | 12,000 |
| Nondeductible Medical 2/ | $\frac{-1,875}{125}$ | $\frac{-3,750}{250}$ | $-\frac{-5,625}{375}$ | $-\frac{-7,500}{50}$ | $\frac{-11,250}{750}$ |
| Net Medical Deduction |  |  |  | $3 /$ | $3 /$ |
| Deductible Taxes | $3 /$ | $3 /$ | $4 /$ | $4 /$ | $3 /$ |
| Mortgage Interest | $4 /$ | $4 /$ | 3,000 | 4,000 | $4 /$ |
| Contribution Deduction 2/, 5/ | 1,000 | 2,000 |  |  | 6,000 |
|  |  |  |  | $\mathbf{4 , 5 0 0}$ |  |
| Total Deductions-without taxes | $\mathbf{1 , 1 2 5}$ | $\mathbf{2 , 2 5 0}$ | $\mathbf{3 , 3 7 5}$ | $\mathbf{6 , 7 5 0}$ |  |
| And mortgage interest 6/ |  |  |  |  |  |

1/ Medical deductions in excess of 7.5 percent of federal AGI are allowed. All or part of medical deduction may be allowed in some states.
2/ New methodology used for assumptions of medical and contribution deductions. $8 \%$ of AGI for medical (minus the $7.5 \%$ of AGI limit); $4 \%$ for charitable contribution. Data from: Table 2.1. Returns with Itemized Deductions: Sources of Income, Adjustments, Itemized Deductions by Type, Exemptions, and Tax Items, by Size of Adjusted Gross Income, Tax Year 2018. Downloaded at this link.
3/The tax deduction varies from city to city and is based on real and personal property taxes computed in the current 2019 Study and individual income taxes computed in the 2018 study for tax year 2018.
4/ Assumed mortgage interest varies from city to city and is based on 5th year interest paid on a home purchased in 2014 at an interest rate of $4.17 \%$.
5/ Contribution Deduction represents charitable contributions claimed.
6/ Note: the current report does not include miscellaneous deductions, taxable interest income or capital gains which have been included in previous reports. Further, if all itemized deductions do not exceed the amount of the standard deduction, the standard deduction amount will be automatically used.

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 2019 federal individual income tax at each income level using the above assumptions. Many states in 2019 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.

Further, depending on levels of deductions used in each state, the standard deduction may be more advantageous for certain taxpayers. In 2019, the federal standard deduction was $\$ 24,400$ for married taxpayers filing jointly; and state level standard deductions varies by state (see Table

14 for more detail on state income tax parameters). Because the federal standard deduction was significantly increased in the TCJA of 2017, more of the families included will now take the standard deduction. For the current study of tax year 2019, all families earning $\$ 75,000$ per year and below, and most (41 of 51) of the families earning $\$ 100,000$, would take the federal standard deduction as it was higher than the itemized deductions assumed for these income levels in the report.

The 2019 deductible real and personal property taxes computed in the current year's 51city study are used for the 2019 property tax deduction. For the 2019 state and local individual income tax deduction, 2018 income tax burdens from the previous year's study were used (unless the calculated sales tax burdens were higher, which was often the case for the lower two income levels). Each of these figures was used in computing the 2019 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 market values, assessed values and the ratio of the two, 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 nominal property tax rates for each of the 51 cities, presented in Table 4 (page 33) indicate a wide range in these rates. This information is based upon survey data received from various state 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 35) 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 2019 American Community Survey (ACS) data, the estimated house value at the $\$ 75,000$ income level ranges from a high of $\$ 432,277$ in Honolulu, Hawaii, to a low of $\$ 123,661$ in Charleston, West Virginia.

The housing values for each income level (except the $\$ 25,000$ income level) shown in Table 5 are derived from 2019 ACS data. A series of assumptions and calculations were made 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 2019. 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 the mortgage interest deduction for the income tax burden. This method, which has been used in

[^2]each of the Tax Burden Studies since 2012, assumes 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). Since 2014, the median household income of mortgage holders, rather than the median income of all households, within an MSA is used to calculate the linear multiplier.

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 2019 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.

For the present 2019 Study (just as in the 2018 Study), median sales ratio statistics have been included where available to derive an "effective assessment level" that results from multiplying the statutory assessment level times the median sales ratio statistic. ${ }^{5}$ A sales ratio (or assessment sales ratio) is the ratio of the assessed value of the property to the sales price, or market value of the property; the median is the median ratio value of all the properties included in the study. ${ }^{6}$ Median sales ratios are a measure of the property valuation and assessment practices within a jurisdiction. If property assessments do not keep up with market value, residents' property taxes will be lower than they would otherwise be if taxed at the full market value of the property. Including the available median sales ratio statistic into the property tax burden calculations is an attempt to reflect how property tax systems in each jurisdiction are administered in practice.

In computing property tax burdens, it is also necessary to consider the various exemptions and credits noted in Table 6 (page 36). The variety of real property tax exemptions, most of which apply only to residential real property, is very broad. Table 6 does not include senior citizen exemptions and credits that are available in many 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 many years. Table 4 (page 33), which compares residential real estate tax rates for each city, does not reflect the various exemptions and credits noted in Table 6. Other exemptions and credits may be available, such as those mentioned above for senior citizens, but 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 Tables 1a-e of this study reflect the provisions in Table 6 applicable to families owning and residing in their homes. In certain jurisdictions, such as DC, MN, and VT, renters or property tax credits or refunds are provided through the income tax and in these cases those values are reflected in the income tax burdens.

## Property Tax Equivalent of Rent

As previously noted, the study assumes that the family with an annual income of $\$ 25,000$

[^3]does not own a home (and as a result does not pay property tax directly), but instead rents. Because renters indirectly pay property taxes through their rent, ${ }^{7}$ this study computes a percentage of said rent constituting property taxes. This concept is called the property tax equivalent of rent (PTER) and is an important tool in comparing the incidence of the property tax on renters versus homeowners. In a 2020 50-State Property Tax Comparison report, the Lincoln Institute of Land Policy and the Minnesota Center for Fiscal Excellence note that states vary in how they tax rental properties in comparison to homesteads; on average, cities tax apartments 34 percent more than homesteads. ${ }^{8}$ Their report presents a table illustrating this information for the largest city in each state; Charleston, South Carolina, has the largest difference in effective rates between apartment buildings and homesteads, taxing apartments more than four times the effective rate of that levied on homesteads. ${ }^{9}$ Conversely, in six of the largest cities in each state (and DC), apartments are given preferential treatment over homesteads with the most preference toward apartments given in Bridgeport, CT. ${ }^{10}$ In eight cities, apartments are given the same treatment as homesteads.

To relieve the implicit tax burden on renters that exists in various locations, some states have a property tax circuit breaker program that offsets renters' tax burdens (often through the income tax since they do not pay property taxes directly). These programs must make assumptions of the PTER to calculate the amount that renters are paying in property taxes, and the amount of relief they will receive through the circuit breaker program. Of the states that offer circuit breaker programs, the PTER assumptions generally range from six to 25 percent (NM has a low of six percent while MA uses a 25 percent assumption); on average, states assume that 17 percent of rent goes toward paying property taxes. ${ }^{11}$ DC's circuit breaker program assumes 20 percent.

Prior to the 2016 Tax Burden Study, a 20 percent assumption was used with some reservation given that it has a large impact on the calculated tax burdens of the families earning $\$ 25,000$ per year. The assumption often seemed unrealistic in cities with higher rental prices in which calculated PTERs would be the highest, especially given that rental buildings in more competitive markets may not be able to pass on all taxes paid since prices are set by the local market. And as the Lincoln report illustrates, the specific PTER level in a city is primarily based on the tax system in each jurisdiction. It is not clear whether states with higher PTER percentages in their circuit breakers have data leading to the choice of PTER percentage in their state, or if these states are using the circuit breaker to provide a subsidy to lower income renters hit hardest by higher rental markets. ${ }^{12}$ In a January 2016 report, the Minnesota Department of Revenue (MN DOR) used several techniques based on both ACS and internal tax data to assess the percentage of rent that constitutes property taxes throughout Minnesota. MN DOR found the statewide PTER hovered around 15 percent each year from 2009 to 2014, though in Minneapolis

[^4]it was often up to 16.9 percent. ${ }^{13}$
After considering the available information we decided to use a level of 15 percent for PTER in the 2016 Study and have continued to do so through the current 2019 Study to attempt to be more realistic in the property tax burden on renters, particularly in cities with more expensive rental markets. Future refinements may be made as new information and data become available. The PTER in each city was calculated as 15 percent of median rents in each MSA. These data were obtained from the US Department of Housing and Urban Development. ${ }^{14}$ This flat assumption means that any variation in the property tax burden for renters (families earning $\$ 25,000$ ) is driven by the housing market in each jurisdiction, and not the tax system in place.

Even with the lower assumption of PTER in the current study, this number still implies that the lowest income families in the report are spending, on average, 43 percent of their incomes on rent, with that portion being as high as 81 percent in Boston and New York City and 74 percent in Washington, DC. However, viewed in the context of some DC metro area statistics it may not be that unrealistic. In 2017, of renters earning less than $\$ 50,000 /$ year, more than 80 percent were spending over 30 percent of their income on rent. ${ }^{15}$ A 2017 DC Fiscal Policy Institute (DCFPI) analysis of 2014 Census data found that 42 percent of extremely low-income renters (earning between $\$ 16,100-\$ 32,100 /$ year for a family of four) in DC paid 80 percent of their income or more in rent. ${ }^{16}$ Further, a 2018 DCFPI analysis of 2016 Census data found that 63 percent of renters at this income level paid more than half of their income in rent. ${ }^{17}$

## Sales and Use Tax

The sales tax burdens included in this study are based on information from the 2019 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. The average expenditures by income level have been adjusted for a 3-person household. The same CES categories have been included since the 2013 Tax Burden Study and include: food (at home); food (away from home); over the counter drugs; housekeeping supplies, household furnishings, and equipment; apparel and footwear; new and used cars and trucks; vehicle finance charges, maintenance and repairs, and insurance; vehicle rentals, leases, and licenses and other charges; public and other transportation; entertainment: fees and admissions, audio visual equipment and services, and reading; and personal care products and services. ${ }^{18}$

The CES expenditure data and the specific state and local tax rates on each type of item are used to determine the sales tax that these expenditures would generate. The state and local general

[^5]2019 Tax Rates and Tax Burdens in the District of Columbia: A Nationwide Comparison
sales tax rates in each city are reported in Table 7, page 40. It is important to note that the sales tax burdens will be a function of the size of the sales tax base in a particular jurisdiction and the specific sales tax rates that apply to the consumer items included.

## 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 44) summarizes automobile ownership assumptions for each income level, including types of vehicles, weight, value, and annual gasoline consumption.

## GHAPTER 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 14-23). As reflected in Table 1, tax burdens across the 51 cities vary widely at all income levels. At the $\$ 25,000$ income level, the $\$ 4,660$ combined burden of all four taxes added together for Philadelphia, Pennsylvania, is significantly greater than the tax burden of $\$ 385$ that a similar taxpayer in Burlington, Vermont, would pay. At the $\$ 150,000$ income level, the Bridgeport, Connecticut, tax burden of $\$ 24,341$ is over four times the Anchorage, Alaska, tax burden of $\$ 5,805$. Differences in state and local tax structures, as well as housing markets and costs-of-living, contribute to the variation.

The highest combined tax burdens at the $\$ 25,000$ income level occur in Philadelphia, Pennsylvania; Seattle, Washington; Birmingham, Alabama; Los Angeles, California; and Chicago, Illinois. Philadelphia's local wage tax adds to the state income tax to make it the highest income tax burden 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 Seattle and Los Angeles put them on 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; Washington, DC; Albuquerque, New Mexico; and Billings, Montana. Each of these (except Montana) has a refundable EITC, and Burlington, Vermont; Washington, DC; and Minneapolis, Minnesota, each offer a renter's refund through the income tax, which contributes to their low rankings. Though Montana does not have a state EITC, it also does not have a sales tax which reduces the tax burden, particularly for low-income households.

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, Oregon. The lowest combined tax burdens at this income level are Anchorage, Alaska; Nashville, Tennessee; Cheyenne, Wyoming; Sioux Falls, South Dakota; and Fargo, North Dakota. These lower tax burdens are primarily a result of the lack of an income tax in all but one (ND) of these jurisdictions. Map 1 (page 24) illustrates the combined burden of all four taxes for a family earning $\$ 75,000 /$ year. ${ }^{19}$

No single pattern characterizes a high or a low tax burden city. High tax burden cities generally have a graduated individual income tax rate and/or high real estate tax rates and moderate to high housing values. Low tax burden cities generally have a low or no individual income tax and average or below average property tax rates.

[^6]2019 Tax Rates and Tax Burdens in the District of Columbia: A Nationwide Comparison

## Chart 1a: 2019 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).
Note: Negative bars represent income tax refunds due to state EITC refunds (or refundable renter's credits).
See Table 1a on the following page for totals and tax burdens as a percent of income and additional notes.

Table 1a: 2019 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 | 1,736 | 1,634 | 948 | 341 | 4,660 | 18.6\% |
| 2 | Seattle | WA | - | 2,723 | 1,383 | 448 | 4,555 | 18.2\% |
| 3 | Birmingham | AL | 908 | 1,373 | 1,750 | 237 | 4,269 | 17.1\% |
| 4 | Los Angeles | CA | (39) | 2,252 | 1,349 | 535 | 4,097 | 16.4\% |
| 5 | Chicago | IL | 271 | 1,796 | 1,376 | 578 | 4,021 | 16.1\% |
| 6 | Honolulu | HI | 0 | 2,682 | 855 | 370 | 3,907 | 15.6\% |
| 7 | Boston | MA | (385) | 3,060 | 779 | 253 | 3,707 | 14.8\% |
| 8 | Atlanta | GA | 273 | 1,809 | 1,368 | 221 | 3,671 | 14.7\% |
| 9 | Indianapolis | IN | 845 | 1,246 | 1,084 | 385 | 3,560 | 14.2\% |
| 10 | New York | NY | $(1,128)$ | 3,060 | 1,217 | 303 | 3,452 | 13.8\% |
| 11 | Kansas City | MO | 259 | 1,231 | 1,518 | 395 | 3,404 | 13.6\% |
| 12 | Nashville | TN | - | 1,591 | 1,551 | 226 | 3,368 | 13.5\% |
| 13 | Louisville | KY | 1,106 | 1,154 | 818 | 279 | 3,357 | 13.4\% |
| 14 | Charleston | WV | 818 | 997 | 921 | 484 | 3,221 | 12.9\% |
| 15 | New Orleans | LA | 130 | 1,384 | 1,562 | 119 | 3,195 | 12.8\% |
| 16 | Charlotte | NC | 131 | 1,692 | 973 | 393 | 3,189 | 12.8\% |
| 17 | Virginia Beach | VA | 0 | 1,777 | 868 | 484 | 3,129 | 12.5\% |
| 18 | Detroit | MI | 849 | 1,197 | 798 | 270 | 3,114 | 12.5\% |
| 19 | Charleston | SC | 0 | 1,589 | 1,319 | 204 | 3,112 | 12.4\% |
| 20 | Portland | OR | 637 | 2,147 | - | 312 | 3,097 | 12.4\% |
| 21 | Denver | CO | (276) | 2,012 | 1,062 | 290 | 3,088 | 12.4\% |
| 22 | Columbus | OH | 625 | 1,238 | 992 | 206 | 3,061 | 12.2\% |
| 23 | Jackson | MS | 87 | 1,269 | 1,414 | 279 | 3,049 | 12.2\% |
| 24 | Salt Lake City | UT | 0 | 1,352 | 1,247 | 313 | 2,912 | 11.6\% |
| 25 | Little Rock | AR | 221 | 1,181 | 1,347 | 159 | 2,908 | 11.6\% |
| 26 | Phoenix | AZ | (75) | 1,435 | 1,267 | 278 | 2,904 | 11.6\% |
| 27 | Las Vegas | NV | ) | 1,249 | 1,142 | 381 | 2,772 | 11.1\% |
| 28 | Houston | TX | - | 1,573 | 1,006 | 166 | 2,745 | 11.0\% |
| 29 | Portland | ME | (375) | 1,872 | 898 | 333 | 2,728 | 10.9\% |
| 30 | Oklahoma City | OK | (120) | 1,220 | 1,414 | 199 | 2,714 | 10.9\% |
| 31 | Sioux Falls | SD | - | 1,179 | 1,240 | 247 | 2,666 | 10.7\% |
| 32 | Providence | RI | (524) | 1,508 | 935 | 646 | 2,566 | 10.3\% |
| 33 | Wichita | KS | (262) | 1,231 | 1,415 | 167 | 2,551 | 10.2\% |
| 34 | Milwaukee | WI | (140) | 1,483 | 805 | 275 | 2,423 | 9.7\% |
| 35 | Jacksonville | FL | - | 1,224 | 942 | 212 | 2,378 | 9.5\% |
| 36 | Cheyenne | WY | - | 1,199 | 862 | 276 | 2,337 | 9.3\% |
| 37 | Omaha | NE | (349) | 1,193 | 1,021 | 461 | 2,327 | 9.3\% |
| 38 | Des Moines | IA | (111) | 1,179 | 930 | 273 | 2,272 | 9.1\% |
| 39 | Baltimore | MD | (526) | 1,676 | 811 | 258 | 2,219 | 8.9\% |
| 40 | Fargo | ND | 7 | 1,057 | 909 | 212 | 2,185 | 8.7\% |
| 41 | Newark | NJ | (882) | 2,012 | 780 | 259 | 2,169 | 8.7\% |
| 42 | Manchester | NH |  | 1,548 | 298 | 292 | 2,139 | 8.6\% |
| 43 | Wilmington | DE | 313 | 1,634 | 9 | 159 | 2,115 | 8.5\% |
| 44 | Bridgeport | CT | (796) | 1,661 | 872 | 375 | 2,112 | 8.4\% |
| 45 | Anchorage | AK | - | 1,780 | 83 | 203 | 2,066 | 8.3\% |
| 46 | Boise | ID | (290) | 1,057 | 1,011 | 228 | 2,006 | 8.0\% |
| 47 | Billings | MT | 241 | 1,114 | 18 | 425 | 1,798 | 7.2\% |
| 48 | Albuquerque | NM | (594) | 1,089 | 1,148 | 136 | 1,779 | 7.1\% |
| 49 | Washington | DC | $(2,572)$ | 2,772 | 945 | 193 | 1,339 | 5.4\% |
| 50 | Minneapolis | MN | $(2,258)$ | 1,481 | 1,071 | 293 | 587 | 2.3\% |
| 51 | Burlington | VT | $(2,666)$ | 1,899 | 916 | 236 | 385 | 1.5\% |
|  | AVERAGE MEDIAN | 1/ | $\begin{array}{r} (117) \\ 0 \end{array}$ | $\begin{aligned} & \mathbf{1 , 6 0 3} \\ & \mathbf{1 , 4 8 3} \end{aligned}$ | $\begin{array}{r} 1,025 \\ 999 \end{array}$ | $\begin{array}{r} 299 \\ 276 \\ \hline \end{array}$ | $\begin{aligned} & \mathbf{2 , 8 1 1} \\ & \mathbf{2 , 9 0 4} \end{aligned}$ | $\begin{aligned} & 11.2 \% \\ & 11.6 \% \end{aligned}$ |
| 1/ Based on jurisdictions levying tax. <br> 2/ Amounts in parentheses represent refundable State Earned Income Tax Credits. Negative income tax burdens in DC, MN, and VT also include a renter's rebate through the income tax. States with dashes 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. <br> 3/ Based on 15 percent of estimated annual rent. <br> 4/ States with dashes do not have a sales tax. For states with no state sales tax where there is a small sales tax burden listed, such as AK, DE, MT, and NH, some selective sales taxes apply to consumption items included. |  |  |  |  |  |  |  |  |

## Chart 1b: 2019 Estimated Burdens of Major Taxes for a Hypothetical Family Earning 50,000/Year



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

Table 1b: 2019 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$50,000/Year

| RANK | CITY | ST | TAXES |  |  |  | BURDEN |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { INCOME } \\ 2 / \end{gathered}$ | $\begin{gathered} \hline \text { PROPERTY } \\ 3 / \end{gathered}$ | $\begin{gathered} \hline \text { SALES } \\ 4 / \end{gathered}$ | AUTO | AMOUNT | PERCENT |
| 1 | Newark | NJ | 1,096 | 5,424 | 898 | 242 | 7,660 | 15.3\% |
| 2 | Baltimore | MD | 2,799 | 2,768 | 954 | 230 | 6,751 | 13.5\% |
| 3 | Bridgeport | CT | 649 | 4,625 | 1,019 | 342 | 6,635 | 13.3\% |
| 4 | Detroit | MI | 1,291 | 3,984 | 931 | 259 | 6,464 | 12.9\% |
| 5 | Louisville | KY | 3,299 | 1,522 | 942 | 267 | 6,031 | 12.1\% |
| 6 | Chicago | IL | 2,137 | 1,724 | 1,607 | 529 | 5,997 | 12.0\% |
| 7 | Philadelphia | PA | 3,471 | 1,105 | 1,085 | 297 | 5,958 | 11.9\% |
| 8 | Des Moines | IA | 1,808 | 2,515 | 1,082 | 257 | 5,662 | 11.3\% |
| 9 | Kansas City | MO | 1,692 | 1,565 | 1,740 | 400 | 5,398 | 10.8\% |
| 10 | Milwaukee | WI | 1,214 | 2,994 | 937 | 250 | 5,394 | 10.8\% |
| 11 | Columbus | OH | 2,187 | 1,776 | 1,139 | 184 | 5,286 | 10.6\% |
| 12 | Los Angeles | CA | - | 3,171 | 1,553 | 491 | 5,215 | 10.4\% |
| 13 | Indianapolis | IN | 2,326 | 1,190 | 1,280 | 389 | 5,184 | 10.4\% |
| 14 | Jackson | MS | 1,186 | 1,962 | 1,613 | 364 | 5,124 | 10.2\% |
| 15 | Birmingham | AL | 2,043 | 752 | 1,981 | 227 | 5,003 | 10.0\% |
| 16 | Atlanta | GA | 1,700 | 1,525 | 1,562 | 191 | 4,978 | 10.0\% |
| 17 | New York | NY | 2,076 | 1,135 | 1,418 | 268 | 4,897 | 9.8\% |
| 18 | Portland | OR | 2,352 | 2,240 | - | 279 | 4,871 | 9.7\% |
| 19 | Virginia Beach | VA | 1,940 | 1,242 | 1,003 | 472 | 4,656 | 9.3\% |
| 20 | Portland | ME | 678 | 2,496 | 1,059 | 420 | 4,653 | 9.3\% |
| 21 | Providence | RI | 758 | 2,071 | 1,102 | 650 | 4,581 | 9.2\% |
| 22 | Omaha | NE | 792 | 1,974 | 1,199 | 542 | 4,507 | 9.0\% |
| 23 | Phoenix | AZ | 550 | 1,933 | 1,479 | 330 | 4,292 | 8.6\% |
| 24 | Wilmington | DE | 2,097 | 2,035 | 14 | 141 | 4,288 | 8.6\% |
| 25 | Salt Lake City | UT | 1,246 | 1,231 | 1,433 | 330 | 4,240 | 8.5\% |
| 26 | Burlington | VT | (169) | 3,091 | 1,073 | 212 | 4,208 | 8.4\% |
| 27 | Charleston | WV | 1,973 | 705 | 1,061 | 467 | 4,206 | 8.4\% |
| 28 | Charlotte | NC | 1,470 | 1,240 | 1,121 | 371 | 4,201 | 8.4\% |
| 29 | Oklahoma City | OK | 1,141 | 1,245 | 1,622 | 184 | 4,192 | 8.4\% |
| 30 | Albuquerque | NM | 770 | 1,869 | 1,315 | 121 | 4,075 | 8.1\% |
| 31 | Wichita | KS | 1,231 | 1,042 | 1,609 | 148 | 4,030 | 8.1\% |
| 32 | Little Rock | AR | 1,214 | 1,040 | 1,541 | 144 | 3,939 | 7.9\% |
| 33 | New Orleans | LA | 1,275 | 773 | 1,785 | 103 | 3,937 | 7.9\% |
| 34 | Las Vegas | NV | - | 2,042 | 1,342 | 412 | 3,796 | 7.6\% |
| 35 | Minneapolis | MN | 930 | 1,264 | 1,257 | 295 | 3,747 | 7.5\% |
| 36 | Denver | CO | 1,151 | 965 | 1,236 | 349 | 3,702 | 7.4\% |
| 37 | Honolulu | HI | 1,572 | 729 | 968 | 330 | 3,599 | 7.2\% |
| 38 | Charleston | SC | 987 | 883 | 1,533 | 186 | 3,590 | 7.2\% |
| 39 | Houston | TX | - | 2,215 | 1,171 | 150 | 3,536 | 7.1\% |
| 40 | Seattle | WA | - | 1,455 | 1,601 | 434 | 3,490 | 7.0\% |
| 41 | Billings | MT | 1,693 | 1,268 | 29 | 414 | 3,404 | 6.8\% |
| 42 | Boston | MA | 1,929 | 164 | 909 | 359 | 3,362 | 6.7\% |
| 43 | Washington | DC | 1,338 | 682 | 1,115 | 176 | 3,311 | 6.6\% |
| 44 | Boise City | ID | 748 | 1,141 | 1,170 | 215 | 3,273 | 6.5\% |
| 45 | Manchester | NH | - | 2,495 | 387 | 279 | 3,162 | 6.3\% |
| 46 | Sioux Falls | SD | - | 1,458 | 1,419 | 224 | 3,101 | 6.2\% |
| 47 | Nashville | TN | - | 1,006 | 1,802 | 205 | 3,013 | 6.0\% |
| 48 | Fargo | ND | 282 | 1,393 | 1,051 | 195 | 2,920 | 5.8\% |
| 49 | Jacksonville | FL | - | 1,610 | 1,092 | 186 | 2,889 | 5.8\% |
| 50 | Cheyenne | WY | - | 1,279 | 1,006 | 474 | 2,759 | 5.5\% |
| 51 | Anchorage | AK | - | 1,571 | 130 | 199 | 1,899 | 3.8\% |
|  |  | 1/ | 1,451 | 1,757 | 1,188 | 298 | 4,413 | 8.8\% |
| MEDIAN |  |  | 1,283 | 1,522 | 1,155 | 268 | 4,208 | 8.4\% |
| 1/ Based on jurisdictions levying tax. <br> 2/ States with dashes 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. <br> 3/ Some jurisdictions, including MN and VT offer a property tax credit of property taxes paid through the income tax and those refunds are reflected in the income tax burdens. <br> 4/ States with dashes do not have a sales tax. For states with no state sales tax where there is a small sales tax burden listed, such as AK, DE, MT, and NH, some selective sales taxes apply to consumption items included. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

## Chart 1c: 2018 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$75,000/Year



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

Part I: Tax Burdens in Washington, DC Compared with Those in the Largest City in Each State

## Table 1c: 2019 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$75,000/Year

| RANK | CITY | ST | TAXES |  |  |  | BURDEN |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | INCOME 2/ | PROPERTY 3/ | SALES 4/ | AUTO | AMOUNT | PERCENT |
| 1 | Detroit | MI | 4,384 | 5,976 | 1,134 | 536 | 12,030 | 16.0\% |
| 2 | Bridgeport | CT | 2,844 | 6,938 | 1,271 | 682 | 11,735 | 15.6\% |
| 3 | Newark | NJ | 1,772 | 8,136 | 1,119 | 483 | 11,510 | 15.3\% |
| 4 | Baltimore | MD | 4,786 | 4,152 | 1,192 | 475 | 10,605 | 14.1\% |
| 5 | Milwaukee | WI | 3,095 | 4,490 | 1,146 | 490 | 9,221 | 12.3\% |
| 6 | Chicago | IL | 3,228 | 2,930 | 1,922 | 1,037 | 9,118 | 12.2\% |
| 7 | Louisville | KY | 4,948 | 2,284 | 1,158 | 639 | 9,028 | 12.0\% |
| 8 | Philadelphia | PA | 5,206 | 1,919 | 1,326 | 575 | 9,027 | 12.0\% |
| 9 | Des Moines | IA | 3,151 | 3,834 | 1,317 | 605 | 8,907 | 11.9\% |
| 10 | Kansas City | MO | 3,272 | 2,348 | 2,055 | 1,050 | 8,725 | 11.6\% |
| 11 | New York | NY | 4,489 | 1,816 | 1,739 | 541 | 8,586 | 11.4\% |
| 12 | Los Angeles | CA | 451 | 4,797 | 1,886 | 1,023 | 8,157 | 10.9\% |
| 13 | Portland | ME | 2,148 | 3,939 | 1,275 | 762 | 8,125 | 10.8\% |
| 14 | Columbus | OH | 3,644 | 2,664 | 1,383 | 360 | 8,050 | 10.7\% |
| 15 | Atlanta | GA | 3,137 | 2,524 | 1,840 | 370 | 7,871 | 10.5\% |
| 16 | Providence | RI | 1,696 | 3,106 | 1,332 | 1,708 | 7,842 | 10.5\% |
| 17 | Indianapolis | IN | 3,604 | 1,853 | 1,562 | 776 | 7,795 | 10.4\% |
| 18 | Omaha | NE | 2,007 | 2,961 | 1,467 | 1,359 | 7,794 | 10.4\% |
| 19 | Jackson | MS | 2,212 | 3,015 | 1,862 | 691 | 7,780 | 10.4\% |
| 20 | Portland | OR | 3,774 | 3,360 | - | 539 | 7,672 | 10.2\% |
| 21 | Virginia Beach | VA | 3,377 | 1,862 | 1,175 | 1,131 | 7,545 | 10.1\% |
| 22 | Birmingham | AL | 3,048 | 1,155 | 2,293 | 538 | 7,034 | 9.4\% |
| 23 | Charleston | WV | 3,518 | 1,058 | 1,296 | 1,106 | 6,978 | 9.3\% |
| 24 | Salt Lake City | UT | 2,809 | 1,846 | 1,718 | 581 | 6,954 | 9.3\% |
| 25 | Phoenix | AZ | 1,191 | 3,199 | 1,799 | 645 | 6,834 | 9.1\% |
| 26 | Wilmington | DE | 3,478 | 3,053 | 19 | 276 | 6,825 | 9.1\% |
| 27 | Charlotte | NC | 2,809 | 1,859 | 1,316 | 821 | 6,806 | 9.1\% |
| 28 | Albuquerque | NM | 2,069 | 2,818 | 1,569 | 252 | 6,708 | 8.9\% |
| 29 | Oklahoma City | OK | 2,511 | 1,874 | 1,863 | 352 | 6,600 | 8.8\% |
| 30 | Burlington | VT | 165 | 4,637 | 1,307 | 415 | 6,523 | 8.7\% |
| 31 | Minneapolis | MN | 2,209 | 2,128 | 1,553 | 580 | 6,470 | 8.6\% |
| 32 | Boise | ID | 2,479 | 2,077 | 1,376 | 407 | 6,338 | 8.5\% |
| 33 | Wichita | KS | 2,546 | 1,586 | 1,880 | 287 | 6,300 | 8.4\% |
| 34 | New Orleans | LA | 2,155 | 1,726 | 2,131 | 209 | 6,221 | 8.3\% |
| 35 | Charleston | SC | 2,737 | 1,277 | 1,817 | 375 | 6,207 | 8.3\% |
| 36 | Little Rock | AR | 2,245 | 1,747 | 1,843 | 323 | 6,157 | 8.2\% |
| 37 | Washington | DC | 2,891 | 1,333 | 1,370 | 387 | 5,980 | 8.0\% |
| 38 | Denver | CO | 2,231 | 1,448 | 1,518 | 658 | 5,856 | 7.8\% |
| 39 | Honolulu | HI | 2,766 | 1,233 | 1,129 | 688 | 5,816 | 7.8\% |
| 40 | Billings | MT | 3,129 | 1,902 | 38 | 690 | 5,759 | 7.7\% |
| 41 | Las Vegas | NV | - | 3,064 | 1,661 | 717 | 5,442 | 7.3\% |
| 42 | Boston | MA | 3,192 | 247 | 1,104 | 635 | 5,177 | 6.9\% |
| 43 | Houston | TX | - | 3,408 | 1,434 | 295 | 5,137 | 6.8\% |
| 44 | Seattle | WA | - | 2,182 | 1,945 | 901 | 5,028 | 6.7\% |
| 45 | Manchester | NH | - | 3,743 | 441 | 665 | 4,849 | 6.5\% |
| 46 | Jacksonville | FL | - | 2,776 | 1,345 | 371 | 4,492 | 6.0\% |
| 47 | Fargo | ND | 557 | 2,089 | 1,277 | 382 | 4,305 | 5.7\% |
| 48 | Sioux Falls | SD | - | 2,187 | 1,634 | 475 | 4,296 | 5.7\% |
| 49 | Nashville | TN | - | 1,509 | 2,141 | 401 | 4,051 | 5.4\% |
| 50 | Cheyenne | WY | - | 1,918 | 1,235 | 829 | 3,982 | 5.3\% |
| 51 | Anchorage | AK | - | 2,356 | 170 | 361 | 2,887 | 3.8\% |
|  | AVERAGE | 1/ | 2,809 | 2,713 | 1,428 | 617 | 7,042 | 9.4\% |
|  | MEDIAN |  | 2,827 | 2,284 | 1,379 | 575 | 6,825 | 9.1\% |
| 1/ Based on jurisdictions levying tax. <br> 2/ States with dashes 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. 3/ Some jurisdictions, including MN and VT offer a property tax credit of property taxes paid through the income tax and those refunds are reflected in the income tax burdens. <br> 4/ States with dashes do not have a sales tax. For states with no state sales tax where there is a small sales tax burden listed, such as AK, DE, MT, and NH, some selective sales taxes apply to consumption items included. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

## Chart 1d: 2019 Estimated Burdens of Major Taxes for a Hypothetical Family Earning \$100,000/Year



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

Table 1d: 2019 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 | Detroit | MI | 6,046 | 7,968 | 1,342 | 560 | 15,915 | 15.9\% |
| 2 | Bridgeport | CT | 4,397 | 9,251 | 1,524 | 699 | 15,871 | 15.9\% |
| 3 | Newark | NJ | 2,634 | 10,848 | 1,324 | 518 | 15,324 | 15.3\% |
| 4 | Baltimore | MD | 5,450 | 5,536 | 1,432 | 510 | 12,928 | 12.9\% |
| 5 | Milwaukee | WI | 4,569 | 5,987 | 1,362 | 498 | 12,416 | 12.4\% |
| 6 | Des Moines | IA | 4,630 | 5,152 | 1,576 | 633 | 11,991 | 12.0\% |
| 7 | Chicago | IL | 4,405 | 4,137 | 2,277 | 1,107 | 11,926 | 11.9\% |
| 8 | Philadelphia | PA | 6,941 | 2,732 | 1,553 | 590 | 11,816 | 11.8\% |
| 9 | Louisville | KY | 6,597 | 3,045 | 1,377 | 666 | 11,684 | 11.7\% |
| 10 | New York | NY | 6,514 | 2,498 | 2,059 | 561 | 11,633 | 11.6\% |
| 11 | Portland | ME | 3,821 | 5,383 | 1,517 | 817 | 11,538 | 11.5\% |
| 12 | Kansas City | MO | 4,847 | 3,131 | 2,435 | 1,103 | 11,516 | 11.5\% |
| 13 | Los Angeles | CA | 1,224 | 6,424 | 2,225 | 1,050 | 10,922 | 10.9\% |
| 14 | Omaha | NE | 3,697 | 3,948 | 1,750 | 1,386 | 10,781 | 10.8\% |
| 15 | Columbus | OH | 5,161 | 3,551 | 1,630 | 367 | 10,709 | 10.7\% |
| 16 | Atlanta | GA | 4,575 | 3,524 | 2,185 | 380 | 10,663 | 10.7\% |
| 17 | Jackson | MS | 3,248 | 4,068 | 2,197 | 741 | 10,254 | 10.3\% |
| 18 | Portland | OR | 5,203 | 4,480 | - | 555 | 10,237 | 10.2\% |
| 19 | Providence | RI | 2,695 | 4,142 | 1,602 | 1,789 | 10,228 | 10.2\% |
| 20 | Indianapolis | IN | 4,883 | 2,505 | 1,873 | 814 | 10,076 | 10.1\% |
| 21 | Virginia Beach | VA | 4,815 | 2,483 | 1,388 | 1,185 | 9,872 | 9.9\% |
| 22 | Burlington | VT | 1,663 | 6,182 | 1,554 | 423 | 9,822 | 9.8\% |
| 23 | Boise | ID | 4,211 | 3,217 | 1,616 | 415 | 9,459 | 9.5\% |
| 24 | Salt Lake City | UT | 4,371 | 2,461 | 2,032 | 588 | 9,452 | 9.5\% |
| 25 | Wilmington | DE | 5,034 | 4,071 | 23 | 281 | 9,409 | 9.4\% |
| 26 | Minneapolis | MN | 3,930 | 2,992 | 1,867 | 617 | 9,406 | 9.4\% |
| 27 | Charleston | WV | 5,143 | 1,410 | 1,546 | 1,158 | 9,257 | 9.3\% |
| 28 | Albuquerque | NM | 3,294 | 3,766 | 1,898 | 273 | 9,232 | 9.2\% |
| 29 | Phoenix | AZ | 1,882 | 4,465 | 2,149 | 688 | 9,184 | 9.2\% |
| 30 | Charlotte | NC | 4,148 | 2,479 | 1,575 | 847 | 9,049 | 9.0\% |
| 31 | Washington | DC | 4,827 | 1,983 | 1,643 | 436 | 8,889 | 8.9\% |
| 32 | Birmingham | AL | 4,063 | 1,557 | 2,690 | 560 | 8,870 | 8.9\% |
| 33 | Oklahoma City | OK | 3,761 | 2,503 | 2,198 | 357 | 8,819 | 8.8\% |
| 34 | Charleston | SC | 4,487 | 1,669 | 2,162 | 381 | 8,699 | 8.7\% |
| 35 | Wichita | KS | 3,971 | 2,131 | 2,205 | 294 | 8,600 | 8.6\% |
| 36 | Little Rock | AR | 3,591 | 2,454 | 2,188 | 333 | 8,566 | 8.6\% |
| 37 | New Orleans | LA | 3,035 | 2,679 | 2,513 | 216 | 8,443 | 8.4\% |
| 38 | Billings | MT | 4,550 | 2,536 | 47 | 707 | 7,840 | 7.8\% |
| 39 | Honolulu | HI | 4,047 | 1,737 | 1,322 | 716 | 7,822 | 7.8\% |
| 40 | Denver | CO | 3,314 | 1,931 | 1,808 | 698 | 7,751 | 7.8\% |
| 41 | Boston | MA | 4,454 | 732 | 1,302 | 682 | 7,170 | 7.2\% |
| 42 | Las Vegas | NV | - | 4,085 | 1,987 | 873 | 6,945 | 6.9\% |
| 43 | Houston | TX | - | 4,602 | 1,720 | 300 | 6,621 | 6.6\% |
| 44 | Manchester | NH | - | 4,991 | 531 | 693 | 6,214 | 6.2\% |
| 45 | Seattle | WA | - | 2,909 | 2,297 | 940 | 6,146 | 6.1\% |
| 46 | Jacksonville | FL | - | 3,942 | 1,602 | 390 | 5,934 | 5.9\% |
| 47 | Fargo | ND | 923 | 2,785 | 1,530 | 388 | 5,626 | 5.6\% |
| 48 | Sioux Falls | SD | - | 2,916 | 1,936 | 483 | 5,335 | 5.3\% |
| 49 | Nashville | TN | - | 2,012 | 2,532 | 408 | 4,952 | 5.0\% |
| 50 | Cheyenne | WY | - | 2,557 | 1,481 | 900 | 4,938 | 4.9\% |
| 51 | Anchorage | AK | - | 3,201 | 211 | 366 | 3,778 | 3.8\% |
| AVERAGEMEDIAN |  |  | 4,168 | $3,681$ | 1,696 | 646 | $\mathbf{9 , 4 2 2}$ | 9.4\% |
|  |  |  | 4,384 | $\mathbf{3 , 1 3 1}$ | 1,636 | 588 | 9,406 | 9.4\% |
| 1/ Based on jurisdictions levying tax. <br> 2/ States with dashes 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. <br> 3/ States with dashes do not have a sales tax. For states with no state sales tax where there is a small sales tax burden listed, such as AK, DE, MT, and NH , some selective sales taxes apply to consumption items included. |  |  |  |  |  |  |  |  |

Part I: Tax Burdens in Washington, DC Compared with Those in the Largest City in Each State

## Chart 1e: 2019 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 and additional notes.

Part I: Tax Burdens in Washington, DC Compared with Those in the Largest City in Each State
Table 1e: 2019 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 | 7,749 | 13,876 | 1,896 | 819 | 24,341 | 16.2\% |
| 2 | Newark | NJ | 5,493 | 16,272 | 1,639 | 534 | 23,938 | 16.0\% |
| 3 | Detroit | MI | 9,371 | 11,951 | 1,641 | 775 | 23,738 | 15.8\% |
| 4 | Baltimore | MD | 8,588 | 8,304 | 1,786 | 524 | 19,203 | 12.8\% |
| 5 | Portland | ME | 6,830 | 8,270 | 1,843 | 1,779 | 18,722 | 12.5\% |
| 6 | Milwaukee | WI | 7,444 | 8,981 | 1,678 | 510 | 18,613 | 12.4\% |
| 7 | Des Moines | IA | 7,887 | 7,788 | 1,930 | 969 | 18,574 | 12.4\% |
| 8 | New York | NY | 11,249 | 3,861 | 2,518 | 571 | 18,198 | 12.1\% |
| 9 | Kansas City | MO | 7,728 | 4,696 | 2,971 | 1,994 | 17,390 | 11.6\% |
| 10 | Los Angeles | CA | 3,530 | 9,677 | 2,727 | 1,394 | 17,328 | 11.6\% |
| 11 | Omaha | NE | 6,684 | 5,922 | 2,156 | 2,555 | 17,318 | 11.5\% |
| 12 | Philadelphia | PA | 10,412 | 4,359 | 1,891 | 612 | 17,274 | 11.5\% |
| 13 | Louisville | KY | 9,896 | 4,567 | 1,704 | 1,069 | 17,237 | 11.5\% |
| 14 | Chicago | IL | 6,759 | 6,550 | 2,755 | 1,078 | 17,142 | 11.4\% |
| 15 | Burlington | VT | 5,097 | 9,273 | 1,897 | 434 | 16,701 | 11.1\% |
| 16 | Providence | RI | 5,069 | 6,213 | 1,952 | 3,279 | 16,513 | 11.0\% |
| 17 | Columbus | OH | 8,531 | 5,327 | 1,996 | 378 | 16,231 | 10.8\% |
| 18 | Jackson | MS | 5,275 | 6,175 | 2,631 | 1,759 | 15,840 | 10.6\% |
| 19 | Portland | OR | 8,441 | 6,719 | - | 572 | 15,732 | 10.5\% |
| 20 | Minneapolis | MN | 7,503 | 4,720 | 2,305 | 1,099 | 15,626 | 10.4\% |
| 21 | Boise | ID | 7,457 | 5,499 | 1,971 | 427 | 15,354 | 10.2\% |
| 22 | Indianapolis | IN | 7,508 | 3,811 | 2,304 | 1,164 | 14,787 | 9.9\% |
| 23 | Atlanta | GA | 6,206 | 5,523 | 2,655 | 394 | 14,778 | 9.9\% |
| 24 | Wilmington | DE | 8,347 | 6,106 | 27 | 290 | 14,771 | 9.8\% |
| 25 | Washington | DC | 8,745 | 3,285 | 2,030 | 445 | 14,505 | 9.7\% |
| 26 | Charleston | WV | 8,391 | 2,115 | 1,907 | 1,760 | 14,173 | 9.4\% |
| 27 | Salt Lake City | UT | 7,318 | 3,692 | 2,485 | 630 | 14,125 | 9.4\% |
| 28 | Phoenix | AZ | 3,062 | 6,998 | 2,650 | 1,326 | 14,036 | 9.4\% |
| 29 | Albuquerque | NM | 5,649 | 5,664 | 2,315 | 288 | 13,917 | 9.3\% |
| 30 | Virginia Beach | VA | 6,626 | 3,725 | 1,662 | 1,830 | 13,843 | 9.2\% |
| 31 | Little Rock | AR | 6,651 | 3,869 | 2,597 | 433 | 13,550 | 9.0\% |
| 32 | Charleston | SC | 7,984 | 2,454 | 2,613 | 390 | 13,440 | 9.0\% |
| 33 | Charlotte | NC | 6,643 | 3,719 | 1,897 | 1,177 | 13,436 | 9.0\% |
| 34 | New Orleans | LA | 4,952 | 4,585 | 3,066 | 257 | 12,860 | 8.6\% |
| 35 | Oklahoma City | OK | 5,923 | 3,761 | 2,636 | 375 | 12,695 | 8.5\% |
| 36 | Wichita | KS | 6,306 | 3,219 | 2,665 | 303 | 12,493 | 8.3\% |
| 37 | Boston | MA | 6,941 | 2,377 | 1,605 | 1,570 | 12,493 | 8.3\% |
| 38 | Birmingham | AL | 5,898 | 2,362 | 3,245 | 888 | 12,393 | 8.3\% |
| 39 | Billings | MT | 7,390 | 3,804 | 55 | 1,015 | 12,264 | 8.2\% |
| 40 | Honolulu | HI | 7,151 | 2,746 | 1,596 | 722 | 12,215 | 8.1\% |
| 41 | Denver | CO | 5,562 | 2,896 | 2,233 | 1,385 | 12,076 | 8.1\% |
| 42 | Las Vegas | NV | - | 6,127 | 2,462 | 1,525 | 10,114 | 6.7\% |
| 43 | Manchester | NH | - | 7,486 | 617 | 1,317 | 9,420 | 6.3\% |
| 44 | Houston | TX | - | 6,989 | 2,119 | 307 | 9,415 | 6.3\% |
| 45 | Jacksonville | FL | - | 6,274 | 1,982 | 403 | 8,658 | 5.8\% |
| 46 | Seattle | WA | - | 4,364 | 2,804 | 1,356 | 8,525 | 5.7\% |
| 47 | Fargo | ND | 1,923 | 4,178 | 1,880 | 396 | 8,378 | 5.6\% |
| 48 | Sioux Falls | SD | - | 4,375 | 2,317 | 494 | 7,186 | 4.8\% |
| 49 | Cheyenne | WY | - | 3,836 | 1,833 | 1,366 | 7,035 | 4.7\% |
| 50 | Nashville | TN | - | 3,018 | 3,118 | 418 | 6,554 | 4.4\% |
| 51 | Anchorage | AK | - | 5,165 | 247 | 393 | 5,805 | 3.9\% |
| AVERAGEMEDIAN |  |  | 6,956 | 5,638 | 2,070 | 936 | 14,332 | 9.6\% |
|  |  |  | 7,046 | 4,720 | 2,013 | 722 | 14,173 | 9.4\% |
| 1/ Based on jurisdictions levying tax. <br> 2/ States with dashes 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. <br> 3/ States with dashes do not have a sales tax. For states with no state sales tax where there is a small sales tax burden listed, such as AK, DE, MT, and NH , some selective sales taxes apply to consumption items included. |  |  |  |  |  |  |  |  |

Map 1: Total 2019 Tax Burdens (Income, Property, Sales, \& Auto) as a \% of Income (Family Earning \$75,000/Year)


Source: ORA Analysis. The lighter blue shading represents a lower tax burden.

> Percent Burden | 3.8\% |
| :--- |

## 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 an individual income tax at the state and/or local levels (In NH and TN only interest and dividends are subject to the income tax, but they are included in this count). 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 30) and Chart 2 (page 27).

In twenty-four of the cities that are in states that levy an income tax, the percentage of income paid in individual income taxes by the family earning $\$ 25,000$ per year is zero percent (or less than zero due to refundable credits). Notably, residents of Burlington, Vermont would receive a refund of $\$ 2,666$, making it the lowest income tax burden on a family earning $\$ 25,000$ per year. The highest income tax burden at this lower income level is $\$ 1,736$, or 6.94 percent in Philadelphia, Pennsylvania, and next at $\$ 1,106$, or 4.4 percent in Louisville, Kentucky. At the $\$ 150,000$ income level, the burden ranges from a low of $\$ 1,923$, or 1.3 percent of income in Fargo, North Dakota, to $\$ 11,249$ or 7.5 percent in New York City, New York. (New Hampshire and Tennessee income taxes are 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 on page 27 provides the income tax burdens on each hypothetical family, sorted by the family earning $\$ 150,000$ per year. Viewing the data this way allows an assessment of how income tax burdens differ between the low- and high-income families in a city and state. Map 2 on page 28 presents the income tax burdens for the family earning $\$ 75,000 /$ year.

Several state individual income tax systems are indexed for inflation either for their rate brackets or credits or both. Indexing allows dollar amounts imbedded in the tax code to retain their value and not erode. For example, a $\$ 10,000$ bracket, the level at which income is taxed at a certain rate, established in 2010 would have a "real" value of just over $\$ 12,000$ now and indexing would keep that value up to date. Absent indexing, a taxpayer would have more of their income which presumably is growing with inflation exposed to the next bracket and a higher rate. 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 (page 29) lists 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 (or
fees), 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 24 of the cities (this count includes DC). Taxpayers in six cities are subject to a flat state tax rate with exemptions. Thirteen states have either graduated or flat state rates and flat local rates (or fees). New York City residents are subject to separate state and local income taxes, both of which are characterized by graduated rate schedules. Fourteen cities in the current study apply a local income tax or fee on wages (see table below).

Local Income Tax Rates, 2019

| City | State | Tax | Rate |
| :--- | :--- | :--- | :--- |
| Birmingham | AL | Income Tax | $1.0 \%$ |
| Denver | CO | Occupational Privilege Tax | $\$ 5.75 /$ month |
| Wilmington | DE | Income Tax | $1.25 \%$ |
| Indianapolis | IN | (County) Income Tax | $2.02 \%$ |
| Louisville | KY | Income Tax | $2.2 \%$ |
| Baltimore | MD | Income Tax | $3.2 \%$ |
| Detroit | MI | Income Tax | $2.4 \%$ |
| Kansas City | MO | Earnings Tax | $1.0 \%$ |
| Newark | NJ | Payroll Tax | $1.0 \%$ |
| New York | NY | Income Tax | $3.078-3.876 \%$ (graduated rates) |
| Columbus | OH | Income Tax | $2.5 \%$ |
| Portland | OR | (Tri-Met Transit District) Payroll Tax | $0.76 \%$ |
| Philadelphia | PA | Wage Tax | $3.87 \%$ |
| Charleston | WV | City Service Fee | $\$ 13 /$ month |
| S |  |  |  |

[^7]Chart 2: 2019 Income Tax Burdens for All Income Levels


Source: ORA analysis; see description on page 6-8 for data sources and methodology.
Note: All data are sorted by the $\$ 150,000 /$ year income level. Negative bars under the $\$ 25,000 /$ year category 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.


Source: ORA Analysis. Note: The lighter green shading represents a lower tax burden. States with no label do not have an income tax.
\$165 \$5,206

Table 2: States That Index Some Part of Their Individual Income Tax, 2019

| STATE |  |
| :--- | :--- |
|  |  |
| Arizona | Tax brackets, standard deduction, personal exemption |
| Arkansas | Tax brackets, personal exemption |
| California | Tax brackets (partial), exemption (credit), standard deduction |
| Colorado | Standard deduction |
| Idaho | Tax brackets, standard deduction, |
| Illinois | Personal exemption |
| Iowa | Tax brackets, standard deduction |
| Kentucky | Standard deduction |
| Maine | Tax brackets, standard deduction |
| Michigan | Personal exemption |
| Minnesota | Tax brackets, exemptions, standard deduction |
| Missouri | Tax brackets, standard deduction |
| Montana | Tax brackets, exemptions, standard deduction |
| Nebraska | Tax brackets, Personal exemption, standard deduction |
| New Mexico | Standard deduction |
| North Dakota | Tax brackets, standard deduction |
| Ohio | Tax brackets, personal exemption |
| Oregon | Tax brackets (up to \$125,000), standard deduction credit, personal exemption |
| Rhode Island | Tax brackets, standard deduction, personal exemption |
| South Carolina | Tax brackets, standard deduction, personal exemption |
| Utah | Standard deduction |
| Vermont | Tax brackets, standard deduction, personal exemption |
| Washington, DC | Standard deduction |
| Wisconsin | Tax brackets, standard deduction |

Sources: State Web Pages; Federation of Tax Administrators, "State Individual Income Tax Rates (as of January 1, 2019)"; Federation of Tax Administrators, "State Individual Income Taxes: Federal Starting Points (as of July 1, 2019)." Wolters Kluwer/CCH 2019 State Tax Handbook; Tax Foundation, "Inflation Adjusting State Tax Codes: A Primer," October 29, 2019.

Part I: Tax Burdens in Washington, DC Compared with Those in the Largest City in Each State
Table 3: State and Local Income Tax Burden as a Percent of Income in the Largest Cities by Type of Income Tax for a Hypothetical Family of Three, 2019

| 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\% | 4.2\% | 6.0\% | 6.5\% | 7.5\% |
| GRADUATED STATE AND FLAT LOCAL RATES |  |  |  |  |  |  |
| Birmingham | AL | 3.6\% | 4.1\% | 4.1\% | 4.1\% | 3.9\% |
| Wilmington | DE | 1.3\% | 4.2\% | 4.6\% | 5.0\% | 5.6\% |
| Baltimore | MD | -2.1\% | 5.6\% | 6.4\% | 5.5\% | 5.7\% |
| Kansas City | MO | 1.0\% | 3.4\% | 4.4\% | 4.8\% | 5.2\% |
| Newark 1/ | NJ | -3.5\% | 2.2\% | 2.4\% | 2.6\% | 3.7\% |
| Columbus | OH | 2.5\% | 4.4\% | 4.9\% | 5.2\% | 5.7\% |
| Portland 1/ | OR | 2.5\% | 4.7\% | 5.0\% | 5.2\% | 5.6\% |
| GRADUATED STATE RATE AND LOCAL FLAT FEE |  |  |  |  |  |  |
| Charleston 1/ | WV | 3.3\% | 3.9\% | 4.7\% | 5.1\% | 5.6\% |
| FLAT STATE AND LOCAL TAX RATES 5/ |  |  |  |  |  |  |
| Indianapolis 6/ | IN | 3.4\% | 4.7\% | 4.8\% | 4.9\% | 5.0\% |
| Louisville | KY | 4.4\% | 6.6\% | 6.6\% | 6.6\% | 6.6\% |
| Detroit | MI | 3.4\% | 2.6\% | 5.8\% | 6.0\% | 6.2\% |
| Philadelphia | PA | 6.9\% | 6.9\% | 6.9\% | 6.9\% | 6.9\% |
| FLAT STATE RATE AND LOCAL FLAT FEE |  |  |  |  |  |  |
| Denver | CO | -1.1\% | 2.3\% | 3.0\% | 3.3\% | 3.7\% |
| GRADUATED STATE TAX RATE |  |  |  |  |  |  |
| Little Rock | AR | 0.9\% | 2.4\% | 3.0\% | 3.6\% | 4.4\% |
| Phoenix | AZ | -0.3\% | 1.1\% | 1.6\% | 1.9\% | 2.0\% |
| Los Angeles | CA | -0.2\% | 0.0\% | 0.6\% | 1.2\% | 2.4\% |
| Bridgeport | CT | -3.2\% | 1.3\% | 3.8\% | 4.4\% | 5.2\% |
| WASHINGTON | DC | -10.3\% | 2.7\% | 3.9\% | 4.8\% | 5.8\% |
| Atlanta | GA | 1.1\% | 3.4\% | 4.2\% | 4.6\% | 4.1\% |
| Honolulu | HI | 0.0\% | $3.1 \%$ | 3.7\% | 4.0\% | 4.8\% |
| Des Moines | IA | -0.4\% | 3.6\% | 4.2\% | 4.6\% | 5.3\% |
| Boise | ID | -1.2\% | 1.5\% | 3.3\% | 4.2\% | 5.0\% |
| Wichita | KS | -1.0\% | 2.5\% | 3.4\% | 4.0\% | 4.2\% |
| New Orleans | LA | 0.5\% | 2.6\% | 2.9\% | 3.0\% | 3.3\% |
| Portland | ME | -1.5\% | 1.4\% | 2.9\% | 3.8\% | 4.6\% |
| Minneapolis | MN | -9.0\% | 1.9\% | 2.9\% | 3.9\% | 5.0\% |
| Jackson | MS | 0.3\% | 2.4\% | 2.9\% | 3.2\% | 3.5\% |
| Billings | MT | 1.0\% | 3.4\% | 4.2\% | 4.6\% | 4.9\% |
| Fargo | ND | .03\% | 0.6\% | 0.7\% | 0.9\% | 1.3\% |
| Omaha | NE | -1.4\% | 1.6\% | 2.7\% | 3.7\% | 4.5\% |
| Albuquerque | NM | -2.4\% | 1.5\% | 2.8\% | 3.3\% | 3.8\% |
| Oklahoma City | OK | -0.5\% | 2.3\% | 3.3\% | 3.8\% | 3.9\% |
| Providence | RI | -2.1\% | 1.5\% | 2.3\% | 2.7\% | 3.4\% |
| Charleston | SC | 0.0\% | 2.0\% | 3.6\% | 4.5\% | 5.3\% |
| Virginia Beach | VA | 0.0\% | 3.9\% | 4.5\% | 4.8\% | 4.4\% |
| Burlington | VT | -10.7\% | -0.3\% | 0.2\% | 1.7\% | 3.4\% |
| Milwaukee | WI | -0.6\% | 2.4\% | 4.1\% | 4.6\% | 5.0\% |
| FLAT STATE TAX RATE WITH EXEMPTIONS |  |  |  |  |  |  |
| Chicago | IL | 1.1\% | 4.3\% | 4.3\% | 4.4\% | 4.5\% |
| Boston | MA | -1.5\% | 3.9\% | 4.3\% | 4.5\% | 4.6\% |
| Charlotte 2/ | NC | 0.5\% | 2.9\% | 3.7\% | 4.1\% | 4.4\% |
| Manchester 3/ | NH | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Nashville 3/ | TN | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Salt Lake City | UT | 0.0\% | 2.5\% | 3.7\% | 4.4\% | 4.9\% |
| AVERAGE | 4/ | -0.5\% | 2.9\% | 3.7\% | 4.2\% | 4.6\% |

[^8]
## 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 practice, homeowner exemptions, and credits. Nominal rates used in Table 4 (page 33) represent the "announced" rates levied by the jurisdiction, while effective rates take into account how the assessed value differs from market value in each city. Effective rates range from a high of $\$ 4.27$ per $\$ 100$ of assessed value in Bridgeport, Connecticut to $\$ 0.35$ per $\$ 100$ of assessed value in Honolulu, Hawaii. Statutory assessment levels vary dramatically from 1.35 percent of assessed value in Billings, Montana, to 100 percent assessment in twenty cities, including the District of Columbia.

As previously mentioned, the current 2019 report includes median sales ratio statistics where available to derive an "effective assessment level" that results from multiplying the statutory assessment level times the median sales ratio statistic (see Table 4, page 33).

Local assessors, state tax and county officials provided the nominal rates, assessment levels, and median sales ratios of each city and state. Research of government web sites was performed to fill in any gaps to present the most accurate and updated information. The District's effective property tax rate (net of assessment value and median sales ratio) is among the lowest of the 51 cities, ranking 44th. Chart 3 (page 34) 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 35). 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 36). This study does not consider the impact of property tax caps that are available in some jurisdictions.

At all four of the income levels for which home ownership is assumed (\$50,000 to $\$ 150,000$ ), Newark, New Jersey; ${ }^{20}$ Bridgeport, Connecticut; Detroit, Michigan; Los Angeles, California; and Burlington, Vermont and have the highest property tax burdens, in that order for each income level. For these cities, high property tax burdens primarily result from a combination of high real estate tax rates and high housing values, as can be seen in Table 4 (page 33) and Table 5 (page 35). (The families in Burlington, Vermont, earning up to $\$ 100,000$ in the study would receive a property tax credit through the income tax, and those amounts are reflected in the income tax burdens in this report).

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

[^9]At the $\$ 25,000$-income level, it is assumed that the families rent rather than own a home. At this level, New York, New York; Boston, Massachusetts; Washington, DC; Seattle, Washington; and Honolulu, Hawaii, have the highest property tax burdens (assumed 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, 15 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 blue shading in a state, the higher the burden is. Chart 4 (page 37) presents property tax burdens at each income level on one chart, sorted by the (rental) tax burden on the family earning $\$ 25,000$ per year. Viewing the data this way illustrates the differing burdens on renters versus homeowners (however, as noted, 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: 2019 Property Tax Burdens (\$) (Family earning \$75,000/year)



Source: ORA Analysis. The lighter blue shading represents a lower tax burden.
Tax Burden Range

| 247 |
| ---: |
| 8,136 |

Table 4: Residential Property Tax Rates in the Largest City in Each State 2019

| RANK | CITY | ST | NOMINAL RATE <br> PER \$100 of Assessed Value | EFFECTIVE ASSESSMENT LEVEL <br> (Statutory Assessment Level x Median Sales Ratio) * | EFFECTIVE RATE <br> PER $\mathbf{\$ 1 0 0}$ of Assessed Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bridgeport | CT | 5.40 | 79.0\% | 4.27 |
| 2 | Detroit | MI | 6.96 | 50.0\% | 3.48 |
| 3 | Newark | NJ | 3.76 | 80.4\% | 3.02 |
| 4 | Indianapolis | IN | 3.01 | 100.0\% | 3.01 |
| 5 | Milwaukee | WI | 2.79 | 99.5\% | 2.77 |
| 6 | Houston | TX | 2.80 | 99.0\% | 2.77 |
| 7 | Des Moines | IA | 4.72 | 52.8\% | 2.49 |
| 8 | Providence | RI | 2.46 | 100.0\% | 2.46 |
| 9 | Burlington | VT | 2.81 | 77.7\% | 2.19 |
| 10 | Omaha | NE | 2.25 | 94.0\% | 2.12 |
| 11 | Baltimore | MD | 2.16 | 94.4\% | 2.04 |
| 12 | Chicago | IL | 6.89 | 10.0\% | 2.01 |
| 13 | Portland | ME | 2.33 | 84.0\% | 1.96 |
| 14 | Jackson | MS | 19.33 | 10.0\% | 1.93 |
| 15 | Manchester | NH | 2.43 | 79.4\% | 1.93 |
| 16 | Columbus | OH | 6.83 | 27.1\% | 1.85 |
| 17 | Jacksonville | FL | 1.79 | 97.3\% | 1.74 |
| 18 | Phoenix | AZ | 16.33 | 10.0\% | 1.63 |
| 19 | Wilmington | DE | 5.67 | 28.8\% | 1.63 |
| 20 | Atlanta | GA | 4.11 | 38.5\% | 1.58 |
| 21 | New Orleans | LA | 15.11 | 10.0\% | 1.51 |
| 22 | Anchorage | AK | 1.64 | 88.6\% | 1.45 |
| 23 | Albuquerque | NM | 4.80 | 30.2\% | 1.45 |
| 24 | Kansas City | MO | 8.33 | 16.9\% | 1.41 |
| 25 | Little Rock | AR | 7.00 | 20.0\% | 1.40 |
| 26 | Boise | ID | 1.37 | 98.3\% | 1.34 |
| 27 | Louisville | KY | 1.34 | 100.0\% | 1.34 |
| 28 | Oklahoma City | OK | 11.90 | 11.0\% | 1.31 |
| 29 | Philadelphia | PA | 1.40 | 93.2\% | 1.30 |
| 30 | Minneapolis | MN | 1.29 | 96.1\% | 1.24 |
| 31 | Portland | OR | 2.47 | 49.0\% | 1.21 |
| 32 | Charleston | SC | 29.93 | 4.0\% | 1.20 |
| 33 | Wichita | KS | 11.58 | 10.3\% | 1.20 |
| 34 | Fargo | ND | 29.24 | 4.1\% | 1.19 |
| 35 | Sioux Falls | SD | 1.49 | 79.6\% | 1.18 |
| 36 | Los Angeles | CA | 1.17 | 100.0\% | 1.17 |
| 37 | Las Vegas | NV | 3.28 | 34.1\% | 1.12 |
| 38 | Charlotte | NC | 0.97 | 98.6\% | 0.95 |
| 39 | Billings | MT | 70.08 | 1.4\% | 0.95 |
| 40 | Boston | MA | 1.05 | 89.0\% | 0.94 |
| 41 | Virginia Beach | VA | 1.00 | 89.8\% | 0.90 |
| 42 | Cheyenne | WY | 9.22 | 9.5\% | 0.88 |
| 43 | Charleston | WV | 1.58 | 54.0\% | 0.86 |
| 44 | WASHINGTON | DC | 0.85 | 97.5\% | 0.83 |
| 45 | New York City | NY | 20.92 | 3.7\% | 0.77 |
| 46 | Seattle | WA | 0.83 | 89.2\% | 0.74 |
| 47 | Birmingham | AL | 7.25 | 10.0\% | 0.73 |
| 48 | Salt Lake City | UT | 1.30 | 54.5\% | 0.71 |
| 49 | Nashville | TN | 3.16 | 21.2\% | 0.67 |
| 50 | Denver | CO | 7.21 | 7.2\% | 0.52 |
| 51 | Honolulu | HI | 0.35 | 100.0\% | 0.35 |
|  |  |  |  |  |  |
| UNWEIGHTED AVERAGE |  |  | 7.28 | 56.5\% | 1.69 |
| MEDIAN |  |  | 3.16 | 54.5\% | 1.40 |

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 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 and Local Revenue Department officials, and state and local web sites.
*Median assessment sales ratios have been combined with the statutory assessment levels where available to arrive at an "effective assessment level." For Milwaukee, WI, the nominal tax rate takes the assessment sales ratio statistic into account. For Chicago, IL the state equalizer of 2.9 is applied to the assessment level of $10 \%$ to reflect the equalizer's impact on the final rate. For Vermont, the Common Level of Appraisal value
for school funding equalization is used in lieu of a sales ratio statistic.

## Chart 3: Residential Property Tax Rates in the Largest City in Each State 2019



Source: ORA Analysis of data from State and Local Revenue Officials and state and local web sites. See notes on Table 4 above.
Notes: Rates include state and local property taxes levied by multiple taxing authorities as identified by survey respondents and from jurisdictions' web sites. For Milwaukee, WI, the nominal tax rate takes the assessment sales ratio statistic into account. For Chicago, IL the state equalizer of 2.9 was applied to the assessment level of $10 \%$ to reflect the equalizer's impact on the final rate. For Burlington, VT, the Common Level of Appraisal value for school funding equalization is used in lieu of a sales ratio statistic.

Table 5: Housing Value Assumptions, 2019

|  |  | HOUSING ASSUMPTIONS AT INDICATED INCOME LEVELS: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | TAX ON RENT |  | HOU |  |  |
| CITY | ST | \$25,000 | \$50,000 | \$75,000 | \$100,000 | \$150,000 |
| Anchorage | AK | 1,780 | 135,394 | 203,091 | 270,788 | 406,183 |
| Birmingham | AL | 1,373 | 111,049 | 166,574 | 222,098 | 333,148 |
| Little Rock | AR | 1,181 | 101,047 | 151,570 | 202,093 | 303,140 |
| Phoenix | AZ | 1,435 | 155,079 | 232,618 | 310,158 | 465,237 |
| Los Angeles | CA | 2,252 | 277,027 | 415,540 | 554,054 | 831,081 |
| Denver | CO | 2,012 | 187,241 | 280,862 | 374,483 | 561,724 |
| Bridgeport | CT | 1,661 | 154,221 | 231,331 | 308,442 | 462,663 |
| WASHINGTON | DC | 2,772 | 157,090 | 235,635 | 314,180 | 471,269 |
| Wilmington | DE | 1,634 | 124,719 | 187,079 | 249,438 | 374,157 |
| Jacksonville | FL | 1,224 | 133,852 | 200,777 | 267,703 | 401,555 |
| Atlanta | GA | 1,809 | 126,459 | 189,688 | 252,917 | 379,376 |
| Honolulu | HI | 2,682 | 288,185 | 432,277 | 576,369 | 864,554 |
| Des Moines | IA | 1,179 | 105,739 | 158,609 | 211,478 | 317,217 |
| Boise | ID | 1,057 | 169,619 | 254,428 | 339,237 | 508,856 |
| Chicago | IL | 1,796 | 120,102 | 180,153 | 240,204 | 360,306 |
| Indianapolis | IN | 1,246 | 105,750 | 158,624 | 211,499 | 317,249 |
| Wichita | KS | 1,231 | 90,904 | 136,356 | 181,808 | 272,712 |
| Louisville | KY | 1,154 | 113,492 | 170,238 | 226,985 | 340,477 |
| New Orleans | LA | 1,384 | 126,170 | 189,255 | 252,340 | 378,510 |
| Boston | MA | 3,060 | 175,355 | 263,033 | 350,711 | 526,066 |
| Baltimore | MD | 1,676 | 135,757 | 203,636 | 271,514 | 407,271 |
| Portland | ME | 1,872 | 147,460 | 221,190 | 294,919 | 442,379 |
| Detroit | MI | 1,197 | 114,442 | 171,663 | 228,884 | 343,326 |
| Minneapolis | MN | 1,481 | 127,462 | 191,193 | 254,923 | 382,385 |
| Kansas City | MO | 1,231 | 110,969 | 166,453 | 221,937 | 332,906 |
| Jackson | MS | 1,269 | 108,954 | 163,431 | 217,907 | 326,861 |
| Billings | MT | 1,114 | 134,039 | 201,059 | 268,079 | 402,118 |
| Charlotte | NC | 1,692 | 130,324 | 195,487 | 260,649 | 390,973 |
| Fargo | ND | 1,057 | 117,035 | 175,553 | 234,071 | 351,106 |
| Omaha | NE | 1,193 | 98,106 | 147,159 | 196,213 | 294,319 |
| Manchester | NH | 1,548 | 129,226 | 193,839 | 258,452 | 387,678 |
| Newark | NJ | 2,012 | 179,331 | 268,997 | 358,663 | 537,994 |
| Albuquerque | NM | 1,089 | 130,985 | 196,478 | 261,971 | 392,956 |
| Las Vegas | NV | 1,249 | 182,704 | 274,055 | 365,407 | 548,111 |
| New York City | NY | 3,060 | 179,331 | 268,997 | 358,663 | 537,994 |
| Columbus | OH | 1,238 | 109,013 | 163,520 | 218,027 | 327,040 |
| Oklahoma City | OK | 1,220 | 96,107 | 144,161 | 192,215 | 288,322 |
| Portland | OR | 2,147 | 185,106 | 277,659 | 370,212 | 555,318 |
| Philadelphia | PA | 1,634 | 124,719 | 187,079 | 249,438 | 374,157 |
| Providence | RI | 1,508 | 140,531 | 210,797 | 281,063 | 421,594 |
| Charleston | SC | 1,589 | 139,608 | 209,412 | 279,216 | 418,823 |
| Sioux Falls | SD | 1,179 | 123,211 | 184,816 | 246,421 | 369,632 |
| Nashville | TN | 1,591 | 150,458 | 225,687 | 300,916 | 451,374 |
| Houston | TX | 1,573 | 107,211 | 160,816 | 214,421 | 321,632 |
| Salt Lake City | UT | 1,352 | 173,733 | 260,600 | 347,466 | 521,199 |
| Virginia Beach | VA | 1,777 | 137,982 | 206,973 | 275,964 | 413,946 |
| Burlington | VT | 1,899 | 141,620 | 212,431 | 283,241 | 424,861 |
| Seattle | WA | 2,723 | 196,838 | 295,257 | 393,675 | 590,513 |
| Milwaukee | WI | 1,483 | 116,280 | 174,420 | 232,560 | 348,841 |
| Charleston | WV | 997 | 82,441 | 123,661 | 164,881 | 247,322 |
| Cheyenne | WY | 1,199 | 145,989 | 218,983 | 291,977 | 437,966 |
| AVERAGE |  | 1,603 | 140,303 | 210,455 | 280,607 | 420,910 |
| MEDIAN |  | 1,483 | 130,985 | 196,478 | 261,971 | 392,956 |

Source for "Tax on Rent": Rental price data are from the US Department of Housing and Urban Development, for 2019 median fair market rents by MSA for studio apartments. The property tax equivalent of rent is assumed to be 15 percent of annual rent. Note, some jurisdictions offer a property tax credit for renters that is delivered through the income tax and is presented in the income tax burdens (incl: DC, MN, and VT).

Source for all other columns: ORA Calculations. Data on MSA median household incomes and MSA median house values of mortgage holders for 2019 were retrieved from the Census Bureau's ACS 2019. 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, so the same house value and income data are used for both. Similarly, Wilmington, DE, is in the same MSA as Philadelphia, and the same house value and income data are used for both (for the above PTER estimate, HUD provides a separate FMR figure for Newark, NJ, but not for Wilmington, DE).

# Table 6: Cities That Allow Exemptions or Reduced Rates in the Calculation of Real Estate Taxes for Homeowners, 2019 

| CITY | STATE | EXEMPTION OR TAX REDUCTION AMOUNT | BASIS OF TAX REDUCTION OR EXEMPTION |
| :---: | :---: | :---: | :---: |
| Anchorage | AK | The lesser of $20 \%$ of the property value or \$50,000 | Assessed Value |
| Birmingham | AL | Up to \$4,000 (local option to exempt \$2,000 to \$4,000) | Assessed Value-Homestead |
| Little Rock | AR | Up to \$375 Credit for Homeowners | Tax Credit |
| Los Angeles | CA | \$7,000 Exemption | Assessed Value |
| WASHINGTON 1/ | DC | \$74,850 Exemption | Assessed Value-Homestead |
| Jacksonville | FL | 1.First Homestead Exemption - $\$ 25,000$ exempt from all levies 2. Second Homestead exemption on value between $\$ 25,000$ $\$ 50,00$, non-school levies | Assessed Value |
| Atlanta | GA | \$30,000 Exemption | Assessed Value |
| Honolulu | HI | \$80,000 Exemption | Assessed Value |
| Des Moines | IA | The actual levy on the first \$4,850 of actual value | Actual Value |
| Boise | ID | 50\% of Assessed Value, up to \$100,000 Exemption | Assessed Value and Homestead up to 1 acre |
| Chicago | IL | 10,000 Exemption | Assessed Value- Homestead |
| Indianapolis | IN | $60 \%$ Deduction (maximum of $\$ 45,000$ ) <br> Supplemental deduction of $35 \%$ deduction of AV less than $\$ 600,000 ; 25 \%$ deduction of AV greater than $\$ 600,000$. | Assessed Value-Homestead |
| Wichita | KS | Residential school levy exemption on first \$20,000 of appraised value; 20 mill Statewide School levy | Assessed Value |
| New Orleans | LA | \$7,500 Exemption | Assessed Value |
| Boston | MA | \$2,879 Homeowner Exemption (Credit) | Assessed Value |
| Portland | ME | \$20,000 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 ( $9 \% * \mathrm{MV}$ of the value over $\$ 76,000$ ) | Market Value |
| Jackson | MS | \$6 tax credit per \$150 of assessed value, up to \$300 maximum. | Assessed Value |
| Omaha | NE | Real property tax credit $=$ reduction in tax bill of $\$ 104.15$ per 100,000 assessed value | Assessed Value |
| Albuquerque | NM | \$2,000 Exemption | Taxable Value |
| New York City | NY | \$30,000 Exemption on Primary Residence (STAR) | Equalized Assessed Value |
| Columbus | OH | 2.5\% owner occupied credit | Assessed Value |
| Oklahoma City | OK | \$1,000 Exemption | Assessed Value-Homestead |
| Philadelphia | PA | \$40,000 Exemption | Assessed Value-Homestead |
| Providence | RI | 40\% reduction in assessment for homesteads | Assessed Value-Homestead |
| Charleston | SC | Owner occupied residential exempt from all school operating taxes | Property Tax Relief Fund |
| Sioux Falls | SD | Lower School General Levy is appr. 50\% reduced (already factored into nominal rate in table 4) | Assessed Value |
| Houston | TX | 20\% County Exemption on Value <br> -Plus $\$ 15,000$ Exemption on School District Taxes Only <br> -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 | Homestead reduction/property tax credit for income eligible residence (available through income tax) | Household Income |
| Milwaukee | WI | For \$150,000 home: \$0.1974 School Levy Credit (already factored into nominal rate in table 4) | Equalized Assessed Value |

Source: Data collected from surveys to State Revenue Department officials and review of State, and City, Revenue Department Web Sites.
Note: Many states and Washington, DC have assessment limitations, and these are not included.
1/ DC's exemption amount increased to $\$ 75,700$ on October 1, 2019 (effective for DC's Real Property Tax Year 2020).

# Chart 4: 2019 Property Tax Burdens for All Income Levels, Sorted by $\mathbf{\$ 2 5 , 0 0 0}$ Income Level (Renters) 



Source: ORA analysis; see description on page $8-11$ for data sources and methodology. Note: the methodology for calculating burdens for the $\$ 25,000 / y e a r$ income earning family differ from the calculations for the other four income groups and represents a property tax equivalent of rent. Further, some jurisdictions, such as DC, MN, and VT, offer a property tax credit for renters that is delivered through the income tax and is presented in the income tax burdens.

## Sales and Use Tax

Residents of 46 of the 51 cities in this study are subject to some form of sales and use tax at various levels of government. The combined sales tax rates range from 10.5 percent in Los Angeles, California, to 4.5 percent in Honolulu, Hawaii, as illustrated in Chart 5, page 39, and presented in Table 7, page 40. The highest state sales tax rate is 7.25 percent in Los Angeles, California; while the lowest state rate of 2.9 percent is found in Denver, Colorado. Sales taxes are levied by 23 of the 51 cities (in addition to state sales taxes) with the highest city rate at 6.0 percent in Washington, DC (and the only sales tax levied in DC), followed by 4.5 percent in New York City. The lowest city rate was 0.5 percent Minneapolis, Minnesota. Of the 22 counties levying a sales tax, the highest rate ( 3.0 percent) is in Fulton County (Atlanta, GA) and Charleston County (Charleston, SC). One school district and eight transit districts also levy sales taxes, with transit district rates ranging from 0.375 percent in New York, New York, to 1.0 percent in Chicago, Illinois; Denver, Colorado; and New Orleans, Louisiana.

Based on the results in Table 1, the average sales tax burden is the second highest of the four major tax types at the $\$ 25,000$ income level (behind the property tax). For families subject to a general sales tax, the highest sales tax burdens are in Birmingham, Alabama, for all five income levels. Other jurisdictions ranking in the top five sales tax burdens at one of the income levels are Nashville, Tennessee; New Orleans, Louisiana; Kansas City, Missouri; Seattle, Washington; Wichita, Kansas; and Oklahoma City, Oklahoma.

Cities and states that levy a general sales tax and have among the lowest sales tax burdens at all income levels include Boston, Massachusetts; Newark, New Jersey; Honolulu, Hawaii; Detroit, Michigan; and Milwaukee, Wisconsin. (In Table 1, Wilmington, Delaware; Billings, Montana; Anchorage, Alaska; ${ }^{21}$ and Manchester, New Hampshire have the lowest sales tax burdens; however, these tax burdens are due to selective sales taxes that apply to rental car expenses and are included in the calculations for this report. However, these jurisdictions do not have a general sales tax and are therefore excluded from the counts on this page, as well as Chart 5 and Table 7.)

It is important to note that the calculated sales tax burdens are not a direct function of the general sales tax rates reported on the following pages as the consumer expenditures items used to calculate burdens often have selective sales tax rates. For example, vehicle rentals and food purchased away from home often have a higher sales tax rate than the general rate, while food purchased for home consumption often has a lower rate. Further, not all jurisdictions have the same sales tax base, meaning purchases of certain items could be taxable in one city, but not in another.

[^10]
## Chart 5: Composition of State and Local General Sales Tax Rates in Each of the 51 Cities as of December 31, 2019



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, 2019

| CITY | STATE | TOTAL RATE (\%) | STATE RATE (\%) | $\begin{aligned} & \text { CITY RATE } \\ & (\%) \end{aligned}$ | $\begin{gathered} \text { COUNTY } \\ \text { RATE } \\ (\%) \\ \hline \end{gathered}$ | $\underset{\text { RATE }}{\text { SCHOOL }}$ (\%) | TRANSIT RATE (\%) | OTHER RATE (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Los Angeles | CA | 10.500 | 7.250 | 1.000 | 2.250 |  |  |  |
| Chicago | IL | 10.250 | 6.250 | 1.250 | 1.750 |  | 1.000 |  |
| Seattle | WA | 10.100 | 6.500 | 3.600 |  |  |  |  |
| Birmingham | AL | 10.000 | 4.000 | 4.000 | 1.000 |  |  | 1.000 |
| New Orleans | LA | 9.450 | 4.450 | 2.500 |  | 1.500 | 1.000 |  |
| Nashville | TN | 9.250 | 7.000 |  | 2.250 |  |  |  |
| Albuquerque | NM | 9.250 | 5.125 | 2.438 | 1.688 |  |  |  |
| Little Rock | AR | 9.000 | 6.500 | 1.500 | 1.000 |  |  |  |
| Charleston | SC | 9.000 | 6.000 |  | 3.000 |  |  |  |
| Atlanta | GA | 8.900 | 4.000 | 1.900 | 3.000 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| New York City | NY | 8.875 | 4.000 | 4.500 |  |  | 0.375 |  |
| Oklahoma City | OK | 8.625 | 4.500 | 4.125 |  |  |  |  |
| Phoenix | AZ | 8.600 | 5.600 | 2.300 | 0.700 |  |  |  |
| Kansas City | MO | 8.600 | 4.225 | 3.000 | 1.375 |  |  |  |
| Denver | CO | 8.310 | 2.900 | 4.310 |  |  | 1.000 | 0.100 |
| Las Vegas | NV | 8.250 | 6.850 |  | 1.400 |  |  |  |
| Houston | TX | 8.250 | 6.250 | 1.000 |  |  |  | 1.000 |
| Minneapolis | MN | 8.025 | 6.875 | 0.500 | 0.150 |  | 0.500 |  |
| Jackson | MS | 8.000 | 7.000 | 1.000 |  |  |  |  |
| Philadelphia | PA | 8.000 | 6.000 | 2.000 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Salt Lake City | UT | 7.750 | 6.100 |  | 0.350 |  | 0.800 | 0.500 |
| 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 |  | 0.500 |  |
| Indianapolis | IN | 7.000 | 7.000 |  |  |  |  |  |
| Providence | RI | 7.000 | 7.000 |  |  |  |  |  |
| Burlington | VT | 7.000 | 6.000 | 1.000 |  |  |  |  |
| Charleston | WV | 7.000 | 6.000 | 1.000 |  |  |  |  |
| Jacksonville | FL | 7.000 | 6.000 |  | 1.000 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Des Moines | IA | 7.000 | 6.000 |  | 1.000 |  |  |  |
| Omaha | NE | 7.000 | 5.500 | 1.500 |  |  |  |  |
| Newark | NJ | 6.625 | 6.625 |  |  |  |  |  |
| Sioux Falls | SD | 6.500 | 4.500 | 2.000 |  |  |  |  |
| Bridgeport | CT | 6.350 | 6.350 |  |  |  |  |  |
| Boston | MA | 6.250 | 6.250 |  |  |  |  |  |
| WASHINGTON | DC | 6.000 |  | 6.000 |  |  |  |  |
| Boise | ID | 6.000 | 6.000 |  |  |  |  |  |
| Louisville | KY | 6.000 | 6.000 |  |  |  |  |  |
| Detroit | MI | 6.000 | 6.000 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Baltimore | MD | 6.000 | 6.000 |  |  |  |  |  |
| Virginia Beach | VA | 6.000 | 5.300 |  |  |  |  | 0.700 |
| Cheyenne | WY | 6.000 | 4.000 |  | 2.000 |  |  |  |
| 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 |  | 7.588 | 5.653 | 2.366 | 1.348 | 1.500 | 0.709 | 0.567 |
| MEDIAN |  | 7.500 | 6.000 | 2.000 | 1.125 | 1.500 | 0.650 | 0.600 |

[^11]
## Map 4: 2019 Sales Tax Burdens (Family Earning \$75,000/Year)



Source: ORA Analysis. The lighter blue shading represents a lower tax burden. Alaska, Montana, New Hampshire, Oregon, and Delaware do not have a general sales tax. All these states except Oregon have a selective sales tax on some items included in the sales tax burden calculation.

| Percent Burden |  |
| :---: | :---: |
| 0.03\% | 3.06\% |
| 0.03\% | 3.06\% |

## 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, state and local motor vehicle registration fees, annual excise taxes, and personal property taxes. Residents in 10 of the cities are subject to a personal property tax based on the value of motor vehicles owned by a taxpayer, while another 26 states or local jurisdictions levy some type of fee or tax with various names (e.g., wheel tax, use tax, uniform fee, county option tax, etc.). Taxpayers in at least 18 cities covered are subject to both state and local fees. 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 44.

Gasoline tax rates in each of the 51 cities as of December 31, 2019, are compared in Table 8, page 43. The total state and local gasoline tax rates vary from a high of 65.10 cents per gallon in Chicago, Illinois; 63.26 in Los Angeles, California; 58.70 in Philadelphia, Pennsylvania; and 52.98 in Honolulu, Hawaii; to a low of 17.42 cents per gallon in Kansas City, Missouri. Eleven states and five cities apply a sales tax to gasoline, and those rates are included in the rates in the table.

The vehicle assumptions used for calculating automobile personal property taxes, excise taxes, the gasoline tax, and registration fees are presented in Table 10, page 44.

The automobile tax burdens are generally the lowest of the tax burdens (by tax) at all income levels in this study (except in those states that offer refundable tax credits through the income tax at the $\$ 25,000$ income level). Providence, Rhode Island has the highest automobile tax burdens across all income levels. Other cities that show up in the top five for at least two of the income levels include Chicago, Illinois; Omaha, Nebraska; Los Angeles, California; Virginia Beach, Virginia, and Charleston, West Virginia. These cities levy either a personal property tax, excise tax, or other type of annual tax.

New Orleans, Louisiana, has the lowest automobile tax burdens at all income levels, followed by Albuquerque, New Mexico. Other jurisdictions with low auto tax burdens at all income levels include Little Rock, Arkansas; Wilmington, Delaware; Wichita, Kansas; and Houston, Texas. Each of these cities has flat registration rates or registration by weight, moderate gasoline tax rates, or no personal property or excise tax.

Table 8: Cumulative Tax Rates on Gasoline in the 51 Cities, as of December 31, 2019
(State and Local Rates per Gallon)

| CITY | ST | TOTAL RATE | STATE RATE | LOCAL RATE |
| :---: | :---: | :---: | :---: | :---: |
| Chicago * | IL | 65.10 | 54.10 | 11.00 |
| Los Angeles *+ | CA | 63.26 | 55.46 | 7.80 |
| Philadelphia | PA | 58.70 | 58.70 |  |
| Honolulu *+ | HI | 52.98 | 34.79 | 18.19 |
| Seattle | WA | 49.52 | 49.52 |  |
| New York City *+ | NY | 46.34 | 34.50 | 11.84 |
| Bridgeport * | CT | 45.76 | 45.76 |  |
| Indianapolis * | IN | 44.40 | 44.40 |  |
| Portland | OR | 44.00 | 34.00 | 10.00 |
| Newark | NJ | 41.45 | 41.45 |  |
| Detroit * | MI | 40.60 | 40.60 |  |
| Atlanta + | GA | 38.83 | 28.00 | 10.83 |
| Baltimore * | MD | 36.89 | 36.89 |  |
| Charlotte | NC | 36.45 | 36.45 |  |
| Charleston * | WV | 35.70 | 35.70 |  |
| Providence | RI | 34.12 | 34.12 |  |
| Jacksonville * | FL | 34.10 | 34.10 |  |
| Boise | ID | 33.00 | 33.00 |  |
| Milwaukee | WI | 32.90 | 32.90 |  |
| Las Vegas | NV | 32.81 | 23.81 | 9.00 |
| Billings | MT | 32.25 | 32.25 |  |
| Portland | ME | 31.40 | 31.40 |  |
| Burlington | VT | 30.94 | 30.94 |  |
| Des Moines | IA | 30.70 | 30.70 |  |
| Salt Lake City | UT | 30.65 | 30.65 |  |
| Omaha | NE | 30.50 | 30.50 |  |
| Virginia Beach *+ | VA | 30.26 | 24.40 | 5.86 |
| Sioux Falls | SD | 30.00 | 30.00 |  |
| Minneapolis | MN | 28.60 | 28.60 |  |
| Columbus | OH | 28.00 | 28.00 |  |
| Nashville | TN | 27.40 | 27.40 |  |
| Boston | MA | 26.74 | 26.74 |  |
| Louisville | KY | 26.00 | 26.00 |  |
| Wichita | KS | 25.03 | 25.03 |  |
| Cheyenne | WY | 24.00 | 24.00 |  |
| Manchester | NH | 23.83 | 23.83 |  |
| WASHINGTON | DC | 23.50 |  | 23.50 |
| Fargo | ND | 23.03 | 23.03 |  |
| Wilmington | DE | 23.00 | 23.00 |  |
| Charleston | SC | 22.75 | 22.75 |  |
| Denver | CO | 22.13 | 22.13 |  |
| Birmingham | AL | 22.00 | 21.00 | 1.00 |
| Little Rock | AR | 21.80 | 21.80 |  |
| New Orleans | LA | 20.93 | 20.93 |  |
| Oklahoma City | OK | 20.00 | 20.00 |  |
| Houston | TX | 20.00 | 20.00 |  |
| Phoenix | AZ | 19.00 | 19.00 |  |
| Anchorage | AK | 18.95 | 8.95 | 10.00 |
| Albuquerque | NM | 18.88 | 18.88 |  |
| Jackson | MS | 18.40 | 18.40 |  |
| Kansas City | MO | 17.42 | 17.42 |  |
|  |  |  |  |  |
| UNWEIGHTED AVERAGE |  | 32.06 | 30.19 | 9.55 |
| MEDIAN |  | 30.50 | 28.60 | 10.00 |

[^12]
# Table 9: Summary of Types of Automobile Registration Taxes 2019 ( 50 states + DC) 

## TYPE OF REGISTRATION

Flat Rate Only
NUMBER OF STATES (\& DC)

Weight Only

```
22
```

Weight and Age 5
Horsepower Only 1
Age Only 3
Value Only 2
Value and Age 3
Value, Age, and Weight $\underline{2}$ 51

## OTHER AUTO TAXES (INCLUDING LOCAL) *

Personal Property 10
Excise 4
Other fees or taxes (incl. local registration) 26
*Based on State Survey responses. An excise tax is only applied in auto tax burden calculation if it is an annual tax.
Table 10: Automobile Tax Assumptions 2019

| Income Level | Description of Auto | Engine Size Liters 1/ | Weight 2/ | Year | Market <br> Values |  |  | Estimated <br> Mileage Per Gallon 1/ | Estimated <br> Annual <br> Gasoline Usage 3/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Retail Price 2/ | $\begin{aligned} & \text { Trade-In } \\ & \text { Value 2/ } \end{aligned}$ | Loan Value 2/ |  |  |
| \$ 25,000 | Sedan, 4 Door 4-cylinder, Auto | 1.8 | 2,920 lbs. | 2016 | \$13,575 | \$10,300 | \$13,439 | 29 | 517 gallons |
| \$ 50,000 | Sedan, 4 Door <br> 4 Cylinder, Manual | 1.4 | 2,930 lbs. | 2018 | \$14,100 | \$10,950 | \$13,959 | 34 | 441 gallons |
| \$ 75,000 | Sedan, 4 Door <br> 4 Cylinder, Automatic | 2.5 | 3,340 lbs. | 2018 | \$20,175 | \$16,400 | \$19,973 | 33 | 455 gallons |
|  | 4WD Utility, 4 Door 6 Cylinder, Automatic | 3.5 | 4,464 lbs. | 2013 | \$18,050 | \$14,875 | \$17,870 | 19 | 395 gallons* |
| \$100,000 | Sedan, 4 Door <br> 6 Cylinder, Automatic | 2.5 | 3,906 lbs. | 2018 | \$22,925 | \$18,725 | \$22,696 | 30 | 500 gallons |
|  | 4WD Utility, 4 Door 6 Cylinder, Automatic | 3.5 |  | 2013 | \$17,675 | \$14,250 | \$17,498 | 20 | 375 gallons* |
| \$150,000 | Sedan, 4 Door <br> 6 Cylinder, Automatic | 2.0 | 3,814 lbs. | 2019 | \$54,220 | \$50,580 | \$53,678 | 25 | 600 gallons |
|  | AWD Utility, 4 Door 6 Cylinder, Automatic | 3.5 | 4,095 lbs. | 2015 | \$18,550 | \$15,150 | \$18,365 | 24 | 313 gallons* |

[^13]Chart 6: 2019 Auto Tax Burdens, Family Earning \$75,000/year


Source: ORA Analysis. See pages 41-43 for methodology and assumptions.

## CHAPTER IV

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

The nation's capital, Washington, DC, 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 District's Mayor and the 13-member District of Columbia Council combine the functions of the executive and legislative bodies of each of these governmental units. 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 like 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, DC, is compared with the 50city average at all income levels in Table 11, page 49 and the individual tax comparisons are described in more detail in the following sections. Further, Chart 7, on page 50 illustrates the comparisons between DC's overall combined burden and the 50-city average at each income level. These two visuals show that DC's combined tax burdens are lower than the 50 -city average for the lowest four income levels in the study, and higher than the average for the top income level of $\$ 150,000$ per year.

## Individual Income Tax

As shown in Table 11 and based on the assumptions made in this report, the individual income tax burden for Washington, DC is below the 50-city average at the $\$ 25,000$ and $\$ 50,000$ level (the average is based on the cities and states that levy an income tax). The income tax burden at the $\$ 75,000-, \$ 100,000-$, and $\$ 150,000$-income levels is gradually higher in DC than for the average of the cities levying an income tax. This is due to the District's more progressive income tax. Washington, DC levied an individual income tax with six rates in tax year 2019: 4.0 percent on the first $\$ 10,000$ of taxable income; 6.0 percent on the next $\$ 30,000$ of taxable
income; 6.5 percent on taxable income over $\$ 40,000$ up to $\$ 60,000 ; 8.5$ percent on taxable income over $\$ 60,000$ up to $\$ 350,000$; 8.75 percent on taxable income greater than $\$ 350,000$ and less than $\$ 1,000,000$, and 8.95 percent on taxable income over $\$ 1,000,000$.

As a result of the 2017 Tax Cuts and Jobs Act (TCJA) and DC's federal conformity provisions, DC personal exemptions are reduced to zero for 2019, and the federal standard deduction will apply. Thus, a standard deduction of $\$ 24,400$ for joint married filers ( $\$ 12,200$ for married filing separately) was in effect for the period of this study. Itemized deductions are the same as those allowed in computing the federal income tax (with a limit of $\$ 10,000$ on state and local deductions that can be itemized on the federal schedule A), and the District does not allow the deduction of its own individual income tax. Washington, DC 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 taxpayer's income tax liability (a Schedule H renters' credit is applied through the income tax).

The District's income tax rates have changed and become more progressive in recent years, with slightly decreasing rates on income between $\$ 40,000$ and $\$ 60,000$ and between $\$ 350,000$ and $\$ 1,000,000$, while rates slightly increased on income over $\$ 1,000,000$. Federal law prohibits Washington, DC from taxing the earnings of non-residents working within the city, a restriction not imposed on any other city in the nation. Partly because of this, the District of Columbia taxes residents at a higher rate than it might otherwise since about 59 percent of the income earned in the District of Columbia is earned by non-residents. ${ }^{22}$

## 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 50 -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, DC, than the average for the 50 cities (and second highest overall), which reflects the high cost of rental housing in the District. (However, DC's $\$ 1,200$ property tax credit administered through the income tax was applied and is counted in the family's income tax burden. Taking that into account would place the DC renter's tax burden below the national average.) Although the District's house values are higher than the 50city average at each income level, these rankings for assumed homeowners highlight the District's relatively 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. ${ }^{23}$ The tax rate on residential owner-occupied property in the District is $\$ 0.85$ per $\$ 100$ of assessed value for 2019. DC homeowners may deduct a homestead exemption of $\$ 74,850$ 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.

[^14]
## Sales and Use Tax

As shown in Table 11, the sales tax burden in the District of Columbia is lower than the 50 -city average at all five income levels (averages are based on cities levying tax). In 2019, the District levied a sales tax with six 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 2019. Items exempt from the District of Columbia sales tax include groceries and prescription drugs.

| ITEMS | 2019 SALES <br> TAX RATE |
| :--- | :---: |
| Retail rate for sales of certain tangible personal property and selected services, food or <br> drinks sold in vending machines | $6.0 \%$ |
| Medical marijuana | $6.0 \%$ |
| Soft drinks. A "soft drink" is defined as a beverage with a natural or artificial <br> sweetener that contains less than 100\% juice; or a beverage that is less than 50\% milk, <br> soy, or other milk substitutes; or coffee, coffee substitutes, cocoa, or tea. | $8.0 \%$ |
| Restaurant meals, liquor prepared for immediate consumption on the premises, and <br> prepaid telephone cards, | $10.0 \%$ |
| Off-premises alcohol, rental vehicles, tickets sold for games and events at the ballpark, <br> merchandise sold at the baseball stadium, tickets sold for games and events at the <br> Capital One Center and merchandise sold at the Capital One Center | $10.25 \%$ |
| Hotels (transient accommodations) | $14.95 \%$ |
| Parking of motor vehicles in commercial lots | $18.0 \%$ |

Source: "DC Tax Facts 2020." Government of DC, Office of the Chief Financial Officer, Office of Revenue Analysis, p. 33. Note, the 8\% tax rate on soft drinks took effect on October 1, 2019. This rate change did not impact calculations for sales tax burdens in this report.

## Automobile Taxes

Washington, DC, automobile tax burdens are below the 50-city average for all income levels, as shown in Table 11, indicating the District's competitive auto tax rates. Washington, DC 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. The District of Columbia is restricted by the federal government from taxing non-resident income; further a large percentage of DC land is tax-exempt (fifty-five percent of District acreage is tax exempt ${ }^{24}$ ). These factors limit the District's revenue raising capacity and some of the available tax bases from which the city must fund a range of government operations that are typically funded by both states and cities. There are positive factors that increase District tax bases, however, including substantial tourist activity as well as the large volume of business and lobbying activity generated by the federal presence.

[^15]Part I: Tax Burdens in Washington, DC Compared with Those in the Largest City in Each State

## Table 11: Tax Burdens in Washington, DC for a Hypothetical Family Compared with the Average for the Largest City in Each State by Income Level, 2019

| TAX | $\begin{gathered} \hline \text { DISTRICT } \\ \text { OF } \\ \text { COLUMBIA } \\ \hline \end{gathered}$ | AVERAGE FOR 50 CITIES LEVYING TAX 1/ | DIFFERENCE (DC Minus 50-City Average) |
| :---: | :---: | :---: | :---: |
| \$25,000 INCOME LEVEL |  |  |  |
| Income | (\$2,572) | (\$57) | (\$2,515) |
| Property | \$2,772 | \$1,580 | \$1,192 |
| Sales | \$945 | \$1,027 | (\$82) |
| Auto | \$193 | \$302 | (\$108) |
| TOTAL | \$1,339 | \$2,841 | $(\$ 1,502)$ |
|  |  |  |  |
| \$50,000 INCOME LEVEL |  |  |  |
| Income | \$1,338 | \$1,453 | (\$115) |
| Property | \$682 | \$1,778 | (\$1,096) |
| Sales | \$1,115 | \$1,189 | (\$74) |
| Auto | \$176 | \$300 | (\$125) |
| TOTAL | \$3,311 | \$4,435 | $(\$ 1,125)$ |
|  |  |  |  |
| \$75,000 INCOME LEVEL |  |  |  |
| Income | \$2,891 | \$2,807 | \$84 |
| Property | \$1,333 | \$2,740 | $(\$ 1,408)$ |
| Sales | \$1,370 | \$1,429 | (\$59) |
| Auto | \$387 | \$621 | (\$235) |
| TOTAL | \$5,980 | \$7,063 | $(\$ 1,083)$ |
|  |  |  |  |
| \$100,000 INCOME LEVEL |  |  |  |
| Income | \$4,827 | \$4,152 | \$675 |
| Property | \$1,983 | \$3,715 | (\$1,732) |
| Sales | \$1,643 | \$1,697 | (\$54) |
| Auto | \$436 | \$650 | (\$214) |
| TOTAL | \$8,889 | \$9,433 | (\$544) |
|  |  |  |  |
| \$150,000 INCOME LEVEL |  |  |  |
| Income | \$8,745 | \$6,913 | \$1,832 |
| Property | \$3,285 | \$5,685 | (\$2,399) |
| Sales | \$2,030 | \$2,071 | (\$41) |
| Auto | \$445 | \$946 | (\$502) |
| TOTAL | \$14,505 | \$14,329 | \$176 |

[^16]
## Chart 7: Combined 2019 Tax Burdens at Each Income Level: Comparison of DC and the Average of the 50 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 50 cities results in slightly different dollar amounts, the results are the same in that DC's overall burden is slightly higher than the 50 -city median at the $\$ 150,000$ income level, and lower than the median at the other four income levels. See Footnote 1 in Table 11 above for more detail.

## Part II

## A Comparison of Selected Tax Rates in the District of Columbia with Those in the 50 States as of January 1, 2020

## Tax Rate Comparisons at a Glance

Below is a review of how DC'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; and motor vehicle registration fees. In five tax categories-insurance premiums, beer, light wine, distilled spirits, and gasoline-the District has lower tax rates than most states. For cigarettes, all 50 states have lower excise taxes than the District and ten states now have the same sales tax rate as DC, while 16 are higher and 19 are lower.

Table 12: Comparison of Selected State Tax Rates

| TAX | LEVYING TAX <br> (excluding DC) | NUMBER OF JURISDICTIONS |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { LOWER } \\ \text { THAN DC } \end{gathered}$ | $\begin{aligned} & \text { SAME } \\ & \text { AS DC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { HIGHER } \\ & \text { THAN DC } \end{aligned}$ |
| Individual Income | $\begin{aligned} & \hline 41 \\ & 1 / \\ & \hline \end{aligned}$ | $\begin{aligned} & 36 \\ & 21 \\ & \hline \end{aligned}$ | 0 | $\begin{aligned} & \hline 5 \\ & 2 / \end{aligned}$ |
| Corporate Income | 43 | 33 | 1 | 10 |
| Insurance | 50 | 13 | 0 | 37 |
| Sales and Use | 45 | 19 | 10 | 16 |
| Beer | 50 | 7 | 1 | 42 |
| Light Wine | 47 | 4 | 4 | 39 |
| Distilled Spirits | 33 | 0 | 1 | 32 |
| Cigarette | 50 | 50 | 0 | 0 |
| Gasoline | 50 | 13 | 0 | 37 |
| Motor Vehicle Excise (for cars >3,500 and <5,000 lbs.) | 46 | 21 | 9 | 16 |
| Motor Vehicle Registration (Fee) | 50 | 45 | 0 | 5 |
| Deed Recordation | 36 | 35 | 0 | 1 |

1/ Does not include two states that tax dividends and/or interest only.
2/ 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 | \$0 1/ | $\$ 0-\$ 10,000$$\$ 10,001-\$ 40,000$$\$ 40,001-\$ 60,000$$\$ 60,001-\$ 350,000$$\$ 350,000-\$ 1,000,000$Over $\$ 1,000,000$ | $4.0 \%$ <br> $\$ 400+6.0 \%$ of excess $>\$ 10,000$ <br> $\$ 2,200+6.5 \%$ of excess $>\$ 40,000$ <br> $\$ 3,500+8.5 \%$ of excess $>\$ 60,000$ <br> $\$ 28,150+8.75 \%$ of excess $>\$ 350,000$ <br> $\$ 85,025$, plus $8.95 \%$ of the excess above <br> $\$ 1,000,000$ |
| Married Filing Separately | \$0 |  |  |
| Married Filing Jointly | \$0 |  |  |
| Head of Household | \$0 |  |  |
| Dependent (additional) | \$0 |  |  |
| Blind (additional) | \$0 |  |  |
| Age 65 and over (additional) | \$0 |  |  |
| Standard Deduction | \$24,800 1/ |  |  |
| MARYLAND 2/ |  |  |  |
| Single | \$3,200 | $\$ 0-\$ 1,000$$\$ 1,001-\$ 2,000$$\$ 2,001-\$ 3,000$$\$ 3,001-\$ 150,000$$\$ 150,001-\$ 175,000$$\$ 175,001-\$ 225,000$$\$ 225,001-300,000$Over $\$ 300,000$ | $2.0 \%$$\$ 20+3.00 \%$ of excess $>\$ 1,000$$\$ 50+4.00 \%$ of excess $>\$ 2,000$$\$ 90+4.75 \%$ of excess $>\$ 3,000$$\$ 7,072.50+5 \%$ of excess $>\$ 150,000$$\$ 8,322.50+5.25 \%$ of excess $>\$ 175,000$$\$ 10,947.50+5.5 \%$ of excess $>\$ 225,000$$\$ 15,072.50+5.75 \%$ of excess $>\$ 300,000$ |
| Married Filing Separately | \$6,400 |  |  |
| Married Filing Jointly | \$6,400 |  |  |
| Head of Household | \$3,200 |  |  |
| Dependent (additional) | \$3,200 |  |  |
| Blind (additional) | \$1,000 |  |  |
| Age 65 and over (additional) | \$1,000 |  |  |
| Standard Deduction | $3 /$ |  |  |
| VIRGINIA |  |  |  |
| Single | \$ 930 | $\$ 0-\$ 3,000$$\$ 3,001-\$ 5,000$$\$ 5,001-\$ 17,000$Over $\$ 17,000$ | $2.0 \%$$\$ 60+3.00 \%$ of excess $>\$ 3,000$$\$ 120+5.00 \%$ of excess $>\$ 5,000$$\$ 720+5.75 \%$ of excess $>\$ 17,000$ |
| Married Filing Separately | \$ 930 |  |  |
| Married Filing Jointly | \$1,860 |  |  |
| Head of Household | \$ 930 |  |  |
| Dependent (additional) | \$ 930 |  |  |
| Blind (additional) | \$ 800 |  |  |
| Age 65 and over (additional) | \$ 800 |  |  |
| Standard Deduction | 4/ |  |  |

Source: State web sites.
1/ As a result of the 2017 Tax Cuts and Jobs Act and DC's federal conformity provisions, DC personal exemptions are reduced to zero and the federal standard deduction will apply thereafter. The standard deduction presented is for married taxpayers filing jointly. 2/ Maryland rates do not include local rates that may be as low as $2.25 \%$ 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/ The standard deduction for an individual is $15 \%$ of Maryland AGI not to exceed $\$ 2,300$ ( $\$ 4,650$ for joint and head of household returns and those filing as qualifying widow(er) with dependent child). The minimum is $\$ 1,550$ for single, married filing separately and dependent taxpayers. All others are allowed a minimum of $\$ 3,100$.
4/ Single - $\$ 4,500$; married persons filing jointly or combined separate - $\$ 9,000$.
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 | MARRIEDFILINGJOINT | DEPENDENTS | TYPEOFRETURN | MINIMUM |  | MAXIMUM |  |
|  |  |  |  | RATE | UP TO | RATE | OVER |
| ALABAMA 1/ |  |  |  |  |  |  |  |
| \$1,500 | \$3,000 | \$500 1/ | $\begin{array}{r} \mathrm{S}, \mathrm{HH}, \mathrm{M} / \mathrm{S} \\ \mathrm{M} / \mathrm{J} \end{array}$ | $\begin{aligned} & 2.0 \% \\ & 2.0 \% \end{aligned}$ | $\begin{array}{r} \$ 500 \\ 1,000 \end{array}$ | $\begin{aligned} & 5.0 \% \\ & 5.0 \% \end{aligned}$ | $\begin{aligned} & \$ 3,000 \\ & 6,000 \end{aligned}$ |
| ARIZONA |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$100 3/ | $\begin{array}{r} \mathrm{S}, \mathrm{M} / \mathrm{S} \\ \mathrm{M} / \mathrm{J}, \mathrm{HH} \end{array}$ | $\begin{aligned} & 2.59 \% \\ & 2.59 \% \end{aligned}$ | $\begin{array}{r} \$ 26,500 \\ 53,000 \end{array}$ | $\begin{aligned} & 4.54 \% \\ & 4.54 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 159,000 \\ 318,001 \end{array}$ |
| ARKANSAS 5/ |  |  |  |  |  |  |  |
| (\$26) | (\$52) | (\$26) | $\begin{array}{r} \hline \mathrm{S}, \mathrm{HH}, \mathrm{M}, \\ \mathrm{M} / \mathrm{J} \end{array}$ | 0.0\% | \$ 4,499 | 6.6\% | \$ 79,301 |
| CALIFORNIA $2 /$ |  |  |  |  |  |  |  |
| (\$122) | (\$244) | (\$378) | $\begin{array}{r} \hline \mathrm{S}, \mathrm{M} / \mathrm{S} \\ \mathrm{HH} \\ \mathrm{M} / \mathrm{J} \\ \hline \end{array}$ | $\begin{aligned} & 1.0 \% \\ & 1.0 \% \\ & 1.0 \% \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline 8,932 \\ 17,864 \\ 17,864 \\ \hline \end{array}$ | $\begin{aligned} & 12.3 \% \\ & 12.3 \% \\ & 12.3 \% \end{aligned}$ | $\begin{array}{r} \$ 599,012 \\ 814,658 \\ 1,198,024 \\ \hline \end{array}$ |
| COLORADO $1 /$ |  |  |  |  |  |  |  |
| \$0 3/ | \$0 3/ | \$0 3/ |  | . $3 \%$ of fe | taxable inc | h certain | odifications. |
| CONNECTICUT |  |  |  |  |  |  |  |
| \$15,000 | \$24,000 | \$0 4/ | $\begin{array}{r} \hline \text { S,M/S } \\ \mathrm{HH} \\ \mathrm{M} / \mathrm{J} \end{array}$ | $\begin{aligned} & \hline 3.0 \% \\ & 3.0 \% \\ & 3.0 \% \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline \$ 10,000 \\ 16,000 \\ 20,000 \\ \hline \end{array}$ | $\begin{aligned} & \hline 6.99 \% \\ & 6.99 \% \\ & 6.99 \% \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline \$ 500,000 \\ 800,000 \\ 1,000,000 \\ \hline \end{array}$ |
| DELAWARE 1/ |  |  |  |  |  |  |  |
| (\$110) | (\$220) | (\$110) | S, M/S, M/J | 0.0\% | \$ 2,000 | 6.60\% | \$ 60,000 |
| DISTRICT OF COLUMBIA |  |  |  |  |  |  |  |
| \$0 3/ | \$0 3/ | \$0 3/ | $\begin{array}{r} \text { S,M/S, } \\ \mathbf{M / J , ~ H H ~} \end{array}$ | 4.00\% | \$ 10,000 | 8.95\% | \$1,000,000 |
| GEORGIA |  |  |  |  |  |  |  |
| \$2,700 | \$7,400 | \$3,000 | M/S | 1.0\% | \$ 500 | 5.75\% | \$ 5,000 |
|  |  |  | S | 1.0\% | 750 | 5.75\% | 7,000 |
|  |  |  | HH, M/J | 1.0\% | 1,000 | 5.75\% | 10,000 |
| HAWAII |  |  |  |  |  |  |  |
| \$1,144 | \$2,288 | \$1,144 | M/S,S | 1.40\% | \$ 2,400 | 11.0\% | \$200,000 |
|  |  |  | HH | 1.40\% | 3,600 | 11.0\% | 300,000 |
|  |  |  | M/J, SS | 1.40\% | 4,800 | 11.0\% | 400,000 |

[^17]
## Table 14 (Continued) Individual Income Tax 43 States and the District of Columbia

| PERSONAL EXEMPTIONS (CREDITS) |  |  | RATES AND TAXABLE INCOME BRACKETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SINGLE | MARRIED <br> FILING <br> JOINT | DEPENDENTS | TYPEOFRETURN | MINIMUM |  | MAXIMUM |  |
|  |  |  |  | RATE | UP TO | RATE | OVER |
| IDAHO |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$03/ | $\begin{array}{r} \text { S,M/S } \\ \mathrm{HH}, \mathrm{M} / \mathrm{J} \end{array}$ | $\begin{aligned} & 1.125 \% \\ & 1.125 \% \end{aligned}$ | $\begin{array}{ll} \hline \$ & 1,568 \\ 3,136 \end{array}$ | $\begin{aligned} & \hline 6.925 \% \\ & 6.925 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 11,760 \\ 23,520 \end{array}$ |
| ILLINOIS |  |  |  |  |  |  |  |
| \$2,275 | \$4,550 | \$2,275 |  |  |  | of taxable | et income. 1/ |
| INDIANA $2 / 3 /$ |  |  |  |  |  |  |  |
| \$1,000 | \$2,000 | \$1,000 |  |  | 3.23\% of | al adjusted | ross income. |
| IOWA |  |  |  |  |  |  |  |
| (\$40) | (\$80) | (\$40) | S, M/J | 0.33\% | \$1,666 | 8.53\% | \$ 74,970 |
| KANSAS 4/ |  |  |  |  |  |  |  |
| \$2,250 | \$4,500 | \$2,250 | $\begin{array}{r} \hline \mathrm{S}, \mathrm{M} / \mathrm{S} \\ \mathrm{M} / \mathrm{J} \end{array}$ | $\begin{aligned} & \hline 3.1 \% \\ & 3.1 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 15,000 \\ 30,000 \end{array}$ | $\begin{aligned} & \hline 5.7 \% \\ & 5.7 \% \end{aligned}$ | $\begin{array}{ll} \hline \$ 30,000 \\ 60,000 \end{array}$ |
| KENTUCKY 1/ |  |  |  |  |  |  |  |
| \$0 | \$0 | \$0 |  |  | 5.0\% | al adjusted | ross income. |
| LOUISIANA |  |  |  |  |  |  |  |
| \$4,500 | \$9,000 | \$1,000 | $\begin{array}{r} \hline \mathrm{S}, \mathrm{M} / \mathrm{S}, \mathrm{HH} \\ \mathrm{M} / \mathrm{J} \end{array}$ | $\begin{aligned} & \hline 2.0 \% \\ & 2.0 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 12,500 \\ 25,000 \end{array}$ | $\begin{aligned} & \hline 6.0 \% \\ & 6.0 \% \end{aligned}$ | $\begin{aligned} & \hline \$ 50,000 \\ & \$ 100,000 \end{aligned}$ |
| MAINE |  |  |  |  |  |  |  |
| \$4,300 | \$8,600 | \$4,300 | $\begin{array}{r} \mathrm{S}, \mathrm{M} / \mathrm{S} \\ \mathrm{HH} \\ \mathrm{M} / \mathrm{J} \end{array}$ | $\begin{aligned} & 5.80 \% \\ & 5.80 \% \\ & 5.80 \% \end{aligned}$ | $\begin{array}{ll} \$ 22,200 \\ 33,300 \\ 44,450 \end{array}$ | $\begin{aligned} & 7.15 \% \\ & 7.15 \% \\ & 7.15 \% \end{aligned}$ | $\begin{array}{r} \$ 52,600 \\ 78,900 \\ 105,00 \end{array}$ |
| MARYLAND $2 /$ |  |  |  |  |  |  |  |
| \$3,200 | \$6,400 | \$3,200 | $\begin{array}{r} \hline \mathrm{S}, \mathrm{M} / \mathrm{S} \\ \mathrm{M} / \mathrm{J}, \mathrm{HH} \end{array}$ | $\begin{aligned} & \hline 2.0 \% \\ & 2.0 \% \end{aligned}$ | $\begin{array}{r} \$ 1,000 \\ 1,000 \end{array}$ | $\begin{aligned} & 5.75 \% \\ & 5.75 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 250,000 \\ 300,000 \end{array}$ |
| MASSACHUSETTS |  |  |  |  |  |  |  |
| \$4,400 | \$8,800 | \$1,000 |  |  |  | 5.0\% of | able income. |
| MICHIGAN $2 /$ |  |  |  |  |  |  |  |
| \$4,400 | \$8,100 | \$4,400 |  |  |  | 4.25\% of | able income. |

1/ Does not include filing fee of $\$ 10$.
2/ Does not include various local income taxes.
3/ Indiana allows an additional \$1,500 exemption for dependent children meeting certain conditions.
4/ Individuals with a taxable income of $\$ 2,500$ or less, and married individuals filing joint returns with a taxable income of less than $\$ 5,000$ will have a tax liability of zero.

Table 14 (Continued)
Individual Income Tax

## 43 States and the District of Columbia

| PERSONAL EXEMPTIONS (CREDITS) |  |  | RATES AND TAXABLE INCOME BRACKETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SINGLE | MARRIED <br> FILING <br> JOINT | DEPENDENTS | $\begin{gathered} \text { TYPE } \\ \text { OF } \\ \text { RETURN } \end{gathered}$ | MINIMUM |  | MAXIMUM |  |
|  |  |  |  | RATE | UP TO | RATE | OVER |
| MINNESOTA |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$0 3/ | S | 5.35\% | \$ 26,950 | 9.85\% | \$ 164,401 |
|  |  |  | M/S | 5.35\% | 19,705 | 9.85\% | 136,736 |
|  |  |  | HH | 5.35\% | 33,190 | 9.85\% | 218,541 |
|  |  |  | M/J | 5.35\% | 39,410 | 9.85\% | 273,241 |
| MISSISSIPPI |  |  |  |  |  |  |  |
| \$6,000 | \$12,000 | \$1,500 | S, M/J, HH | 3.0\% 1/ | \$5,000 | 5.0\% | \$ 10,000 |
| MISSOURI $2 /$ |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$0 3/ | $\begin{array}{r} \hline \mathrm{S}, \mathrm{M} / \mathrm{J}, \mathrm{HH}, \\ \mathrm{M} / \mathrm{S} \end{array}$ | 1.5\% | \$ 1,053 | 5.4\% | \$ 8,424 |
| MONTANA |  |  |  |  |  |  |  |
| \$2,510 | \$5,020 | \$2,510 | S, M/J, HH | 1.0\% | \$3,100 | 6.9\% | \$ 18,400 |
| NEBRASKA |  |  |  |  |  |  |  |
| (\$140) | (\$280) | (\$140) | M/S, S | 2.46\% | \$3,290 | 6.84\% | \$ 31,750 |
|  |  |  | HH | 2.46\% | 6,130 | 6.84\% | 47,080 |
|  |  |  | M/J | 2.46\% | 6,570 | 6.84\% | 63,500 |
| NEW HAMPSHIRE |  |  |  |  |  |  |  |
| \$2,400 | \$4,800 4/ | --- |  | 5.0\% on dividen | nd interest | over perso | 1 exemption. |
| NEW JERSEY |  |  |  |  |  |  |  |
| \$1,000 | \$2,000 | \$1,500 | $\begin{gathered} \text { S, M/S, } \\ \mathrm{HH}, \mathrm{M} / \mathrm{J} \end{gathered}$ | 1.4\% | \$ 20,000 | 10.75\% | \$ 5,000,000 |
| NEW MEXICO |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$0 3/ | S, M/S HH, M/J | $\begin{aligned} & 1.7 \% \\ & 1.7 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 5,500 \\ 8,000 \end{array}$ | $\begin{aligned} & \hline 4.9 \% \\ & 4.9 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 16,000 \\ 24,000 \end{array}$ |
| NEW YORK $2 /$ |  |  |  |  |  |  |  |
| --- | --- | \$1,000 | M/S, S | 4.0\% | \$ 8,500 | 8.82\% | \$1,077,550 |
|  |  |  | HH 4/ | 4.0\% | 12,800 | 8.82\% | 1,616,451 |
|  |  |  | M/J | 4.0\% | 17,150 | 8.82\% | 2,155,350 |
| NORTH CAROLINA |  |  |  |  |  |  |  |
| --- | --- | --- |  |  |  |  | 5.25\% |
| NORTH DAKOTA |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$0 3/ | S | 1.10\% | \$ 40,125 | 2.90\% | \$ 440,600 |
|  |  |  | HH | 1.10\% | 53,750 | 2.90\% | 440,600 |
|  |  |  | M/J | 1.10\% | 67,050 | 2.90\% | 440,600 |

1/ First $\$ 1,000$ exempted in 2018, with $\$ 1,000$ being added each year so that by 2022 first $\$ 5,000$ of income is not taxed.
2/ Does not include various local income taxes.
3/ These states conform personal exemptions to the federal Internal Revenue Code, and the passage of the Tax Cut and Jobs Act of 2017 reduced federal personal exemptions to $\$ 0$.
4/ In addition, a \$1,200 exemption is available for residents who are 65 years of age or older; a $\$ 1,200$ exemption is available for residents who are blind regardless of their age; and a $\$ 1,200$ exemption is available to disabled individuals who are unable to work.

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

| PERSONAL EXEMPTIONS (CREDITS) |  |  | RATES AND TAXABLE INCOME BRACKETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SINGLE | $\begin{aligned} & \text { MARRIED } \\ & \text { FILING } \\ & \text { JOINT } \\ & \hline \end{aligned}$ | DEPENDENTS | $\begin{gathered} \text { TYPE } \\ \text { OF } \\ \text { RETURN } \end{gathered}$ | MINIMUM |  | MAXIMUM |  |
|  |  |  |  | RATE | UP TO | RATE | OVER |
| OHIO 1/ |  |  |  |  |  |  |  |
| \$2,350 | \$4,700 | \$2,350 | S, M/J, M/S | 0.0\% | \$ 21,750 | 4.797\% | \$217,400 |
| OKLAHOMA |  |  |  |  |  |  |  |
| \$1,000 | \$2,000 | \$1,000 | S,M/S | 0.5\% | \$1,000 | 5.00\% | \$7,200 |
|  |  |  | HH,M/J | 0.5\% | 2,000 | 5.00\% | 12,200 |
| OREGON 1/ |  |  |  |  |  |  |  |
| (\$210) | (\$420) | (\$210) | $\begin{gathered} \hline \mathrm{S}, \mathrm{M} / \mathrm{S} \\ \mathrm{M} / \mathrm{J} \end{gathered}$ | $\begin{aligned} & \hline 4.75 \% \\ & 4.75 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 50,000 \\ 50,000 \end{array}$ | $\begin{aligned} & \hline 9.9 \% \\ & 9.9 \% \end{aligned}$ | $\begin{array}{r} \hline \$ 125,000 \\ 250,000 \end{array}$ |
| PENNSYLVANIA 1/ |  |  |  |  |  |  |  |
| --- | --- | --- |  | \% of spe | classes of | income | ffective rate. |
| RHODE ISLAND |  |  |  |  |  |  |  |
| \$4,100 | \$8,200 | \$4,100 | $\begin{array}{r} \hline \mathrm{S}, \mathrm{HH}, \mathrm{M} / \mathrm{S}, \\ \mathrm{M} / \mathrm{J} \end{array}$ | 3.75\% | \$ 65,250 | 5.99\% | \$ 148,350 |
| SOUTH CAROLINA |  |  |  |  |  |  |  |
| \$03/ | \$0 3/ | \$0 3/ | S, M/S, M/J | 0.0\% | \$ 3,070 | 7.0\% | \$ 15,400 |
| TENNESSEE |  |  |  |  |  |  |  |
| \$1,250 | \$2,500 | --- |  |  | 1.0\% o | est and divid | dend income. |
| UTAH /2 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 95\% flat rate. |
| VERMONT |  |  |  |  |  |  |  |
| \$4,250 | \$8,500 | \$4,250 | S | 3.35\% | \$40,350 | 8.75\% | \$ 204,000 |
|  |  |  | M/S | 3.35\% | 32,300 | 8.75\% | 118,975 |
|  |  |  | HH | 3.35\% | 51,580 | 8.75\% | 216,700 |
|  |  |  | M/J | 3.35\% | 67,450 | 8.75\% | 248,350 |
| VIRGINIA |  |  |  |  |  |  |  |
| \$930 | \$1,860 | \$930 | S, M/J | 2.0\% | \$ 3,000 | 5.75\% | \$ 17,000 |
| WEST VIRGINIA $1 /$ |  |  |  |  |  |  |  |
| \$2,000 | \$4,000 | \$2,000 | S, M/J | 3.0\% | \$ 10,000 | 6.5\% | \$ 60,000 |
| WISCONSIN |  |  |  |  |  |  |  |
| \$700 | \$1,400 | \$700 | S, HH | 3.54\% | \$11,970 | 7.65\% | \$ 263,480 |
|  |  |  | M/J | 3.54\% | 15,960 |  | 351,310 |
|  |  |  | M/S | 3.54\% | 7,980 |  | 175,660 |

[^18]Table 15: Characteristics of State Individual Income Taxes

| JURISDICTION | FEDERAL INCOME TAX DEDUCTIBLE | $\begin{aligned} & \text { NO INCOME } \\ & \text { TAX } \end{aligned}$ | FEDERAL DEFINITION OF INCOME FOR STATE TAX BASE | STATE DEFINITION OF INCOME FOR STATE TAX BASE |
| :---: | :---: | :---: | :---: | :---: |
| ALABAMA | AL |  |  | AL |
| ALASKA |  | AK |  |  |
| ARIZONA |  |  | AZ |  |
| ARKANSAS |  |  |  | AR |
| CALIFORNIA |  |  | CA |  |
| COLORADO |  |  | CO* |  |
| CONNECTICUT |  |  | CT |  |
| DELAWARE |  |  | DE |  |
| $\begin{aligned} & \text { DISTRICT OF } \\ & \text { COLUMBIA } \end{aligned}$ |  |  | DC |  |
| FLORIDA |  | FL |  |  |
| GEORGIA |  |  | GA |  |
| HAWAII |  |  | HI |  |
| IDAHO |  |  | ID* |  |
| ILLINOIS |  |  | IL |  |
| INDIANA |  |  | IN |  |
| IOWA | IA |  | IA |  |
| KANSAS |  |  | KS |  |
| KENTUCKY |  |  | KY |  |
| LOUISIANA | LA |  | LA |  |
| MAINE |  |  | ME |  |
| MARYLAND |  |  | MD |  |
| MASSACHUSETTS |  |  | MA |  |
| MICHIGAN |  |  | MI |  |
| MINNESOTA |  |  | MN* |  |
| MISSISSIPPI |  |  |  | MS |
| MISSOURI 1/ | MO |  | MO |  |

Table 15 (Continued) Characteristics of State Individual Income Taxes

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

Source: Federation of Tax Administrators, "State Personal Income Taxes: Federal Starting Points;" January 1, 2020 and "State Individual Income Taxes;" January 1, 2020; and Survey of State Revenue Department Officials

* 'Federal taxable income' is the definition of income for state base (rather than Federal Adjusted Gross Income).

1/ Federal taxes used as a deduction are limited to $\$ 5,000$ for individuals and $\$ 10,000$ for joint returns in MO and MT.
2/ Tax only on interest and dividends.
3/ Federal deductibility is limited to $\$ 6,350$, 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 Corporate Income Tax Rates (Maximum Rates)

DISTRICT OF COLUMBIA: $8.25 \%$

| LOWER THAN THE DISTRICT 33 STATES |  |  |  |
| :---: | :---: | :---: | :---: |
| North Carolina | 2.50\% | Alabama | 6.50\% |
| North Dakota 1/ | 4.31\% | Arkansas | 6.50\% |
| Colorado | 4.50\% | New York | 6.50\% |
| Florida | 4.55\% | Tennessee | 6.50\% |
| Arizona | 4.90\% | West Virginia | 6.50\% |
| Utah | 4.95\% | Montana $2 /$ | 6.75\% |
| Kentucky | 5.00\% | Idaho | 6.93\% |
| Mississippi | 5.00\% | Kansas 3/ | 7.00\% |
| South Carolina | 5.00\% | Rhode Island 4/ | 7.00\% |
| Indiana 12/ | 5.50\% | Connecticut | $7.50 \%$ |
| Georgia | 5.75\% | Oregon | 7.60\% |
| New Mexico 11/ | 5.90\% | Nebraska | 7.81\% |
| Michigan | 6.00\% | Wisconsin | 7.90\% |
| Oklahoma | 6.00\% | Louisiana | 8.00\% |
| Virginia | 6.00\% | Massachusetts | 8.00\% |
| Missouri Hawaii | $\begin{aligned} & 6.25 \% \\ & 6.40 \% \\ & \hline \end{aligned}$ | New Hampshire 5/ | 7.70\% |
| SAME AS THE DISTRICT1 STATE |  |  |  |
| Maryland 8.25\% |  |  |  |
| HIGHER THAN THE DISTRICT10 STATES |  |  |  |
| Vermont 13/ | 8.50\% | Alaska | 9.40\% |
| Delaware | 8.70\% | Illinois 6/ | 9.50\% |
| California | 8.84\% | Minnesota | 9.80\% |
| Maine | 8.93\% | Pennsylvania | 9.99\% |
| New Jersey | 9.00\% | Iowa 7/ | 12.00\% |
| $\begin{aligned} & \text { NO TAX } \\ & 6 \text { STATES } \end{aligned}$ |  |  |  |
| Ohio 8/ <br> Nevada <br> South Dakota 9/ |  | Texas $10 /$ Washington Wyoming |  |

Source: Survey of State Revenue Department Officials; State web pages; and Federation of Tax Administrators, "Range of State Corporate Income Tax Rates, January 1, 2020."
$1 /$ On income exceeding $\$ 50,000$.
2/ Montana's rate is 7\% for corporations making a "water's edge" election.
3/ Kansas' rate includes a $3.0 \%$ surtax on taxable income more than $\$ 50,000$.
4/ In RI, a rate of $9.0 \%$ applies to financial institutions, not applicable to public service corporations or insurance companies.
5/ Rate is applied to income over $\$ 100,000$. Does not include a Business Enterprise Tax of $0.675 \%$.
6/ Illinois' rate includes 2.5\% Personal Property Replacement Tax.
$7 / 50 \%$ federal deductibility.
8/ Ohio's Commercial Activity Tax (CAT) is imposed on the privilege of doing business in Ohio, measured by gross receipts.
9/ There is a Bank Franchise Tax for Commercial Lenders in South Dakota.
10/ There is a Franchise Tax on Entities with total revenues over $\$ 1.13$ million.
$11 /$ Rate is $4.8 \%$ if income is less than $\$ 500,000$.
12/ Indiana's corporate tax rate decreased to $5.25 \%$ on July 1, 2020.
13 / Vermont tax rate is lower if income allocable to Vermont is less than $\$ 25,001$.

Table 17: State Gross Premiums Tax Rates on Foreign (Out-of-State) Life Insurers (Maximum Rates)

## DISTRICT OF COLUMBIA: 1.7\%

\left.| LOWER THAN THE DISTRICT |  |
| :--- | ---: | :--- | :--- |
| 13 STATES |  |$\right]$|  |
| :--- |
| Illinois |
| New York 1/ |
| South Carolina |
| Wyoming |
| Iowa |
|  |
| Nebraska |
| Michigan |

[^19]Table 18: State General Sales and Use Tax Rates
(Maximum Local Rates in Parentheses)

DISTRICT OF COLUMBIA: 6.0\%

| LOWER THAN THE DISTRICT19 STATES |  |  |  |
| :---: | :---: | :---: | :---: |
| Colorado (8.3\%) | 2.900\% | North Carolina (2.75\%) | 4.750\% |
| Alabama (7.0\%) | 4.000\% | North Dakota (3.5\%) | 5.000\% |
| Georgia (5.0\%) | 4.000\% | Wisconsin (1.75\%) | 5.000\% |
| Hawaii (0.50\%) | 4.000\% | New Mexico (4.125\%) | 5.125\% |
| New York (4.875\%) | 4.000\% | Virginia (0.70\%) 1/ | 5.300\% |
| Wyoming (2.0\%) | 4.000\% | Maine | 5.500\% |
| Missouri (5.625\%) | 4.225\% | Nebraska (2.5\%) | 5.500\% |
| Louisiana (7.0\%) | 4.450\% | Arizona (5.6\%) | 5.600\% |
| Oklahoma (7.0\%) | 4.500\% | Ohio (2.25) | 5.750\% |
| South Dakota (4.5\%) | 4.500\% |  |  |
| SAME AS THE DISTRICT10 STATES |  |  |  |
| Florida (2.5\%) | 6.000\% | Michigan | 6.000\% |
| Idaho (3.0\%) | 6.000\% | Pennsylvania (2.0\%) | 6.000\% |
| Iowa (1.0\%) | 6.000\% | South Carolina (3.0\%) | 6.000\% |
| Kentucky | 6.000\% | Vermont (1.0\%) | 6.000\% |
| Maryland | 6.000\% | West Virginia (1.0\%) | 6.000\% |
| HIGHER THAN THE DISTRICT16 STATES |  |  |  |
| Utah (2.95\%) 1/ | 6.100\% | Minnesota (2.0\%) | 6.875\% |
| Illinois (10.00\%) | 6.250\% | Indiana | 7.000\% |
| Massachusetts | 6.250\% | Mississippi (1.0\%) | 7.000\% |
| Texas (2.0\%) | 6.250\% | Rhode Island | 7.000\% |
| Connecticut | 6.350\% | Tennessee (2.75\%) | 7.000\% |
| Arkansas (5.125\%) | 6.500\% | California (2.50\%) 1/ | 7.250\% |
| Kansas (4.0\%) | 6.500\% |  |  |
| Washington (4.0\%) | 6.500\% |  |  |
| New Jersey (3.313\%) | 6.625\% |  |  |
| Nevada (1.65\%) | 6.850\% |  |  |
| $\begin{gathered} \hline \text { NO TAX } \\ 5 \text { STATES } \\ \hline \end{gathered}$ |  |  |  |
| Alaska (7.5\%) |  | New Hampshire |  |
| Delaware <br> Montana $2 /$ |  | Oregon |  |

Source: Survey of State Revenue Department Officials; State Revenue Department Web Sites; all maximum local rates from Tax Foundation, "State and Local Sales Tax Rates as of January 1, 2020."

1/ State rates in CA, UT, and VA include a mandatory local add-on sales tax of $1.25 \%, 1.25 \%$, and $1 \%$, 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


Source: Survey of State Revenue Department Officials; and Federation of Tax Administrators, "State Tax Rates on Beer. (January 1, 2020)."

1/ Montana taxes beer at different rates per size of brewer (<5k barrels produced - $\$ .04$ per gallon; 5 k to $10 \mathrm{k}-\$ .07$ per gallon; 10k to $20 \mathrm{k}-\$ .11$ per gallon; and $>20 \mathrm{k}-\$ .14$ per gallon).
2/ Credit allowed to small brewers.
3/ $\$ 0.08$ per gallon for bulk beer.
4/ Credit allowed to small brewers.
$5 /$ Rate is $\$ 0.08$ per gallon for microbrewer.
6/ 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.
7/ Rate is $\$ 0.54$ per gallon for draft beer.
8/ In addition, Tennessee has a barrellage tax of $.138 / \mathrm{gal}$.

Table 20: State Light Wine Tax Rates
(Per Gallon, Alcoholic Content of 12\%)
DISTRICT OF COLUMBIA: \$0.30

| MONOPOLY STATES 3 STATES |  |  |  |
| :---: | :---: | :---: | :---: |
| Pennsylvania 1 / |  | Utah 21 Wyoming |  |
| LOWER THAN THE DISTRICT4 STATES |  |  |  |
| California Texas | $\begin{aligned} & \$ .20 \\ & .204 \end{aligned}$ | Wisconsin Colorado | $\begin{array}{r} \$ .25 \\ .28 \end{array}$ |
| SAME AS THE DISTRICT 4 STATES |  |  |  |
| Kansas <br> Minnesota | $\begin{array}{r} \$ .30 \\ .30 \end{array}$ | New Hampshire New York | $\begin{array}{r} \$ .30 \\ .30 \end{array}$ |
| HIGHER THAN THE DISTRICT39 STATES |  |  |  |
| Ohio <br> Mississippi <br> Maryland <br> Missouri <br> Idaho <br> Indiana <br> Kentucky <br> North Dakota <br> Michigan <br> Massachusetts <br> Vermont <br> Maine <br> Oregon <br> Nevada <br> Oklahoma <br> Arkansas <br> Louisiana <br> Connecticut <br> Arizona <br> Washington | $\$ .32$ .35 .40 .42 .45 .47 .50 .50 .51 .55 .55 .60 .67 .70 .72 .75 .76 .79 .84 .87 | New Jersey <br> South Carolina <br> South Dakota <br> Nebraska <br> North Carolina <br> West Virginia <br> Montana $2 /$ <br> Tennessee <br> Hawaii <br> Illinois <br> Rhode Island <br> Georgia <br> Virginia <br> Delaware <br> Alabama <br> New Mexico <br> Iowa <br> Florida <br> Alaska | $\$ .875$ .90 .93 .95 1.00 1.00 1.02 1.21 1.38 1.39 1.40 1.51 1.51 1.63 1.70 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, 2020)."
1/ $18 \%$ wine $\&$ liquor tax on top of a $30 \%$ markup.
2/ $\$ 1.06$ 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 <br> Idaho <br> Iowa 1/ <br> Maine <br> Michigan <br> Mississippi <br> Montana $2 /$ <br> New Hampshire <br> North Carolina 3/ |  | Ohio <br> Oregon <br> Pennsylvania 4/ <br> Utah 5/ <br> Vermont <br> Virginia $6 /$ <br> West Virginia <br> Wyoming |  |
| SAME AS THE DISTRICT 1 STATE |  |  |  |
| Maryland |  | \$ 1.50 |  |
| HIGHER THAN THE DISTRICT 32 STATES |  |  |  |
| Georgia <br> Kentucky <br> Missouri <br> Colorado <br> Texas | $\begin{array}{r} \$ 1.89 \\ 1.92 \\ 2.00 \\ 2.28 \\ 2.40 \end{array}$ | Nebraska South Dakota Massachusetts Tennessee Delaware 9/ | $\begin{array}{r} \$ 3.75 \\ 3.93 \\ 4.05 \\ 4.40 \\ 4.50 \end{array}$ |
| Arkansas 7/ <br> Kansas <br> North Dakota <br> Indiana <br> South Carolina 8 | $\begin{aligned} & 2.50 \\ & 2.50 \\ & 2.50 \\ & 2.68 \\ & 2.72 \end{aligned}$ | Minnesota <br> Rhode Island New Jersey Oklahoma Connecticut | $\begin{aligned} & 5.03 \\ & 5.40 \\ & 5.50 \\ & 5.56 \\ & 5.94 \end{aligned}$ |
| Arizona <br> Louisiana <br> Wisconsin <br> California <br> Nevada | $\begin{aligned} & 3.00 \\ & 3.03 \\ & 3.25 \\ & 3.30 \\ & 3.60 \end{aligned}$ | Hawaii <br> New Mexico <br> New York <br> Florida <br> Illinois | $\begin{aligned} & 5.98 \\ & 6.06 \\ & 6.44 \\ & 6.50 \\ & 8.55 \end{aligned}$ |
|  |  | Alaska <br> Washington | $\begin{aligned} & 12.80 \\ & 14.27 \end{aligned}$ |

Source: Survey of State Revenue Department Officials; Federation of Tax Administrators, "State Tax Rates on Distilled Spirits, (January 1, 2020)."

## 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. State sales tax additional.
4/ $18 \%$ on the actual price paid by the consumer including mark-up, handling charge, and federal tax.
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, totaling $\$ 4.92$ 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: \$4.98 1 /

| LOWER THAN THE DISTRICT |  |  |  |
| :--- | :--- | :--- | :--- |
| 50 STATES |  |  |  |

[^20]1/ Includes an in-lieu cigarette sales tax currently at $\$ 0.48$.
2/ Additional $\$ 2.00$ tax in Philadelphia and $\$ 1.50$ in New York City.
3/ Includes a cigarette sales tax of $\$ 0.633$ per pack.

Table 23: State Gasoline Tax Rates (Per Gallon)

DISTRICT OF COLUMBIA: \$0.235 1/

| LOWER THAN THE DISTRICT |  |  |  |
| :--- | :--- | :--- | :--- |
| 12 STATES |  |  |  |

Source: ORA Survey of State Revenue Department officials; State Web Sites; and Federation of Tax Administrators, "State Motor Fuel Rates, (January 1, 2020)."

Note: Tax rates do not include local taxes (see Table 8). Rates do include inspection or environmental cleanup fees and applicable state sales taxes (also included in Table 8), and therefore this table differs from the same one presented in some prior editions of this report (2017 and before).

1/ As of October 1, 2020, the District of Columbia levied a surcharge of $\$ 0.053$ on the sale of motor fuel, gasoline, and gasohol.
2/Additional Gross Receipts Tax of $0.9 \%$ applies to wholesaler.
3/ Includes a minimum statewide local tax.
4/ Alabama's state rate increased to $\$ 0.26$ on October 1, 2020.
5/ South Carolina's rate increased to $\$ 0.24$ on July 1, 2020.
6/ Nebraska's state rate increased to $\$ 0.332$ on July 1, 2020.

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

## 46 States and DC

| DISTRICT OF COLUMBIA: $1 /$ <br> $6 \%$ of fair market value - 3,499 pounds or less $\mathbf{7 \%}$ of fair market value $-\mathbf{3 , 5 0 0}$ pounds and less than 5,000 pounds $\mathbf{8 \%}$ of fair market value $-5,000$ pounds or more |  |  |  |
| :---: | :---: | :---: | :---: |
| Alabama | 2.00\% | Maryland | 6.00\% |
| Colorado | 2.90\% | Michigan 7/ | 6.00\% |
| North Carolina $2 /$ | 3.00\% | Pennsylvania 7/ | 6.00\% |
| Oklahoma | 3.25\% | South Carolina 6/ | 6.00\% |
| Hawaii | 4.00\% | Vermont | 6.00\% |
| New Mexico | 4.00\% | West Virginia 71 | 6.00\% |
| New York 3/ | 4.00\% | Illinois 3/ | 6.25\% |
| South Dakota | 4.00\% | Massachusetts 3/ | 6.25\% |
| Wyoming 3/ | 4.00\% | Texas 3/ 71 | 6.25\% |
| Virginia | 4.15\% | Connecticut 3/ | 6.35\% |
| Missouri 3/ | 4.225\% | Arkansas 3/, 9/ | 6.50\% |
| Delaware 4/ | 4.25\% | Kansas | 6.50\% |
| Louisiana 3/ | 4.45\% | Minnesota | 6.50\% |
| Utah | 4.85\% | Washington 3/ | 6.50\% |
| Iowa 5/ | 5.00\% | Georgia 10/ | 6.60\% |
| North Dakota | 5.00\% | New Jersey 3/ | 6.625\% |
| Wisconsin 3/ | 5.00\% | Indiana 3/ | 7.00\% |
| Maine 3/8/ | 5.50\% | Mississippi 3/ | 7.00\% |
| Nebraska | 5.50\% | Tennessee 3/ | 7.00\% |
| Arizona | 5.60\% | Rhode Island 7/ | 7.00\% |
| Ohio 3/ | 5.75\% | California | 7.50\% |
| Florida 3/7/ | 6.00\% | Nevada 3/ | 8.10\% |
| Idaho | 6.00\% |  |  |
| Kentucky | 6.00\% |  |  |
| NO TAX 4 STATES |  |  |  |
| Alaska |  | New Hampshire |  |
| Montana |  | Oregon 11/ |  |

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. No excise tax on hybrid vehicles.
2/ Tax on sales price less trade-in allowance. The maximum tax is $\$ 250$ on non-commercial vehicles.
3/ No excise tax; vehicles charged sales tax at time of purchase.
4/ Called a document fee.
5/ This is a statewide levy, but it is collected by the counties.
6/ Maximum tax is $\$ 500$.
7/ Tax on sales price less trade-in allowance.
8/ Rate listed is a sales tax; Maine's excise tax is an annual tax between $.4 \%$ and $2.4 \%$ depending on the age of the vehicle.
9/ Local sales taxes are capped at $\$ 25$ per $1 \%$ of tax on a single transaction, maximum of $\$ 62.50$. Used cars below $\$ 4,000$ are exempt.
10/ Title Ad Valorem Tax collected at time of title application.
11/ A $0.5 \%$ tax (part vehicle dealer privilege tax and part consumer use tax) applies to vehicles $<26,000 \mathrm{lbs}$. and $<7,500$ miles.

Table 25: State Motor Vehicle Annual 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 45 STATES |  |  |  |
| :---: | :---: | :---: | :---: |
| Arizona $6 /$ | \$9.50 | New Hampshire | \$43.20 |
| Mississippi | 15.00 | Hawaii | 45.00 |
| Nebraska | 15.00 | Florida | 45.60 |
| Georgia | 20.00 | Utah 6/ | 46.00 |
| Kentucky | 21.00 | Alaska | 50.00 |
| Alabama | 23.00 | Texas | 50.75 |
| Arkansas | 25.00 | West Virginia | 51.50 |
| Missouri 2/ | 27.25 | California $12 /$ | 60.00 |
| Louisiana 4/ | 27.90 | New Mexico 9/ | 62.00 |
| New York 3/ | 28.25 | Oregon | 66.00 |
| Tennessee | 29.00 | Washington 5/ | 68.25 |
| Massachusetts | 30.00 | Maryland | 67.50 |
| Wyoming | 30.00 | Idaho | 69.00 |
| Virginia | 30.75 | Colorado 8/ | 72.00 |
| Ohio | 31.00 | South Dakota | 72.00 |
| Rhode Island | 32.50 | Vermont | 76.00 |
| Nevada | 33.00 | New Jersey | 84.00 |
| Maine | 35.00 | Wisconsin | 85.00 |
| North Carolina | 36.00 | North Dakota 7/ | 93.00 |
| Indiana | 36.35 | Oklahoma | 96.00 |
| Pennsylvania | 38.00 |  |  |
| Kansas | 37.25 |  |  |
| Connecticut 12/ | 40.00 |  |  |
| Delaware | 40.00 |  |  |
| South Carolina | 40.00 |  |  |
| HIGHER THAN THE DISTRICT5 STATES |  |  |  |
| Illinois | 151.00 | Iowa 11/ | 293.00 |
| Michigan 8/ | 166.00 | Minnesota | 359.00 |
| Montana 10/ | 217.00 |  |  |

Source: Survey of State Revenue Department Officials; Review of State Motor Vehicle Registration Web Sites.
1/ $\$ 72$ (<3,499 lbs.); $\$ 115$ (3,500-4,999 lbs.); $\$ 155$ ( $>5,000 \mathrm{lbs}$ ); and $\$ 36$ (clean fuel or electric vehicle).
2/ Based on vehicle horsepower. $\$ 21$ is for a vehicle between $12 \mathrm{hp}-23 \mathrm{hp}$. Does not include $\$ 1$ insurance database fee.
3/ Biennial fees start at $\$ 26$ for a vehicle under $1,650 \mathrm{lbs}$. and increase by $\$ 1.50$ for every 100 lbs . above 1,650. Presented annually here.
4/ Based on value of the vehicle. Current rate is $0.1 \%$ of vehicle per year.
5/ Includes vehicle weight fee of $\$ 25$, additional local taxes and fees apply.
6/ AZ includes \$1.50 Air Quality Research Fee. UT includes $\$ 1$ insurance database fee. CA includes alternative fuel/technology fee.
7/ Fees range from $\$ 49$ to $\$ 274$ based on weight and number of years vehicle has been registered. Rate declines after first 6 years.
8/ Varies based on age, weight, taxable value, purchase date, and plate type.
9/ This fee is for the first registration, $1.25 \%$ of base vehicle value, plus $\$ 10$.
10/ There is an additional $\$ 6$ fee for Park access and a $\$ 5$ fee for police salaries.
11 / Based on fee of $1 \%$ of value plus a $\$ .40$ fee per 100 lbs .
12/ CA includes \$3 alternative fuel/technology registration fee. CT includes \$10 Clean Air Act fee.

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

DISTRICT OF COLUMBIA: $\$ 11.00$ 1/

| LOWER THAN THE DISTRICT35 STATES |  |  |  |
| :---: | :---: | :---: | :---: |
| Colorado 5/ | \$. 05 | South Carolina 5/ | \$1.30 |
| Alabama | . 50 | Tennessee | 1.85 |
| Georgia ${ }^{2}$ | . 50 | Nevada 5/ | 1.95 |
| Hawaii 3/ | . 50 | Arizona $6 /$ | 2.00 |
| Illinois | . 50 | New York 9/ | 2.00 |
| Kansas 4/ | . 50 | Maine | 2.20 |
| Kentucky | . 50 | Massachusetts | 2.28 |
| Ohio | . 50 | Rhode Island 8/ | 2.30 |
| South Dakota | . 50 | Maryland 9/ | 2.50 |
| Oklahoma | . 75 | New Jersey 5/ 71 | 2.90 |
| Iowa | . 80 | Florida | 3.50 |
| North Carolina | 1.00 | Michigan | 3.75 |
| West Virginia 5/ | 1.10 | New Hampshire | 3.75 |
| Nebraska | 1.125 | Connecticut 5/ | 3.75 |
| Virginia | 1.25 | Pennsylvania | 5.00 |
| Wisconsin | 1.50 | Washington 11/ | 5.50 |
| Arkansas | 1.65 | Vermont 10/ | 7.25 |
| Minnesota | 1.65 |  |  |
| HIGHER THAN THE DISTRICT1 STATE |  |  |  |
| Delaware \$15.00 5/ |  |  |  |
| $\begin{aligned} & \text { NO TAX } \\ & 14 \text { STATES } \\ & \hline \end{aligned}$ |  |  |  |
| Alaska | Louisiana | New Mexico |  |
| California 5/ | Mississippi | North Dakota | Utah |
| Idaho | Missouri | Oregon | Wyoming |
| Indiana | Montana | Texas |  |

Source: Survey of State Revenue Department Officials, State web sites; and National Conference of State Legislatures (NCSL), "Real Estate Transfer Taxes."
1/ For DC, $\$ 11.00$ represents the deed recordation tax + the deed transfer tax per $\$ 500(\$ 5.50 / \$ 500$ for each) for residential property. The rate is $1.1 \%$ 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 $>\$ 400,000$. Total transfer + recordation rate is 2.2 and 2.9 percent, respectively. 2/ $\$ 1.00$ for the first $\$ 1,000$ or fractional part thereof. Thereafter, $\$ 0.10$ per each $\$ 100.00$.
3/ Based on value, from $\$ 0.50$ to $\$ 6.25$ per $\$ 500$ of value, as value rises from less than $\$ 600,000$ to over $\$ 10,000,000$.
4/ This is a mortgage registration fee. Recording rate is per page.
5/ Additional local/County rates/fees apply.
6/ Flat fee per deed or contract.
$7 /$ Based on value, from $\$ 2 / \$ 500$ to $\$ 6.05 / \$ 500$ of consideration.
8/ Includes portion received by state rate of $\$ 0.90$; local government share of $\$ 1.10$, and state Housing Resources Commission share of $\$ 0.30$.
9/ Local transfer tax and recordation fees additional; rates vary by locality. State rate is $\$ 1.25 / \$ 500$ for first-time homebuyers. $10 /$ Rate varies. For principal residence, the rate is $\$ 2.50 / \$ 500$ on first $\$ 100,000$ in value and $\$ 7.25 / \$ 500$ on value over $\$ 100,000$.
11/ For value of $\$ 500,00$ or less.

## Appendix

## Map 5: Combined 2019 Tax Burdens (Income, Property, Sales, \& Auto) as a \% of Income (Family Earning \$25,000/Year)



Source: ORA Analysis. The lighter the blue in the map, the lower the tax burden as a percentage of income.

$$
\begin{aligned}
& \text { Percent Burden } \\
& 1.5 \% \quad 18.6 \%
\end{aligned}
$$

Map 6: Combined 2019 Tax Burdens (Income, Property, Sales, \& Auto) as a \% of Income (Family Earning \$50,000/Year)


Source: ORA Analysis. The lighter the blue in the map, the lower the tax burden as a percentage of income.
Percent Burden
3.8\% 15.3\%

Map 7: Total 2019 Tax Burdens (Income, Property, Sales, \& Auto) as a \% of Income (Family Earning \$75,000/Year)


Source: ORA Analysis. The lighter blue shading represents a lower tax burden.

> | Percent Burden |
| :--- |
| $3.8 \% \quad 16.0 \%$ |

Map 8: Combined 2019 Tax Burdens (Income, Property, Sales, \& Auto) as a \% of Income (Family Earning \$100,000/Year)


Source: ORA Analysis. The lighter the blue in the map, the lower the tax burden as a percentage of income.

> Percent Burden
3.8\% 15.9\%

Map 9: Combined 2019 Tax Burdens (Income, Property, Sales, \& Auto) as a \% of Income (Family Earning \$150,000/Year)


Source: ORA Analysis. The lighter the blue in the map, the lower the tax burden as a percentage of income.
Percent Burden
3.9\% 16.2\%

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

| City | State | $\begin{gathered} 2010 \\ \text { Population } \end{gathered}$ | $\begin{gathered} 2017 \\ \text { Population } \end{gathered}$ | $\begin{gathered} 2018 \\ \text { Population } \end{gathered}$ | $2019$ <br> Population | $\%$ Difference 2010 to 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Birmingham | Alabama | 212,026 | 210,710 | 209,880 | 209,403 | -1.24\% |
| Anchorage | Alaska | 293,405 | 294,356 | 291,538 | 288,000 | -1.84\% |
| Phoenix | Arizona | 1,450,267 | 1,626,078 | 1,660,272 | 1,680,992 | 15.91\% |
| Little Rock | Arkansas | 194,003 | 198,606 | 197,881 | 197,312 | 1.71\% |
| Los Angeles | California | 3,796,575 | 3,999,759 | 3,990,456 | 3,979,576 | 4.82\% |
| Denver | Colorado | 603,300 | 704,621 | 716,492 | 727,211 | 20.54\% |
| Bridgeport | Connecticut | 144,911 | 146,579 | 144,900 | 144,399 | -0.35\% |
| Wilmington | Delaware | 70,787 | 71,106 | 70,635 | 70,166 | -0.88\% |
| Jacksonville | Florida | 823,280 | 892,062 | 903,889 | 911,507 | 10.72\% |
| Atlanta | Georgia | 422,753 | 486,290 | 498,044 | 506,811 | 19.88\% |
| Honolulu | Hawaii | 338,680 | 350,395 | 347,397 | 345,064 | 1.88\% |
| Boise | Idaho | 206,355 | 226,570 | 228,790 | 228,959 | 10.95\% |
| Chicago | Illinois | 2,697,650 | 2,716,450 | 2,705,994 | 2,693,976 | -0.14\% |
| Indianapolis | Indiana | 821,632 | 863,002 | 867,125 | 876,384 | 6.66\% |
| Des Moines | Iowa | 204,573 | 217,521 | 216,853 | 214,237 | 4.72\% |
| Wichita | Kansas | 382,872 | 390,591 | 389,255 | 389,938 | 1.85\% |
| Louisville | Kentucky | 597,738 | 621,349 | 620,118 | 617,638 | 3.33\% |
| New Orleans | Louisiana | 347,900 | 393,292 | 391,006 | 390,144 | 12.14\% |
| Portland | Maine | 66,087 | 66,882 | 66,417 | 66,215 | 0.19\% |
| Baltimore | Maryland | 621,180 | 611,648 | 602,495 | 593,490 | -4.46\% |
| Boston | Massachusetts | 620,623 | 685,094 | 694,583 | 692,600 | 11.60\% |
| Detroit | Michigan | 711,049 | 673,104 | 672,662 | 670,031 | -5.77\% |
| Minneapolis | Minnesota | 383,083 | 422,331 | 425,403 | 429,606 | 12.14\% |
| Jackson | Mississippi | 173,750 | 166,965 | 164,422 | 160,628 | -7.55\% |
| Kansas City | Missouri | 460,732 | 488,943 | 491,918 | 495,327 | 7.51\% |
| Billings | Montana | 104,539 | 109,642 | 109,550 | 109,577 | 4.82\% |
| Omaha | Nebraska | 432,672 | 466,893 | 468,262 | 478,192 | 10.52\% |
| Las Vegas | Nevada | 584,780 | 641,676 | 644,644 | 651,319 | 11.38\% |
| Manchester | New Hampshire | 109,611 | 109,642 | 112,525 | 112,673 | 2.79\% |
| Newark | New Jersey | 277,347 | 285,154 | 282,090 | 282,011 | 1.68\% |
| Albuquerque | New Mexico | 547,092 | 558,545 | 560,218 | 560,513 | 2.45\% |
| New York | New York | 8,192,426 | 8,622,698 | 8,398,748 | 8,336,817 | 1.76\% |
| Charlotte | North Carolina | 738,678 | 859,035 | 872,498 | 885,708 | 19.90\% |
| Fargo | North Dakota | 105,928 | 122,359 | 124,844 | 124,662 | 17.69\% |
| Columbus | Ohio | 790,694 | 879,170 | 892,533 | 898,553 | 13.64\% |
| Oklahoma City | Oklahoma | 582,118 | 643,648 | 649,021 | 655,057 | 12.53\% |
| Portland | Oregon | 585,427 | 647,805 | 653,115 | 654,741 | 11.84\% |
| Philadelphia | Pennsylvania | 1,528,338 | 1,580,863 | 1,584,138 | 1,584,064 | 3.65\% |
| Providence | Rhode Island | 178,114 | 180,393 | 179,335 | 179,883 | 0.99\% |
| Charleston* | South Carolina | 350,209 | 134,875 | 136,208 | 137,566 | 5.47\% |
| Sioux Falls | South Dakota | 154,594 | 176,888 | 181,883 | 183,793 | 18.89\% |
| Nashville* | Tennessee | 601,222 | 667,560 | 669,053 | 670,820 | 2.81\% |
| Houston | Texas | 2,114,761 | 2,312,717 | 2,325,502 | 2,320,268 | 9.72\% |
| Salt Lake City | Utah | 186,564 | 200,544 | 200,591 | 200,567 | 7.51\% |
| Burlington | Vermont | 42,417 | 42,239 | 42,899 | 42,819 | 0.95\% |
| Virginia Beach | Virginia | 439,038 | 450,435 | 450,189 | 449,974 | 2.49\% |
| Seattle | Washington | 610,383 | 724,745 | 744,955 | 753,675 | 23.48\% |
| Charleston | West Virginia | 51,400 | 47,929 | 47,215 | 46,536 | -9.46\% |
| Milwaukee | Wisconsin | 595,120 | 595,351 | 592,025 | 590,157 | -0.83\% |
| Cheyenne | Wyoming | 59,901 | 63,624 | 63,957 | 64,235 | 7.24\% |
| WASHINGTON, DC |  | 605,126 | 693,972 | 702,455 | 705,749 | 16.63\% |

Source: US Census Bureau. 2010 data: Table DP-1. Profile of General Demographic Characteristics: 2010. 2017 Data: Annual
Estimates of the Resident Population for Incorporated Places of 50,000 or More, Ranked by July 1, 2017 Population: April 1, 2010 to July 1, 2017 Release Date: May 2018. 2018 Data: Annual Estimates of the Resident Population for Incorporated Places of 50,000 or More, Ranked by July 1, 2018 Population: April 1, 2010 to July 1, 2018 Release Date: May 2019. 2018 Estimates for Burlington, VT: Census Quick Facts; accessed February 27, 2020. 2019 Data: Annual Estimates of the Resident Population for Incorporated Places of 50,000 or More, Ranked by July 1, 2019 Population: April 1, 2010 to July 1, 2019 Release Date: May 2020.
*In the 2017 report, the largest cities in South Carolina and Tennessee changed to Charleston, South Carolina (previously Columbia); and Nashville, Tennessee (previously Memphis).

Map 10: Population of the Largest Cities as a \% of the State's Total Population, 2019


Source: ORA Analysis of data from Table 27 and the US Census Bureau, Population Division, Annual Estimates of the Resident Population: April 1, 2010 to July $1,2019$.

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[^0]:    ${ }^{1}$ 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.

[^1]:    2 "Structural Imbalance and Management Issues." GAO-03-666. Government Accountability Office. Washington, DC: 2003. p. 1.
    3 "DC Tax Facts 2020." 2019 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, DC: 2020. p. 49.

[^2]:    ${ }^{4}$ 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.

[^3]:    ${ }^{5}$ For Vermont, the Common Level of Appraisal value that is used for school funding equalization is used in lieu of a sales ratio statistic. Similarly, an equalization statistic is used for Illinois.
    ${ }^{6}$ "Glossary for Property Appraisal and Assessment," International Association of Assessing Officers. 2013. Page 150. https://www.iaao.org/media/Pubs/IAAO_GLOSSARY.pdf.

[^4]:    7 " 50 -State Property Tax Comparison Study for Taxes Paid in 2019." The Lincoln Institute of Land Policy and the Minnesota Center for Fiscal Excellence. June 2020: pg. 4.
    ${ }^{8}$ Ibid.
    ${ }^{9}$ Ibid, pg. 104-5.
    ${ }^{10}$ Ibid. The study found that in Washington, DC, the classification ratio between apartments and homesteads is 1.07 , indicating that homesteads are treated slightly preferentially to rental buildings by the property tax rates (exclusive of credits) in DC.
    ${ }^{11}$ Based on analysis of state programs in the Lincoln Institute of Land Policy's Significant Features of the Property Tax Database for 2017.
    ${ }^{12}$ This discussion does not intend to assess appropriate levels of PTER used in circuit breaker programs. It is intended solely to consider whether and how these levels are used as an input for the Tax Burden Study's calculation of renter's tax burdens as compared to homeowner's tax burdens across the 50 states.

[^5]:    ${ }^{13}$ The MN Renter's Property Tax Refund program allowed renters to qualify for a refund on their rent of up to $17 \%$ of rent paid (dependent on the renter's income level) in 2018.
    ${ }^{14}$ US Department of Housing and Urban Development, "2019 50 ${ }^{\text {th }}$ Percentile Rent Estimates." Data for studio apartments used. HUD provides data for Newark, NJ, but not for Wilmington, DE (thus the value for Philadelphia, PA, is used).
    ${ }^{15}$ Analysis of US Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.
    ${ }^{16}$ Zippel, Claire. "A Broken Foundation: Affordable Housing Crisis Threatens DC's Lowest-Income Residents." DC Fiscal Policy Institute. December 8, 2016.
    ${ }^{17}$ Zippel, Claire. "Building the Foundation: A Blueprint for Creating Affordable Housing for DC's Lowest-Income Residents." DC Fiscal Policy Institute. April 4, 2018
    ${ }^{18}$ In cases where a category includes items that are both taxed and not taxed, such as "drugs" which includes both prescription and over the counter (OTC) drugs, the expenditure amount is divided by two before applying the tax rate of the item that is taxed (For example, states often tax OTC drugs but not prescription drugs. Similarly, states often tax personal care products, but not personal care services.)

[^6]:    ${ }^{19}$ See the Appendix (page 72) for maps showing the combined burdens by state for the other income levels.

[^7]:    Sources: ORA analysis of City and State web pages.

[^8]:    Note: Negative numbers result from refundable credits. AL, FL, NE, SD, TX, WA, and WY do not have an income tax.
    Source: ORA Analysis; percentages are effective tax rates calculated using the assumptions and methodologies in this report.
    1/ Imposed on employers.
    2/ North Carolina has a flat rate, but no personal exemption.
    3/ New Hampshire and Tennessee have a flat 5 percent income tax on dividends and interest income only, above personal exemptions.
    4/ Based on jurisdictions levying tax and presented here.
    5/ Because local income tax liabilities are included in this chart, the percentage of income exceeds the flat state tax rates for these states.
    6/ Indiana allows for personal exemptions.

[^9]:    ${ }^{20}$ 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 Study for a sensitivity analysis of how several cities' (including Newark's) property tax burdens would change using city-level data.

[^10]:    ${ }^{21}$ Alaska allows local governments to levy a general sales tax, however, Anchorage does not levy one.

[^11]:    Source: Survey of State Revenue Department Officials, and state web sites.
    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.
    *These rates include state-side mandatory local add-on rates: CA: $1.25 \%$; UT: $1.25 \%$; VA: $1.0 \%$

[^12]:    Note: Rates include state and local sales taxes applicable to gasoline and other fees (such as environmental or inspection fees).
    *Indicates a state sales tax is included in the rate; + indicates a local sales tax is included in the rate.
    Source: ORA Survey of State Revenue Department Officials and review of State Web pages; Federation of Tax Administrators, "State Motor
    Fuel Tax Rates, as of January 1, 2020;" Federation of Tax Administrators, "Motor Fuel Tax Administration by State. September 2019.

[^13]:    1/ Gas Mileage Guide, EPA fuel economy estimates for city driving, US 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).

[^14]:    22 "District of Columbia Economic and Revenue Trends: December 2020." Data point for FY19. Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis. Washington, DC: 2020. p. 6.
    ${ }^{23}$ As detailed on page 9 , median sales ratios were included where available to represent the actual level of assessment compared to market values. DC's most recent median assessment sales ratio is $97.5 \%$.

[^15]:    24 "DC Tax Facts 2020." Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis, p. 49.

[^16]:    1/ Income and sales averages are based on cities 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 50 cities results in slightly different dollar amounts, the results are the similar in that DC's overall burden is lower than the 50 -city median at every income level except the $\$ 150,000$ income level. However, the only changes in rankings between DC and the 50 cities that occur when using the 50 -city median instead of the 50 -city average are that DC's income tax burden is slightly above the median at the $\$ 50,000$ level and DC's sales tax burden is slightly above the median for the $\$ 150,000$ level.

[^17]:    1/ Does not include various local income taxes. Alabama's personal exemption is $\$ 2,500$ for single taxpayers with an AGI less than $\$ 20,500$, and $\$ 300$ for those with an AGI greater than $\$ 100,000$. Alabama's personal exemption for a dependent is $\$ 1,000$ for taxpayers with incomes up to $\$ 20,000, \$ 500$ for incomes between $\$ 20,001$ to $\$ 100,000$, and for taxpayers with incomes over $\$ 100,001$ the dependent exemption is $\$ 300$. 2/ California imposes a Mental Health Services Tax at a rate of 1 percent on income over $\$ 1,000,000$.
    3/ These states conform personal exemptions to the federal Internal Revenue Code, and the passage of the Tax Cut and Jobs Act of 2017 decreased the federal personal exemptions to $\$ 0$.
    4/ Connecticut's personal exemption incorporates a standard deduction and decreases as AGI increases.
    5/ Arkansas' rates are dependent on income levels beginning Jan. 1, 2020. The brackets shown include the lowest and highest but would not apply to the same taxpayer. Top rate for highest earners (over $\$ 79,300$ ) will reduce to $5.9 \%$ on January $1,2021$.

[^18]:    Source: Survey of State Revenue Department Officials; State Department of Revenue web sites; and Federation of Tax Administrators, "State Individual Income Tax Rates as of July 1, 2020."

    1/ Does not include various local income taxes.
    2/ Utah provides a tax credit equal to $6 \%$ of the federal personal exemption amounts (and applicable standard deduction).
    3/ These states conform personal exemptions to the federal Internal Revenue Code, and the passage of the Tax Cut and Jobs Act of 2017 reduced federal personal exemptions to $\$ 0$.

[^19]:    Source: Survey of State Revenue Department Officials; state statutes; and Gentry, John D., "Taxation of Insurance
    Companies." Informational Paper 10. Wisconsin Legislative Fiscal Bureau. January 2019.
    1/ 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.

[^20]:    Source: Survey of State Revenue Department Officials; Federation of Tax Administrators, "State Excise Tax Rates on Cigarettes, (January 1, 2020)."

