

Government of the
District of Columbia



Muriel Bowser
Mayor

Jeffrey DeWitt
Chief Financial Officer

Tax Rates and Tax Burdens

Washington Metropolitan Area

Including: Washington, DC

Maryland
Montgomery Co.
Prince George's Co.

Virginia
Alexandria
Arlington Co.
Fairfax City
Fairfax Co.
Falls Church

2018

Issued March 2020

**A Comparison of Tax Rates and Burdens in
the Washington Metropolitan Area**

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Executive Summary

Overview

This publication contains two studies: (I) the Washington, DC Metropolitan Area tax burden comparison, and (II) the Washington, DC Metropolitan Area comparison of tax rates.

Hypothetical state and local tax burdens for a family of three, at five income levels, are presented in Part I of this publication. These burdens reflect individual income, real property, sales, and automotive taxes in the District of Columbia and selected jurisdictions in the Washington metropolitan area. 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.

Taxation of individuals is an important factor in considering the competitiveness of a given jurisdiction within a major metropolitan area. Simply comparing nominal tax rates,

...this study calculates the combined state and local tax burdens that a hypothetical family [at five different income levels] would face living in DC as compared to neighboring jurisdictions.

however, does not provide an accurate picture of how one location compares to other jurisdictions, and can be misleading given that statutory rates do not reflect the wide array of adjustments and provisions made to the tax base, such as tax deductions, credits, and other preferences. Further, the District's tax rates are often compared to either state rates, or other city rates, and not usually a combination of both rates that would be applicable to residents living in those locales. As such, this study calculates the combined state and local tax burdens a hypothetical family [at five different income levels] would face living in DC as compared to neighboring jurisdictions.

In order to compare different locations within the major metropolitan Washington area, this study estimates hypothetical state and local tax burdens for a family of three in eight Washington-area jurisdictions: the District of Columbia, the Maryland counties of Montgomery and Prince George's; the Virginia counties of Arlington and Fairfax; and the Virginia cities of Alexandria, Fairfax, and Falls Church. Part II of the report also includes rates for Loudoun and Prince William Counties in Virginia. The hypothetical family comparison accounts for differences in tax base as well as tax rates across jurisdictions and can be conducted at a variety of income levels.

In this study, the hypothetical family consists of two wage-earning spouses and one school-age child. The gross family income levels used are \$25,000, \$50,000, \$75,000, \$100,000 and \$150,000. The wage and salary split between the two spouses is assumed to be 70-30. The family at each income level is assumed to own a single-family home, except for families at the \$25,000 income level, who are assumed to occupy rental housing. All families are assumed to reside within the confines of the jurisdiction, and all wage and salary income is assumed to have been earned in the jurisdiction.

The four 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, and personal property tax for tax year 2018.

This study is not intended to measure the overall level of taxation in a jurisdiction; rather, it attempts to measure a hypothetical tax burden for a family given assumptions identified for each tax. There is no single “best” way of measuring tax burdens. To estimate tax payments, the study makes critical assumptions about typical households, their sources of income, and consumption patterns. Property tax liabilities are particularly difficult to measure accurately because of varying assessment practices, property characteristics, and relief mechanisms. The methodology used to derive the estimated tax burden for each tax is presented in the section pertaining to that tax.

Findings

The main results of the study are presented in Tables 6 and 7, pages 18-19, and are also illustrated in Charts 4 and 5 on pages 20-22. When combining the four different tax burdens studied together, the District of Columbia taxes its residents lower relative to neighboring jurisdictions at each income level. At the \$25,000/year income level, the five Virginia jurisdictions rank highest in the combined tax burdens, with Fairfax City’s burden being the highest. At the \$50,000, \$75,000, \$100,000 and \$150,000 levels income levels, Prince George’s County, Maryland’s tax burden ranks first. At the \$50,000, \$75,000, and \$150,000 income levels, Falls Church, Virginia ranks second, while at the \$100,000 income level, Fairfax City, Virginia, has the second highest burden.

Main Finding:

When combining the four different tax burdens together, the District of Columbia taxes its residents lower relative to neighboring jurisdictions at each income level.

Individual Income Tax: The District’s individual income tax burden is lower than the metropolitan average at all levels except at the \$150,000 income level. The District’s income tax burden ranges from less than 0 percent (negative \$2,065, representing a tax refund) at the \$25,000 income level to 6.10 percent (\$9,144) at the \$150,000 income level (see Table 7, page 19). Montgomery County ranks highest for all the income levels except at \$25,000 where the Virginia jurisdictions rank highest (even with a \$0 tax burden). The two Maryland counties have an Earned Income Tax Credit, as does DC, so those three jurisdictions would offer a refund. Prince George’s County ranks second highest for the 100,000 level. DC’s tax burden is second to the tax burden in Montgomery County at the \$150,000 level, followed by Prince George’s County. Generally, the tax burdens in the Maryland jurisdictions are higher than in DC and Northern Virginia because these two counties levy their own local income tax, in addition to the income tax levied by the state of Maryland. Without taking the local income taxes into account, the families in DC would have a higher income tax burden than the families in the Maryland counties at the highest four income levels. This fact highlights a reason for analyzing tax burdens in a more comprehensive manner by including both state and local taxes.

Property Tax: The real property tax burden for District of Columbia homeowners falls below the area-wide averages for homeowners at all income levels, a result of its lower property tax rate and homestead deduction. For DC homeowners (those families earning \$50,000 or more) the tax burden ranges from 1.38 percent (\$691) of income at the \$50,000 income level to 2.19

percent (\$3,287) at the \$150,000 income level. In the District, the 2018 nominal rate of \$0.85/\$100 of assessed value is multiplied by the effective assessment level (statutory assessment level of 100% X median assessment sales ratio) and applied to the market value of the home after deducting \$73,350 for the homestead exemption. For homeowners at all income levels, Prince George's County, Maryland has the highest property tax burden. In this study, families earning \$25,000/year are assumed to rent instead of own a home and based on the way the property tax equivalent of rent is calculated for the study, the property tax burden is assumed to be the same for all the metro jurisdictions. The high property tax equivalent of rent reflects the high cost of rental housing in the metro region.

Sales and Use Tax: The District's sales tax burden is higher than the metropolitan area average at all income levels. The general sales tax rate in the District of Columbia is 6.0 percent (the same as Maryland and Northern Virginia's general rates). However, because of a multiple rate system in DC in which the District's sales tax rates on items such as food consumed away from home are higher than the general rate, the total tax burden calculated for this study is more than 6.0 percent of total taxable sales.

Automotive Taxes: The District of Columbia automotive tax burden is lower than the metropolitan area average at all income levels. Unlike Virginia localities, the District and Maryland jurisdictions do not levy a personal property tax on automobiles. The combined state and local registration fees in Virginia are comparable to the state rate in Maryland. The District imposes the highest registration fee in the metropolitan area, ranging from \$72 for a vehicle weight under 3,500 pounds to \$155 for vehicles of 5,000 pounds or more.

The District of Columbia gasoline tax rate of 23.5 cents per gallon at the end of 2018 is lower than Maryland's recently increased rate of 35.5 cents per gallon, and higher than Virginia's 22.3 cents per gallon (combined state + local rate).

See Map 1 (page 23) for an illustration of the metro area jurisdiction's combined tax burdens (income, property, auto, and sales) as a percentage of income, for a family earning \$75,000/year. At all income levels, DC has the lowest combined tax burden of the surrounding jurisdictions. For maps illustrating combined metro area burdens for the other income levels, see the Appendix on page 68.

This report is organized in two sections. Part I presents the Washington, DC Metropolitan Area tax burden comparisons; and Part II contains a comparison of tax rates across the Washington, DC Metropolitan Area.

Acknowledgments

Each year the Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis publishes *Tax Rates and Tax Burdens: Washington Metropolitan Area* as required by DC Code 47-817. Taxpayers and government officials in the District of Columbia have a significant interest in the relative tax position of the District compared to the surrounding jurisdictions.

The Office of Revenue Analysis acknowledges and sincerely appreciates the time, effort, and courtesy of officials in the Washington metropolitan area who cooperated in providing information for this report. In order to properly compare tax rates and tax burdens, uniform and reliable data must be used. Officials from the area jurisdictions provide the data included in this report. Part I of this volume compares tax burdens for the 2018 tax year and Part II compares tax rates effective as of January 1, 2019.

I would also like to thank Lori Metcalf, who prepared this document, and Bob Zuraski and Farhad Niami, who offered editing assistance.

Questions and/or comments relating to this publication should be addressed to Lori Metcalf, Fiscal Analyst, Office of Revenue Analysis, 1101 4th Street, SW, Suite 770 West, Washington, DC 20024, or call (202) 727-7775.

Fitzroy Lee,
Chief Economist &
Deputy Chief Financial Officer
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Part I

A Comparison of Tax Burdens in Selected Washington Metropolitan Area Jurisdictions 2018

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, without considering its unique situation of having to charge taxes that both a city and a state normally levy. Therefore, the Office of Revenue Analysis produces a report comparing District tax burdens on a hypothetical family to the combined state and local tax burdens the family would face if it lived in the largest city in each state. As a companion to that nationwide study, the present study compares the state and local tax burdens of a hypothetical family of three in the eight major Washington metropolitan area jurisdictions: the District of Columbia; the Maryland counties of Montgomery and Prince George's; the Virginia counties of Arlington and Fairfax; and the Virginia cities of Alexandria, Fairfax, and Falls Church. Each jurisdiction provides its own level of services and levies various taxes to pay for those services. The study does not attempt to compare the level of services provided by each jurisdiction.

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 Similar to the assumptions in the nationwide study, the hypothetical family in this study consists of two wage-earning spouses and one school-age child. Families with annual gross income levels of \$25,000, \$50,000, \$75,000, \$100,000, and \$150,000 for each jurisdiction are analyzed. The wage and salary split is assumed to be 70-30 between the two spouses.

The family at each income level over \$25,000 is assumed to own a single-family home and to reside within the confines of the city or county. However, at the \$25,000 income level, the study assumes that the household renter-occupies and not owner-occupies its housing unit and owns one automobile. Families with annual income of \$50,000 are presumed to own their home and one automobile; and families with annual incomes of \$75,000, \$100,000 and \$150,000 are assumed to own their own home and two automobiles. This study compares the tax burden in each jurisdiction for the hypothetical family of three for four major tax categories: individual income tax, real property tax, sales tax, and automobile-related taxes.

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.

This study does not intend to measure the overall level of taxation in a jurisdiction; rather, it attempts to measure a hypothetical tax burden for a family given the assumptions noted. There is no single "best" way of measuring tax burdens. To estimate tax payments, the study makes critical assumptions about typical households, their sources of income, and consumption patterns. Property tax liabilities are particularly difficult to compare accurately because of varying assessment practices, property characteristics, and relief mechanisms.

The methodology used to derive the estimated tax burden for each tax is presented in the section pertaining to that tax. 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 jurisdictions studied. Comparisons across the different types of taxes or across years should be made with caution. 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.

The individual income tax rates, exemptions, and deductions in effect for calendar year 2018 in the District of Columbia, Maryland, and Virginia are shown in Table 1, on page 7. Factors used in the housing value assumptions are detailed in the property tax section, and the assumed housing values by income level for each jurisdiction are shown in Table 2, page 10. The assumptions used to derive the automobile tax burdens are contained in Table 5, page 17.

Table 6, page 18, presents detailed data on state and local tax burdens for each type of tax by income level for each selected metropolitan area jurisdiction. The District's tax burden is compared with the average for the metropolitan area at each income level for the four tax categories, separately and combined, in Table 7, page 19. Chart 4 on page 20 presents the DC combined tax burdens compared to the metro area averages at each income level.

Finally, selected state and local tax rates in the Washington metropolitan area as of December 31, 2018 are outlined in Table 8, page 24. To provide context, selected demographic information for the metro area jurisdictions is presented in Table 9, page 25.

Individual Income Tax

Income Tax Calculations

The income tax burden of a hypothetical family is estimated using the actual income tax system in each jurisdiction and assumptions about the sources of income for families at different income levels. The features of the individual income tax systems used in the Washington, DC Metropolitan Area are presented in Table 1 (page 7).

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 jurisdiction 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 Income:	<u>\$25,000</u>	<u>\$50,000</u>	<u>\$75,000</u>	<u>\$100,000</u>	<u>\$150,000</u>
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 were also used in the federal tax computation, are shown below. These amounts are based on actual average deduction amounts at each income level for Washington, DC taxpayers who were married filing jointly and itemizing deductions in tax year 2017.

Gross Income Level					
Deduction	\$ 25,000	\$ 50,000	\$ 75,000	\$100,000	\$150,000
Medical (Gross)	2,856	4,829	6,435	7,909	11,514
Nondeductible Medical 1/	<u>-1,875</u>	<u>-3,750</u>	<u>-5,625</u>	<u>-7,500</u>	<u>-11,250</u>
Net Medical Deduction	981	1,079	810	409	264
Deductible Taxes	2/	2/	2/	2/	2/
Mortgage Interest	3/	3/	3/	3/	3/
Contribution Deduction 4/	2,113	2,766	3,660	3,519	3,154
Total Deductions-without taxes And mortgage interest 5/	3,094	3,845	4,470	3,928	3,418

1/ Medical deductions allowed when the total is more than 7.5 percent of federal AGI. All or part of medical deduction may be allowed in some states.

2/ The tax deduction varies from city to city and is based on real and personal property taxes computed in the 2018 study and individual income taxes computed in the 2017 study for tax year 2017.

3/ Assumed mortgage interest varies from city to city and is based on 5th year interest paid on a home purchased in 2013 at an interest rate of 3.98%.

4/ Contribution Deduction represents charitable contributions claimed.

5/ 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, it is necessary to compute the 2018 federal individual income tax at each income level using the above assumptions. Many states in 2018 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 2018, the federal standard deduction almost doubled to \$24,000; state level standard deductions vary by state. Because the federal standard deduction was significantly increased in the Tax Cuts and Jobs Act of 2017 (TCJA), more of the families included will now take the standard deduction (See Appendix B for a discussion of the impacts of TCJA on 2018 state and local income taxes). This also means that if states require taxpayers taking the federal standard deduction to also take the state standard deduction, those in states with standard deductions lower than their itemized deductions may face an increased tax liability in 2018 as compared to 2017 (both Maryland and Virginia require taxpayers taking the federal standard deduction to also take the state standard deduction. The DC standard deduction is now the same as at the federal level. For the current study of tax year 2018, all families earning \$75,000 per year and below, and many 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 2018 deductible real and personal property taxes computed in the current year's Metro Area study are used for the 2018 property tax deduction. For the 2018 state and local individual income tax deduction, 2017 tax burdens from the previous year's study were used. Each of these figures was used in computing the 2018 federal income tax burden, which is the starting point for the Metro-area income tax burden calculations.

The highest rate in Maryland is 5.75 percent and is not reached until taxable income exceeds \$300,000 for joint filers (\$250,000 for single filers). In addition, Maryland local tax rates in the Washington Metropolitan Area range from 3.03 percent in Charles County, to 3.2 percent in Montgomery and Prince George's Counties. At the \$25,000 income level, one-half of the federal earned income credit is deducted from state tax liability in Maryland (and nonrefundable), while 28 percent is fully refundable. In contrast, Virginia's maximum 5.75 percent tax rate is reached when taxable income exceeds \$17,000 and 20 percent of the federal earned income credit is deducted from Virginia's tax liability; and the District's maximum rate of 8.95 percent in 2018 was not reached until the \$1,000,000 taxable income level is exceeded. At the \$25,000 income level, eligible taxpayers received 40 percent of the federal earned income credit as a deduction from their District tax liability and the DC credit is refundable.

Table 1: Individual Income Tax Washington Metropolitan Area (2018)

PERSONAL EXEMPTIONS	EXEMPTIONS	TAXABLE INCOME 5/	RATES
DISTRICT OF COLUMBIA			
Single	\$0 1/	\$0 - \$10,000	4.0%
Married Filing Separately	\$0	\$10,001-\$40,000	\$400 + 6.0% of excess > \$10,000
Married Filing Jointly	\$0	\$40,001-\$60,000	\$2,200 + 6.5% of excess > \$40,000
Head of Household	\$0	\$60,001-\$350,000	\$3,500 + 8.5% of excess > \$60,000
Dependent (additional)	\$0	\$350,000-\$1,000,000	\$28,150 + 8.75% of excess > \$350,000
Blind (additional)	\$0	Over \$1,000,000	\$85,025, plus 8.95% of the excess above \$1,000,000
Age 65 and over (additional)	\$0		
Standard Deduction	\$24,000		
MARYLAND 2/			
Single	\$3,200	\$0 - \$1,000	2.0%
Married Filing Separately	\$6,400	\$1,001-\$2,000	\$20 + 3.00% of excess > \$1,000
Married Filing Jointly	\$6,400	\$2,001-\$3,000	\$50 + 4.00% of excess > \$2,000
Head of Household	\$3,200	\$3,001-\$150,000	\$90 + 4.75% of excess > \$3,000
Dependent (additional)	\$3,200	\$150,001-\$175,000	\$7,072.50 + 5% of excess > \$150,000
Blind (additional)	\$1,000	\$175,001-\$225,000	\$8,322.50 + 5.25% of excess > \$175,000
Age 65 and over (additional)	\$1,000	\$225,001-300,000	\$10,947.50 + 5.5% of excess > \$225,000
Standard Deduction	3/	Over \$300,000	\$15,072.50 + 5.75% of excess > \$300,000
VIRGINIA			
Single	\$ 930	\$0 - \$3,000	2.0%
Married Filing Separately	\$ 930	\$3,001-\$5,000	\$60 + 3.00% of excess >\$3,000
Married Filing Jointly	\$1,860	\$5,001-\$17,000	\$120 + 5.00% of excess > \$5,000
Head of Household	\$ 930	Over \$17,000	\$720 + 5.75% of excess > \$17,000
Dependent (additional)	\$ 930		
Blind (additional)	\$ 800		
Age 65 and over (additional)	\$ 800		
Standard Deduction	4/		

Source: Survey of State Revenue Department Officials; State Web Sites; and Federation of Tax Administrators, "State Individual Income Taxes for tax year 2019." March 29, 2019. *2019 State Tax Handbook*, Wolters Kluwer/ CCH Group, 2018.

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.

2/ Maryland rates do not include local rates that may be as low as 1.75% in Worcester County and as much as 3.20% in Howard, Montgomery and Prince George's Counties, among others.

3/ The standard deduction for an individual is 15% of Maryland AGI not to exceed \$2,250 (\$4,550 for joint and head of household returns and those filing as qualifying widow(er) with dependent child). The minimum is \$1,500 for single, married filing separately and dependent taxpayers. All others are allowed a minimum of \$3,000.

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

5/ Brackets and rates are for married filing jointly.

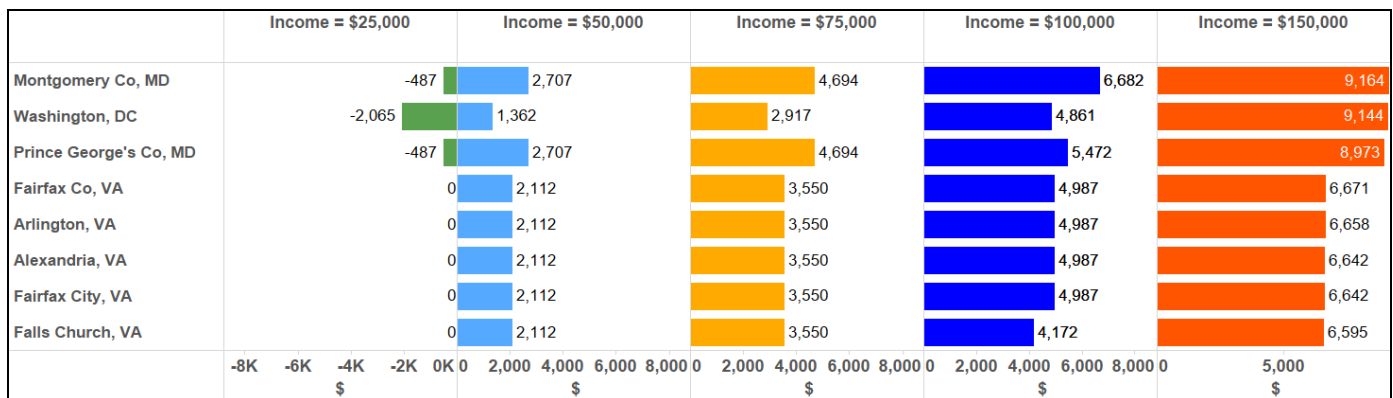
Income Tax Burdens

At the \$25,000 income level, the metropolitan area average individual income tax burden represents a *negative* 1.52 percent of family income (this is because three of the eight metro-area families under these assumptions receive a refund due to the EITC); the average income tax burden is 4.33 percent at \$50,000; 5.01 percent at \$75,000; 5.14 percent at \$100,000; and 5.04 percent at \$150,000 (see Table 7, page 19).

The District’s individual income tax burden is lower than the metropolitan average at every level except at the \$150,000 income level. The District’s individual income tax burden ranges from a *negative* \$2,065, or *negative* 8.26 percent at the \$25,000 income level to \$9,144 or 6.1 percent at the \$150,000 income level. The Montgomery and Prince George’s county individual income tax burdens exceed the metropolitan average at every income level except at \$25,000. At the \$150,000 level Montgomery County’s tax burden is the highest, DC’s is second, and Prince George’s County’s is third highest.

In those two Maryland counties, the tax burden is a *negative* 1.95 percent at the \$25,000 income level, and 6.11 percent at the \$150,000 income level in Montgomery County and 5.98 percent at that level in Prince George’s County. For the Virginia area jurisdictions (Arlington County, Alexandria, Fairfax City, Fairfax County, and Falls Church), the average of the four individual income tax burdens is 0 percent at the \$25,000 level, and 4.43 percent at the \$150,000 income level. (Chart 1 below presents income tax burdens in dollars, ranked by highest to lowest burdens at the \$150,000 income level.)

Chart 1: 2018 Washington Metropolitan Area Individual Income Tax Burdens



Source: ORA Analysis.

Note: Negative income tax burdens are a result of refundable tax credits.

Real Property Tax

Property Tax Calculations

Real property tax burdens in the metropolitan area are a function of residential real estate values, the ratio of assessed value to market value, applicable tax deductions or credits, and the tax rate. The District allows a homestead deduction from the value of residential property before the tax is calculated on owner-occupied properties (\$73,350 in 2018), while the Virginia jurisdictions do not allow any deductions for the typical homeowner. Montgomery County, Maryland offers a property tax credit to offset the county income tax for owner-occupied properties which is applied to County property taxes. The amount set by the County Council for tax year 2018 was \$692 and was applied to each family in the study assumed to own a home. The state of Maryland has a supplemental homeowners' tax credit for incomes up to \$60,000 per year but is only applicable if property taxes exceed a certain amount. None of the study's families in Montgomery or Prince George's County would have qualified because calculated taxes did not meet the limit required. Both the District of Columbia and the state of Maryland have limits on the amount a property's assessment can increase from one year to the next (both are capped at 10 percent), however neither of these are included in the study because it is a point in time calculation.

The effective property tax rates used for property tax burden calculations for each of the metropolitan jurisdictions, presented in Chart 2, page 14, indicate a variety of ranges in these rates and are net of property assessment levels. For the present 2018 Study, median sales ratio statistics have been included to derive an "effective assessment level" that results from multiplying the statutory property assessment level times the median sales ratio statistic. Median sales ratios are a measure of the property valuation and assessment practices within a jurisdiction. A sales ratio (or assessment sales ratio) is the ratio of the appraised value of the property to the sales price, or market value; the median is the median ratio value of all of the properties included in the study.² 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 addition to tax rate and effective assessment level differences, data presented in Table 2, page 10, show assumed market value differences of a residence for purposes of this study at the different income levels. The \$25,000 income level families are assumed to reside in a rental unit and the \$50,000, \$75,000, \$100,000 and \$150,000-income families are assumed to live in an owner-occupied house. A series of assumptions and calculations were made in order to estimate the median house value for the Washington, DC metropolitan area for each income level used in the report.

Data for the area's median house value and median income were retrieved from the

²"Glossary for Property Appraisal and Assessment," International Association of Assessing Officers. 2013. Page 150. https://www.iaao.org/media/Pubs/IAAO_GLOSSARY.pdf.

Census Bureau’s 2018 American Community Survey. A linear multiplier was calculated by dividing the area’s median house value by its median household income of mortgage holders. This multiplier was used to scale the house values to the various income levels in the report (multiplying it by each income 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 since 2012, assumes that house values increase in a linear fashion with income. Since 2014, the use of median household income of *mortgage holders*, rather than the median income of all households, has been used to calculate the linear multiplier. However, any analysis should focus on the relative rankings within a given year. Table 2 below presents the metro area house value assumptions used in this study.

The mortgage interest amount (for use as an itemized deduction in the income tax) in the 2018 study is derived by calculating an amortization schedule for the estimated value of a house purchased in 2013.

Table 2: Housing Value Assumptions For Major Washington Metropolitan Area Jurisdictions Calendar Year 2018 1/

FAMILY INCOME	DISTRICT OF COLUMBIA, MONTGOMERY COUNTY, MD PRINCE GEORGE’S COUNTY, MD ALEXANDRIA, VA ARLINGTON COUNTY, VA FAIRFAX COUNTY, VA FALLS CHURCH, VA FAIRFAX CITY, VA
\$ 50,000	\$156,779
\$ 75,000	\$235,168
\$100,000	\$313,558
\$150,000	\$470,336

Source: ORA Analysis.

1/ For the \$50,000 income levels and above, data on 2018 median household incomes for mortgage holders and median house values for the Washington DC, MSA were retrieved from the Census Bureau's ACS 2018. A multiplier was then applied to each income based on the relationship of median income to median home value.

Property Tax Equivalent of Rent

As previously noted, the study assumes that the family with an annual income of \$25,000 does not own a home (and as a result does not pay property tax directly), but instead rents.

Given the high real estate values in the metro area, the assumption that families earning \$25,000 per year rent is likely more realistic than the assumption that they own a home. Because renters indirectly pay property taxes through their rent,³ this study and previous Tax Burden Studies calculate a percentage of 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 2019 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 31 percent more than homesteads.⁴ 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 3 times the effective rate of that levied on homesteads.⁵ Conversely, in seven of the largest cities in each state (and DC), apartments are given preferential treatment over homesteads with the most preference toward apartments given in Virginia Beach, Virginia.⁶ In 10 cities, apartments are given the same treatment as homesteads.

To relieve the implicit tax burden on renters that exists in some locations, some states have property tax circuit breaker programs that offset 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 6 to 25 percent (NM has a low of 6 percent while MA uses a 25 percent assumption); on average, states assume that 17 percent of rent goes toward paying property taxes.⁷ DC's circuit breaker program assumes 20 percent.

Previous Tax Burden Studies have used a 20 percent assumption with some reservation given that it has a large impact on the calculated tax burdens of the families earning \$25,000 per year. In particular, the assumption often seemed unrealistic in cities with higher rental prices in which calculated PTERs would be the highest, when in reality rental buildings in more competitive markets may not be able to pass on all taxes paid, given that 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 backing up the percentage of PTER 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.⁸ The only published evidence found of this calculation is from a January 2016 report in which 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 it was often up to 16.9

³ "50-State Property Tax Comparison Study for Taxes Paid in 2018." The Lincoln Institute of Land Policy and the Minnesota Center for Fiscal Excellence. June 2019: pg. 4.

⁴ Ibid.

⁵ Ibid, pg. 104-5.

⁶ Ibid. The study found that in Washington, DC, the classification ratio between apartments and homesteads is 1.096, indicating that homesteads are treated slightly preferentially to rental buildings by the property tax rates (exclusive of credits) in DC.

⁷ Based on analysis of state programs in the Lincoln Institute of Land Policy's *Significant Features of the Property Tax Database* for 2017.

⁸ This discussion does not intend to assess appropriate levels of PTER used in circuit breaker programs, or to advocate that they be changed. It is intended solely to consider whether and how these levels are used as an input for the Tax Burden Study's calculation of renters' tax burdens as compared to homeowners' tax burdens across the 50 states.

percent.⁹

After considering the available information we decided to use a level of 15 percent for PTER in the 2016 and 2017 Studies and to continue to do so for current 2018 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. In order to compute a percentage of said rent constituting property taxes for the 51-City Tax Burden Study, the property tax equivalent of rent (PTER) was calculated by first obtaining data on 2018 median rents for each MSA from the U.S. Department of Housing and Urban Development.¹⁰ The PTER for each jurisdiction was calculated as 15 percent of the median rent for the Washington, DC MSA. Unlike the 51-City Study in which median rents for each metropolitan area are used to reflect different housing markets in different areas, all the jurisdictions in the present study are in the Washington, DC, metropolitan statistical area, and thus have the same housing assumptions, for both rental costs and house values.

The 2018 median rent for a studio apartment was \$1,504 per month in the DC MSA. Even with the lower assumption of PTER in the current study, taking 15 percent of this rent over an entire year implies that the lowest income families in the report are spending 72 percent of their incomes on rent in the Washington, DC area. 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 more than 30 percent of their income in rent.¹¹ Further, a 2016 DC Fiscal Policy Institute analysis of 2014 Census data found that 42 percent of extremely low-income renters (between \$16,100 - \$32,100/year for a family of four) in DC paid 80 percent of their income or more in rent, while over half of renters at this income level paid more than half of their income in rent.¹²

Property Tax Burdens

Real property tax burdens for District of Columbia residents fall below the area wide averages at all income levels, except at the \$25,000 income level where property tax burdens are assumed to be the same across the region. Using the same housing cost assumptions across the region means that the real property tax burdens for those assumed to own their homes only reflect differences in both real property tax rates and property tax relief provisions among the metropolitan area jurisdictions. The metropolitan area average burden for the real property tax is 3.07 percent of income at the \$50,000 income level; 3.18 percent at the \$75,000 level; 3.23 percent at the \$100,000 level; and 3.28 percent at the \$150,000 level (Table 7, page 19). Chart 3 below presents property tax burdens in dollars, by income level, for each jurisdiction.

To calculate property tax burdens, nominal real estate tax rates for each jurisdiction are multiplied by an effective assessment level (which is the announced or statutorily prescribed assessment level times the median assessment sales ratio statistic for each jurisdiction). The

⁹ 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.

¹⁰ U.S. Department of Housing and Urban Development, "2017 50th Percentile Rent Estimates." Data for studio apartments used.

¹¹ Analysis of U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

¹² Zippel, Claire. "A Broken Foundation: Affordable Housing Crisis Threatens DC's Lowest-Income Residents." DC Fiscal Policy Institute. December 8, 2016.

effective property tax rate (which does not include homestead or other deductions or exemptions) is then multiplied by the housing values to determine the real property tax due. Homestead exemptions or other property tax relief provisions are deducted or included as applicable in the calculation of the final property tax burden.

For the District of Columbia, the nominal tax rate of \$0.85 per \$100 of assessed value is multiplied by the effective assessment level of 97.4 percent (statutory assessment level of 100% X median assessment sales ratio of 97.4%), and then applied to the market value of the house, less \$73,350 for the 2018 homestead exemption. Therefore, the homeowner with \$50,000 in income would pay tax on \$83,429 of house value; on \$161,818 at the \$75,000 income level; on \$240,208 of house value at the \$100,000 income level; and on \$396,986 at the \$150,000 income level (each of these amounts represents the median house value at that income level minus \$73,350 for the homestead deduction).

Because Virginia's property tax relief program is targeted toward the elderly (age 65 or older), and to persons permanently and totally disabled whose incomes do not exceed \$72,000, no adjustments are made in the property tax burdens for the hypothetical family of three in the Virginia jurisdictions.

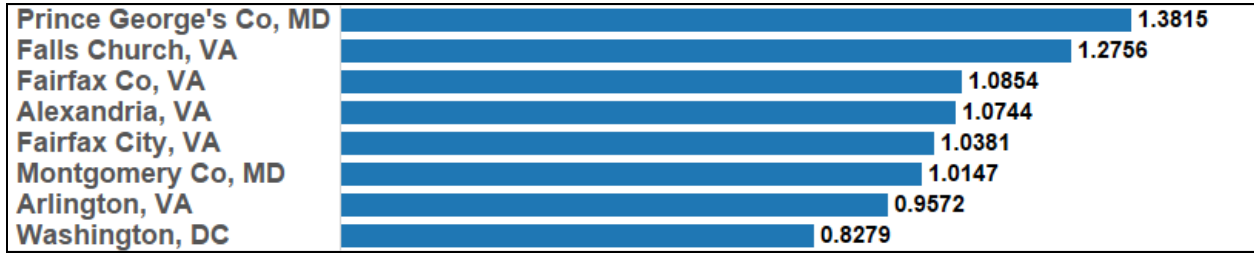
In calculating the real property tax burdens in the Maryland jurisdictions, nominal rates of \$1.0934 per \$100 of value in Montgomery County and \$1.465 per \$100 of value in Prince George's County were used as the starting point to calculate the effective rates as described above. These nominal rates in Maryland include the countywide rate, plus the state rate (\$0.112 per \$100 of value). The Montgomery County rate also includes a transit tax, fire district tax, and advanced land acquisition tax and a tax for the Maryland National Capital Park and Planning Commission (MNCPPC) and a Washington Suburban Transit Commission (WSTC), while the Prince George's County rate includes a stormwater/flood control tax and a tax for the MNCPPC and WSTC. As previously mentioned, in 2018 Montgomery County, Maryland offered an income tax offset credit on property tax bills for owner-occupied residences of \$692.

Table 3: Calculation of Effective Residential Property Tax Rates

JURISDICTION	NOMINAL RATE PER \$100 of Assessed Value	EFFECTIVE ASSESSMENT LEVEL (Statutory Assessment Level x Median Sales Ratio) *	EFFECTIVE RATE PER \$100 of Assessed Value
Prince George's Co, MD	1.465	94.30%	1.381495
Falls Church, VA	1.355	94.14%	1.275597
Fairfax Co, VA	1.18	91.98%	1.085364
Alexandria, VA	1.13	95.08%	1.074404
Fairfax City, VA	1.075	96.57%	1.038128
Montgomery Co, MD	1.0934	92.80%	1.014675
Arlington, VA	1.026	93.29%	0.957155
Washington, DC	0.85	97.40%	0.8279

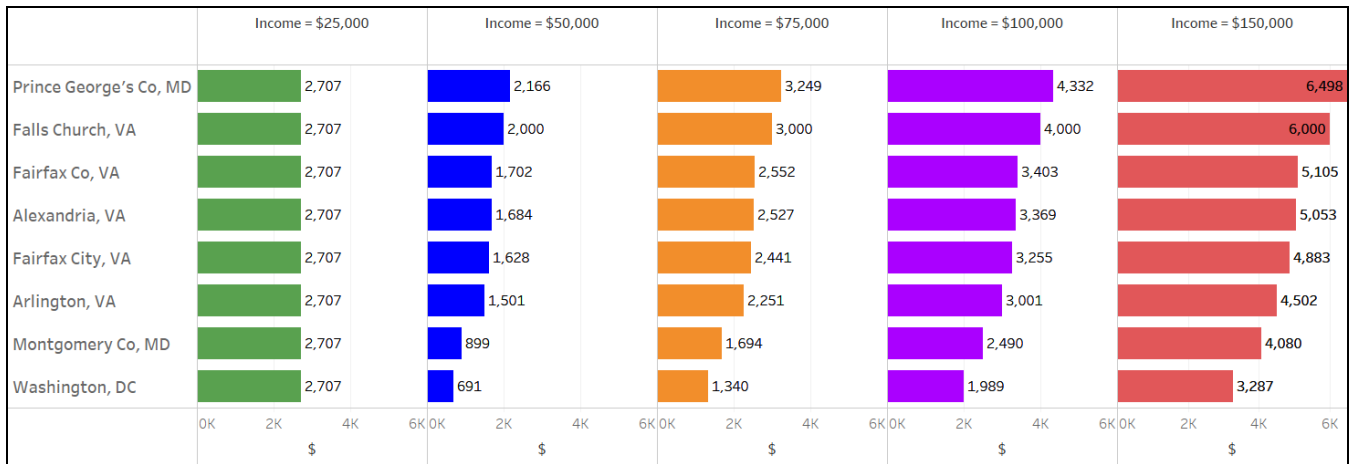
Source: Survey of local revenue officials and local government web sites. Rates as of December 31, 2018.

Chart 2: 2018 Washington Metropolitan Area Effective Property Tax Rates (Per \$100 of Assessed Value)



Source: Survey of local revenue officials and local government web sites. Rates as of December 31, 2018.

Chart 3: 2018 Washington Metropolitan Area Real Property Tax Burdens



Source: ORA Analysis. Note: Rental tax burden calculated differently. See pages 10-12 for details.

Sales Tax

Sales Tax Calculations

The sales tax burdens differ among the jurisdictions because different items are included under the general sales tax. Sales tax rates in 2018 for the metro area are presented below.

Table 4: Selected Sales Tax Rates

JURISDICTION	GENERAL RATE	GROCERIES	RESTAURANT MEALS	ADMISSIONS
DISTRICT OF COLUMBIA	6.0%	Exempt	10.0%	10.0%
MARYLAND	6.0%	Exempt	6.0%	10.0%
VIRGINIA	6.0% ^{1/}	2.5% ^{1/}	6.0%-10.0%	^{2/}

^{1/} Combined local and state rate.

^{2/} There is no state tax on admissions in Virginia; however, Alexandria does levy a 10% admissions tax, not to exceed \$0.50/person.

The estimated sales tax burdens for hypothetical households at each of the five income levels are reported in Table 6, page 18. These burdens are derived by applying local and state sales tax rates to data on average 2018 levels of consumption for various items by income level provided by the U.S. Bureau of Labor Statistics in the Consumer Expenditure Survey (CES). The average expenditures by income level have been adjusted for a 3-person household. 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.

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.¹³

Factoring in both state and local sales tax rates for the jurisdictions in this study, Maryland, DC, and Virginia had the same general sales tax rate of 6.0 percent at the end of 2018. The District has higher rates for alcoholic beverages, restaurant meals, parking, and hotel rooms, than do Maryland and Virginia.¹⁴ The District, like Maryland, exempts all non-snack food purchased in grocery stores from the general sales tax. Virginia levies a 2.5 percent sales tax on all food purchased in grocery stores.

Residential usage of utilities is not in the general sales and use tax base in the District and the State of Maryland. However, Montgomery and Prince George's Counties do tax the use of utilities through a utility tax. While Montgomery County's energy tax is levied upon the distributor, its cost is effectively borne by the customer. Prince George's County sets the tax rates annually based on a formula driven by total consumption and revenue for each type of energy in prior years. These utility taxes are not accounted for in the tax burden calculations.

¹³ 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.)

¹⁴ The District’s general sales tax rate increased from 5.75 to 6 percent on October 1, 2018.

Sales Tax Burdens

The District's sales tax burden is just above the area average at each income level. The District sales tax burdens generally are higher than those in Maryland but tend to be lower than those in Virginia at the \$25,000/year income level (except in Fairfax County, which is lower than the District). The District has the highest sales tax burdens of all the jurisdictions at the \$50,000, \$75,000, and \$100,000 and \$150,000-income levels, while Alexandria's were highest for the \$25,000 income level. As noted above, the general sales tax rate in the District of Columbia is 6 percent (the same as Maryland and Northern Virginia's state plus local general rates). However, because of a multiple rate system in DC in which the District's sales tax rates on consumption items included, such as food away from home, are higher than the general rate, the total tax burden can be more than 6 percent of total taxable sales.

Automobile Tax

The taxes related to ownership of automobiles include the gasoline tax, motor vehicle registration fees, and, where applicable, personal property taxes. The assumptions used to calculate the automotive tax burdens are shown in Table 5, page 17.

Virginia localities are the only area jurisdictions that levy a personal property tax on automobiles. The personal property tax rates for the seven Virginia jurisdictions included in this study vary from \$3.70 to \$5.33 per \$100 of value and are presented in Table 8 (page 24). Since 1999, the Commonwealth of Virginia has reimbursed all localities in Virginia for the vehicle portion of the Personal Property Tax as part of the Personal Property Tax Relief Act (PPTRA). From 2002 to 2005, the reimbursement amount was 70 percent of the first \$20,000 of a vehicle's assessed tax bill. Beginning in 2007, Virginia began to reimburse localities a fixed amount based on the 2004 level of state reimbursement. Unless the General Assembly provides additional funding, that reimbursement is not expected to increase, and with no increases, it will cover a gradually decreasing portion of the tax on vehicles. For 2018, the reimbursement to Alexandria covered 52.5 percent of the tax bill for vehicles with assessed values between \$1,000 and \$20,000. In Arlington County, vehicles that are valued at \$3,000 or less, and are PPTR eligible, have no tax liability and pay only an annual decal fee. For vehicles with assessed values between \$3,000 and \$20,000, the Arlington County reimbursement covered 28 percent of the tax bill. In Fairfax County, the resident's tax bill was reduced by 60 percent on the assessed value between \$1,000 to \$20,000.

The basis for assessing the tax also differs among the Virginia area jurisdictions. Alexandria, Fairfax County, and Falls Church use the vehicle's trade-in value; the clean loan value is used in Arlington County. For both methods, however, values are obtained from the National Automobile Dealers Association (NADA) Used Car Pricing Guide.

The District of Columbia's registration fee is the highest in the metropolitan area. In the District, the annual fee for a vehicle weighing less than 3,500 pounds (Class I) is \$72; for vehicles weighing 3,500 pounds to 4,999 pounds (Class II), the fee is \$115; for vehicles 5,000 pounds and over (Class III), the fee is \$155; and for Class IV, clean fuel or electric vehicle, the fee is \$36 (See Table 8, page 24 and Table 15, page 41). For tax year 2018, Maryland's fees are

slightly lower than the District’s; the fee for vehicles less than 3,700 pounds is \$135 for two years (\$67.50 for one year), and for vehicles over \$3,700 pounds it is \$187 for two years (\$93.50 for 1 year).

The District of Columbia gasoline tax rate of 23.5 cents per gallon at the end of 2018 is lower than the rate in Maryland and higher than the Virginia rate. Effective July 1, 2013, Virginia’s state gasoline tax rate changed from 17.5 cents per gallon to 3.5 percent of the statewide average wholesale price per gallon. In 2018, this equated to 16.8 cents per gallon (including a \$0.006/gallon storage tank fee). There is also a special 2.1 percent sales tax levied by all the Northern Virginia jurisdictions, making the total tax used in this study 22.3 cents per gallon. In 2015, Maryland’s gas tax increased from 23.5 cents per gallon to 32.1 cents per gallon and had further increased to 35.5 cents per gallon at the end of 2018.

Table 5: Automobile Tax Assumptions 2018

Income Level	Description of Auto	Engine Size Liters 1/	Weight 2/	Year	Market Values			Estimated Mileage Per Gallon 1/	Estimated Annual Gasoline Usage 3/
					Retail Price 2/	Trade-In Value 2/	Loan Value 2/		
\$ 25,000	Sedan, 4 Door 4-cylinder, Auto	1.8	2,908 lbs.	2015	\$12,925	\$9,675	\$12,796	29	517 gallons
\$ 50,000	Sedan, 4 Door 4 Cylinder, Manual	1.4	2,939 lbs.	2017	\$13,525	\$10,575	\$13,390	28	536 gallons
\$ 75,000	Sedan, 4 Door 4 Cylinder, Automatic	2.5	3,300 lbs.	2017	\$18,725	\$15,200	\$18,538	24	625 gallons
	4WD Utility, 4 Door 6 Cylinder, Automatic	3.5	4,464 lbs.	2012	\$17,775	\$15,025	\$17,597	17	441 gallons*
\$100,000	Sedan, 4 Door 6 Cylinder, Automatic	3.6	3,906 lbs.	2017	\$23,350	\$19,200	\$23,117	21	714 gallons
	4WD Utility, 4 Door 6 Cylinder, Automatic	3.5	4,732 lbs.	2012	\$16,525	\$13,575	\$16,360	17	441 gallons*
\$150,000	Sedan, 4 Door 6 Cylinder, Automatic	2.0	3,814 lbs.	2018	\$53,440	\$50,580	\$52,906	21	714 gallons
	AWD Utility, 4 Door 6 Cylinder, Automatic	3.5	4,234 lbs.	2014	\$18,800	\$15,150	\$18,612	18	417 gallons*

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.

* Denotes secondary car.

Auto Tax Burdens

Virginia localities have the highest auto tax burdens at all income levels, with Fairfax City ranking highest at all levels except the \$150,000 level, where Arlington is highest. DC has the lowest auto tax burdens at all levels, with Montgomery and Prince George’s Counties in Maryland ranking sixth and seventh at all levels. The District and Maryland jurisdictions do not levy a personal property tax on automobiles, as do Virginia localities.

**Table 6: 2018 Major State & Local Tax Burdens for a Family of Three
In Selected Washington Metropolitan Area Jurisdictions**

TAX	DISTRICT OF COLUMBIA	MONTGOMERY COUNTY	PRINCE GEORGE'S COUNTY	ALEXANDRIA	ARLINGTON COUNTY	FAIRFAX COUNTY	FAIRFAX CITY	FALLS CHURCH
\$25,000 INCOME LEVEL								
Income 1/	(2,065)	(487)	(487)	0	0	0	0	0
Real Property	2,707	2,707	2,707	2,707	2,707	2,707	2,707	2,707
Sales and Use	875	762	772	881	881	835	881	881
Automobile	193	251	251	409	542	348	589	418
TOTAL	1,711	3,233	3,242	3,996	4,129	3,890	4,176	4,005
RANK	8	7	6	4	2	5	1	3
\$50,000 INCOME LEVEL								
Income	1,362	2,707	2,707	2,112	2,112	2,112	2,112	2,112
Real Property	691	899	2,166	1,684	1,501	1,702	1,628	2,000
Sales and Use	1,052	907	921	1,031	1,031	971	1,031	1,031
Automobile	198	258	258	436	567	368	630	447
TOTAL	3,303	4,771	6,052	5,263	5,211	5,153	5,401	5,590
RANK	8	7	1	4	5	6	3	2
\$75,000 INCOME LEVEL								
Income	2,917	4,694	4,694	3,550	3,550	3,550	3,550	3,550
Real Property	1,340	1,694	3,249	2,527	2,251	2,552	2,441	3,000
Sales and Use	1,368	1,188	1,212	1,296	1,296	1,229	1,296	1,296
Automobile	438	539	539	1,105	1,480	906	1,638	1,152
TOTAL	6,062	8,116	9,694	8,478	8,577	8,238	8,926	8,998
RANK	8	7	1	5	4	6	3	2
\$100,000 INCOME LEVEL								
Income	4,861	6,682	5,472	4,987	4,987	4,987	4,987	4,172
Real Property	1,989	2,490	4,332	3,369	3,001	3,403	3,255	4,000
Sales and Use	1,610	1,392	1,425	1,497	1,497	1,429	1,497	1,497
Automobile	501	597	597	1,189	1,620	973	1,764	1,243
TOTAL	8,962	11,160	11,825	11,043	11,106	10,792	11,503	10,912
RANK	8	3	1	5	4	7	2	6
\$150,000 INCOME LEVEL								
Income	9,144	9,164	8,973	6,642	6,658	6,671	6,642	6,595
Real Property	3,287	4,080	6,498	5,053	4,502	5,105	4,883	6,000
Sales and Use	2,055	1,775	1,826	1,895	1,895	1,836	1,895	1,895
Automobile	496	588	588	2,953	3,229	2,408	3,119	2,833
TOTAL	14,981	15,608	17,885	16,543	16,284	16,020	16,539	17,323
RANK	8	7	1	3	5	6	4	2

Source: ORA Analysis. Note: Numbers may not add to totals due to rounding.

1/ Negative numbers result from refundable income tax credits.

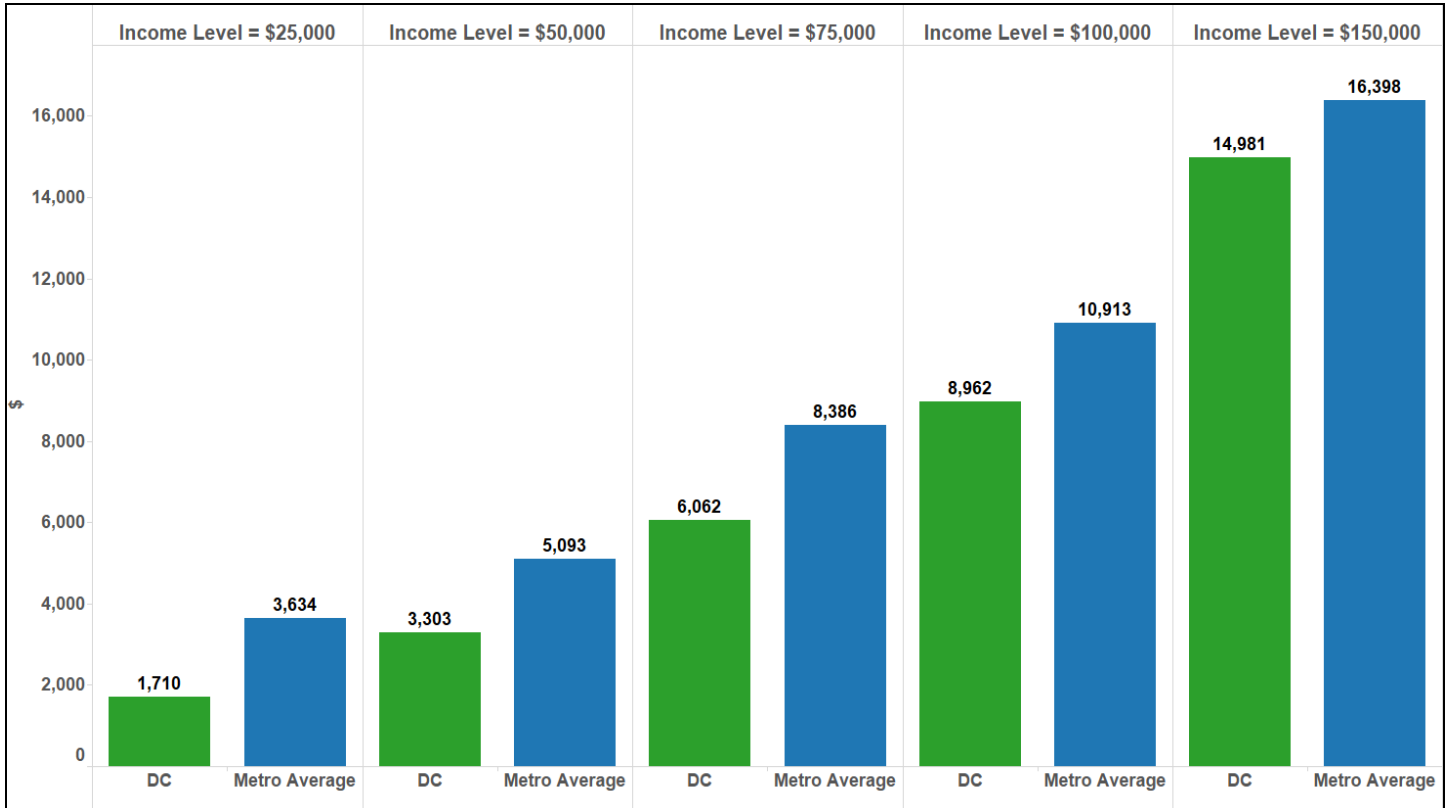
Table 7: Summary of Average Tax Burdens for Selected Washington Metropolitan Area Jurisdictions and DC, 2018

INCOME	TAX BURDENS		PERCENT OF INCOME	
	AREA AVERAGE 1/ \$	DISTRICT OF COLUMBIA \$	AREA AVERAGE 1/ %	DISTRICT OF COLUMBIA %
OVERALL BURDEN				
\$ 25,000	3,634	1,710	14.54%	6.84%
\$ 50,000	5,093	3,303	10.19%	6.61%
\$ 75,000	8,386	6,062	11.18%	8.08%
\$100,000	10,913	8,962	10.91%	8.96%
\$150,000	16,398	14,981	10.93%	9.99%
INDIVIDUAL INCOME				
\$ 25,000	(380)	(2,065)	-1.52%	-8.26%
\$ 50,000	2,167	1,362	4.33%	2.72%
\$ 75,000	3,757	2,917	5.01%	3.89%
\$100,000	5,142	4,861	5.14%	4.86%
\$150,000	7,561	9,144	5.04%	6.10%
REAL PROPERTY				
\$ 25,000	2,707	2,707	10.83%	10.83%
\$ 50,000	1,534	691	3.07%	1.38%
\$ 75,000	2,382	1,340	3.18%	1.79%
\$100,000	3,230	1,989	3.23%	1.99%
\$150,000	4,926	3,287	3.28%	2.19%
SALES AND USE				
\$ 25,000	846	875	3.38%	3.50%
\$ 50,000	997	1,052	1.99%	2.10%
\$ 75,000	1,273	1,368	1.70%	1.82%
\$100,000	1,481	1,610	1.48%	1.61%
\$150,000	1,884	2,055	1.26%	1.37%
AUTOMOBILE				
\$ 25,000	375	193	1.50%	0.77%
\$ 50,000	395	198	0.79%	0.40%
\$ 75,000	975	438	1.30%	0.58%
\$100,000	1,060	501	1.06%	0.50%
\$150,000	2,027	496	1.35%	0.33%

Source: ORA Analysis. Note: Numbers may not add to totals due to rounding.

1/ Negative numbers result from refundable income tax credits.

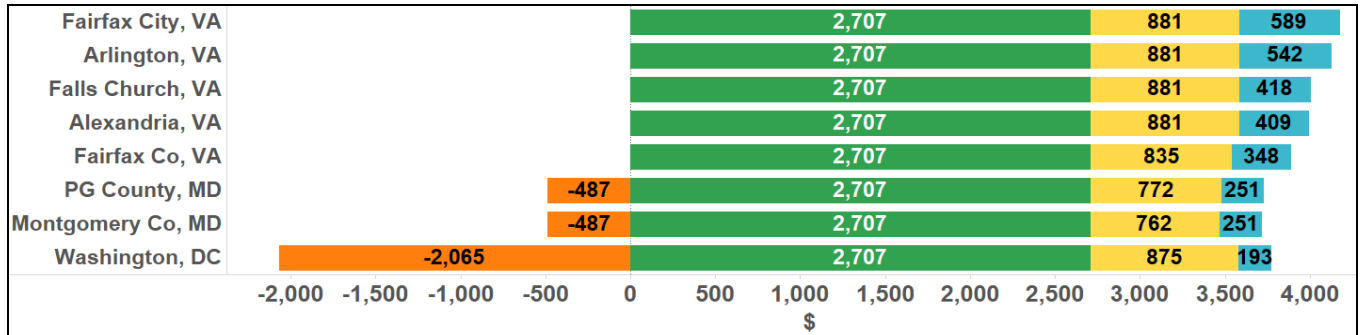
Chart 4: DC’s Combined Tax Burdens in Comparison With the Metropolitan Area Average, 2018



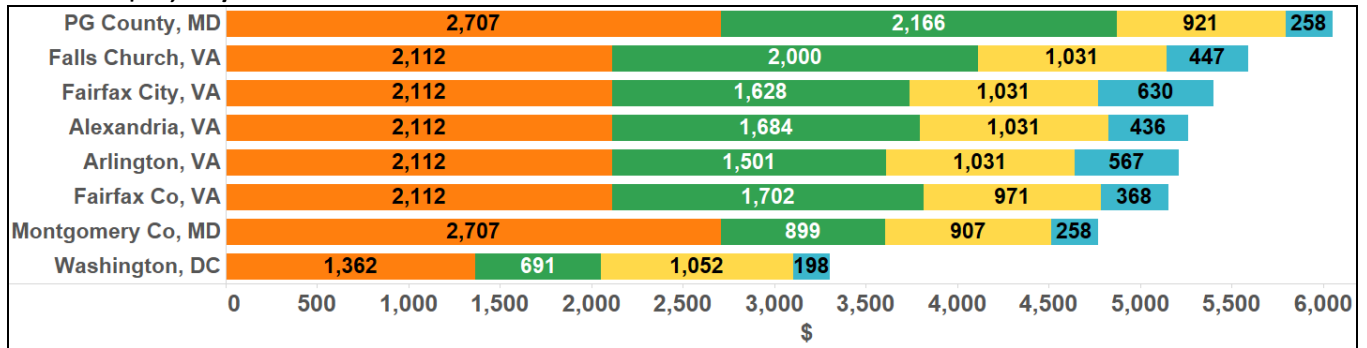
Source: ORA Analysis.

Chart 5: Estimated Tax Burdens for Five Hypothetical Families, 2018

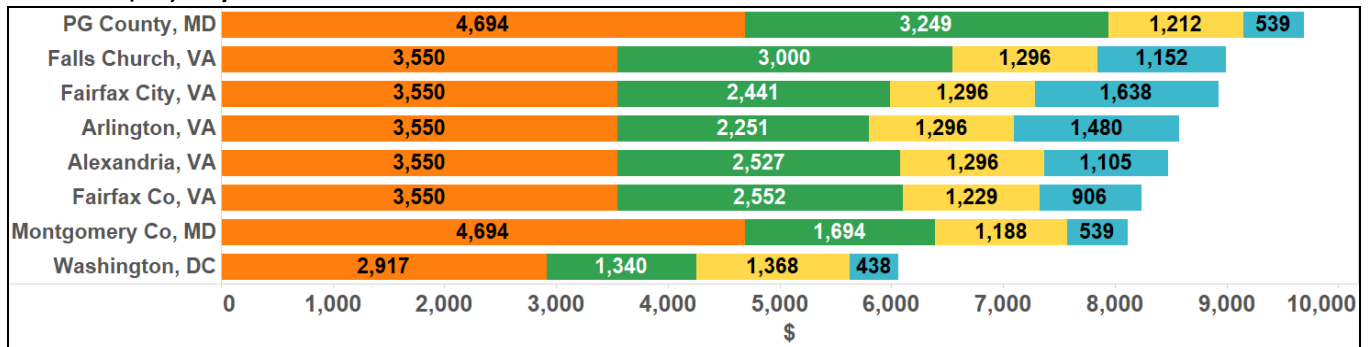
Income = \$25,000/Year



Income = \$50,000/Year



Income = \$75,000/Year



Legend:

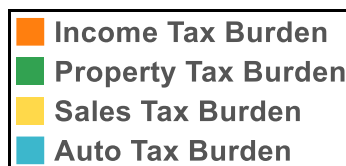
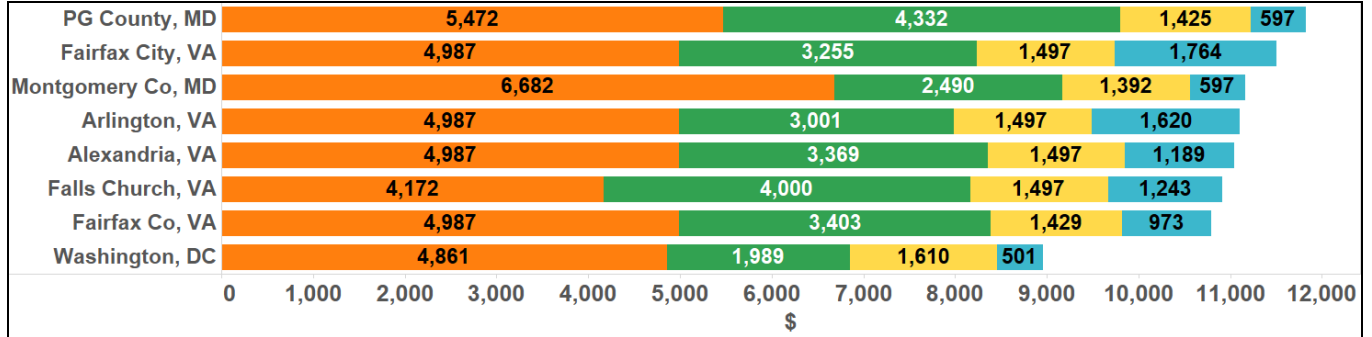
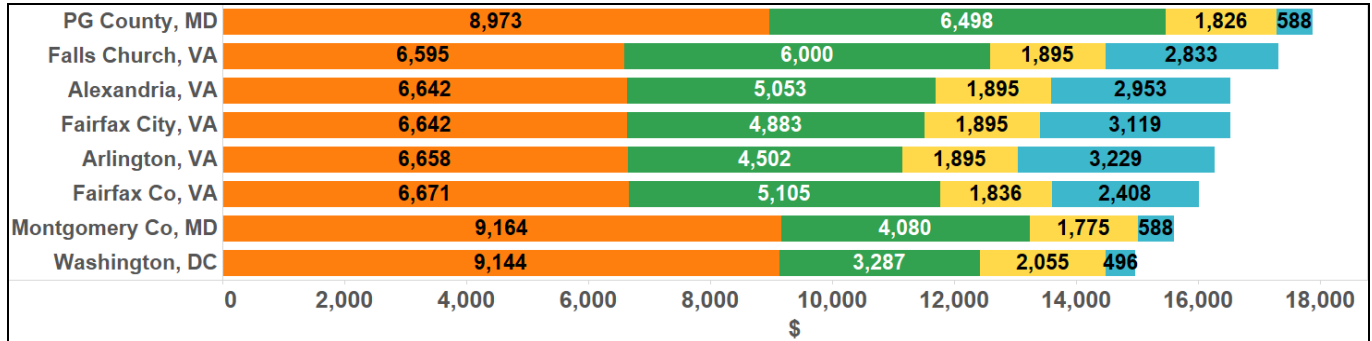


Chart 5: Estimated Tax Burdens for Five Hypothetical Families, 2018, Continued

Income = \$100,000/Year

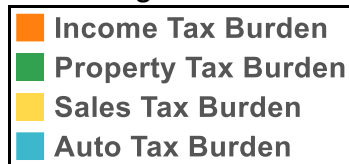


Income = \$150,000/Year

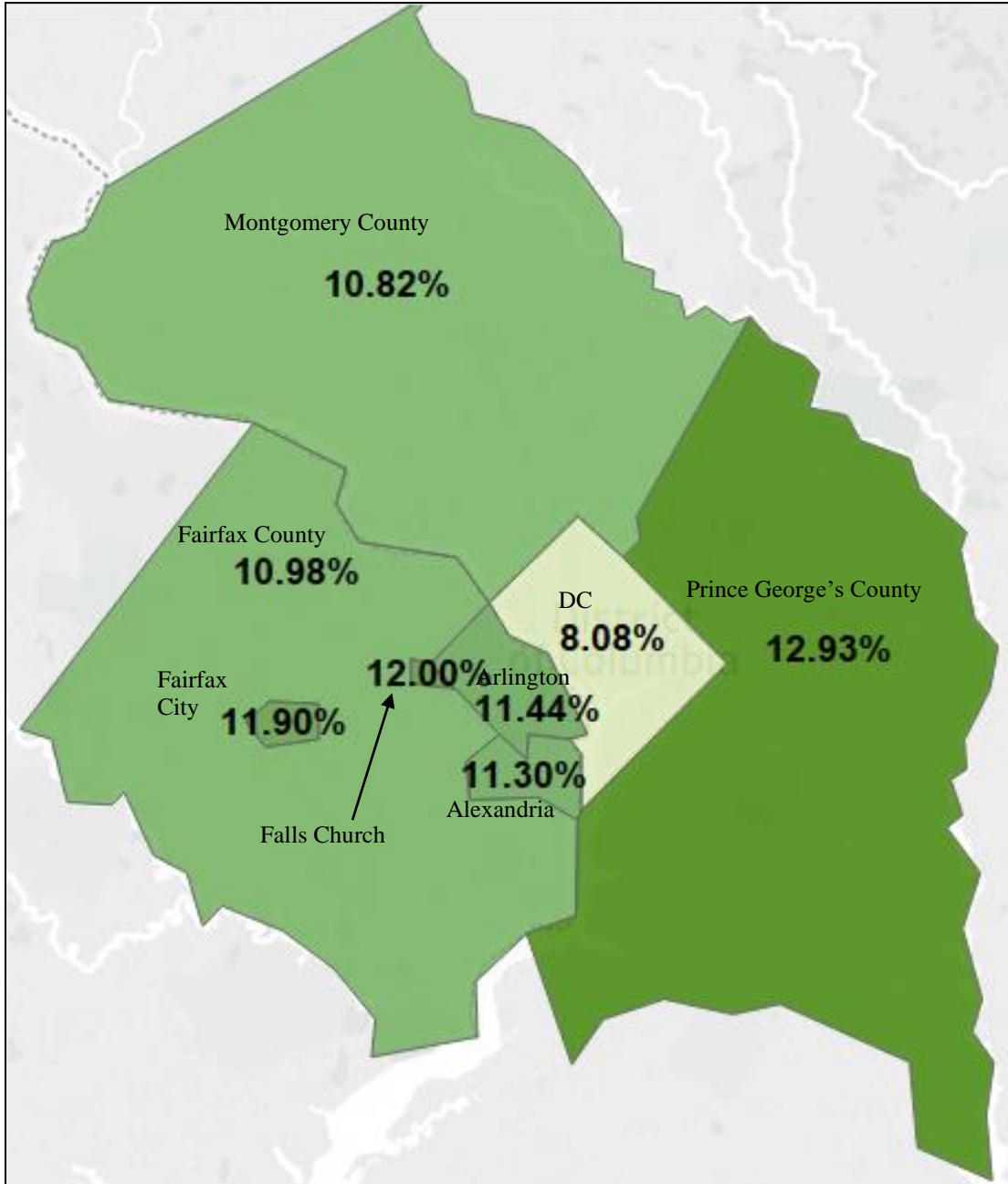


Source: ORA Analysis. Jurisdictions are sorted by highest combined burden.

Legend:



Map 1: Combined 2018 Metropolitan Area Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$75,000/Year)



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

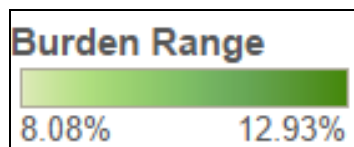


Table 8: Selected State and Local Tax Rates in the DC Metropolitan Area as of December 31, 2018

TAX	DISTRICT OF COLUMBIA	CHARLES COUNTY 1/	MONT-GOMERY COUNTY 1/	PRINCE GEORGE'S COUNTY 1/	ALEX-ANDRIA	ARLINGTON COUNTY	FAIRFAX CO.	FALLS CHURCH	LOU-DOUN CO.	PRINCE WILLIAM CO.	FAIRFAX CITY
PROPERTY											
Nominal Rate (\$100 of value)	\$0.850	\$1.205	\$1.0934	\$1.465	\$1.130	\$1.026	\$1.18	\$1.355	\$1.045	\$1.208	\$1.075
Assessment Level	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Effective Assessment level (incl. Median Sales Ratio)	97.4%	95.1	92.8%	94.3%	95.08%	93.29%	91.98%	94.14%	91.37%	90.92%	96.57%
Effective Rate (per \$100 of value) 2/	\$0.8279 3/	\$1.1460	\$1.0147	\$1.3815	\$1.0744	\$0.9572	\$1.0854	\$1.2756	\$0.9548	\$1.0983	\$1.0381
SALES AND USE											
General Rate	6.0%	6.0%	6.0%	6.0%	6.0% 4/	6.0% 4/	6.0% 4/	6.0% 4/	6.0% 4/	6.0% 4/	6.0% 4/
INDIVIDUAL INCOME (State Rates)	4.0% - 8.95%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%	2% - 5.75%
(Local Rates)		3.03%	3.2%	3.2%	0%	0%	0%	0%	0%	0%	0%
PERSONAL PROPERTY 5/ (per \$100 of value)	\$3.40 6/	\$3.01	\$1.85	\$2.50	\$5.33 7/	\$5.00 7/	\$4.57 7/	\$5.00 7/	\$4.20 7/	\$3.70 7/	\$4.13 7/
AUTO REGISTRATION											
3,499 lbs. Or less	\$72.00 8/	\$67.50	\$67.50	\$67.50	\$73.75 9/	\$73.75 9/	\$73.75 9/	\$73.75 9/	\$65.75 9/	\$64.75 9/	\$73.75 9/
3,500–4,000 lbs.	\$115.00	\$67.50/ \$93.50	\$67.50/ \$93.50	\$67.50/ \$93.50	\$73.75 9/	\$73.75 9/	\$73.75 9/	\$73.75 9/	\$65.75 9/	\$64.75 9/	\$73.75 9/
4,001– 4,999 lbs.	\$115.00	\$93.50	\$93.50	\$93.50	\$78.75 9/	\$78.75 9/	\$83.75 9/	\$78.75 9/	\$70.75 9/	\$69.75 9/	\$78.75 9/
Over 4,999 lbs.	\$155.00	\$93.50	\$93.50	\$93.50	\$78.75 9/	\$78.75 9/	\$83.75 9/	\$78.75 9/	\$70.75 9/	\$69.75 9/	\$78.75 9/
GASOLINE TAX											
(Cents/ Gallon)	23.5	35.5	35.5	35.5	22.3 10/	22.3 10/	22.3 10/	22.3 10/	22.3 10/	22.3 10/	22.3 10/

Source: Survey of local government officials and local government web sites.

- 1/ Real estate rates shown include the Maryland state real property tax rate of 11.2 cents per \$100 of assessed value.
- 2/ Effective tax rates listed here are net of assessment value and include median sales ratios, but do not reflect any exemptions or credits. See page 12-13 for a discussion of the addition of median sales ratios for this year.
- 3/ There is a \$73,350 homestead exemption for property that is owner-occupied. The exemption amount increased to \$74,850 on October 1, 2018 (effective for DC's Real Property Tax Year 2019).
- 4/ State rate is 5% and local rate is 1%.
- 5/ Effective rate per \$100. Applicable to private autos in Northern Virginia jurisdictions. Also, boats, trailers and motorcycles.
- 6/ First \$225,000 of value is exempt from tax.
- 7/ Fairfax City, and Arlington, Fairfax, and Loudoun Counties use the NADA Used Car Pricing Guide clean trade-in value as basis for assessing tax. Alexandria uses the loan value.
- 8/ Class IV, clean fuel or electric vehicle, the fee is \$36.
- 9/ Includes \$40.75 state registration fee for vehicles 4,000 pounds or less; \$45.75 for vehicles over 4,000 pounds.
- 10/ The tax is 3.5% of the statewide average wholesale price/gallon. In December 2018, the tax in Virginia was \$0.162/gallon, plus a \$0.006/gal storage tank fee. There is an additional 2.1 percent sales tax on the total sales price, bringing the state + local total gas tax in Virginia to \$0.222/gal.

Table 9: Demographic Statistics for Selected Metropolitan Area Jurisdictions, 2018

	DC	Montgomery County	Prince George's County	Alexandria	Arlington County	Fairfax County
2018 Total Population 1/	702,455	1,052,567	909,308	160,530	237,521	1,150,795
Number of Households	287,476	368,334	315,759	71,740	109,940	396,628
Average Household Size	2.31	2.83	2.82	2.22	2.13	2.88
Number of Married Couples with Own Children <18	26,405	94,545	50,968	11,402	17,461	106,933
Owner-Occupied Housing Rate	42.3%	65.1%	62.4%	44.3%	42.7%	68.9%
Median Value - Owner Occupied Units	617,900	489,000	320,500	561,800	707,000	569,000
Median Gross Rent	1,516	1,746	1,459	1,736	1,924	1,851
Median Household Income	85,203	108,188	83,034	101,215	122,394	122,227
Median Family Income	117,713	127,733	96,929	125,680	154,608	142,961
Poverty Rate, All People	16.2%	6.9%	8.1%	10.9%	5.8%	5.9%
School System Enrollment (3 years and over)	173,303	269,929	238,221	32,686	48,244	305,937
% High School Graduate or Higher	92.1%	91.0%	87.2%	93.1%	95.4%	92.9%
Population >16 in Labor Force	414,568	599,660	521,719	102,411	159,306	653,562
Number of Government Workers	87,601	114,271	121,875	21,092	36,116	127,651
Unemployment Rate (June 2017) 2/	5.9%	3.8%	4.7%	2.4%	2.2%	2.7%

Source: All figures from U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates, unless otherwise noted.

1/ Total Population from: U.S. Census Bureau, Population Division; Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018. Release date May 2019.

2/ U.S. Bureau of Labor Statistics. "Unemployment in the Washington Area by County – June 2018."

Part II

A Comparison of Tax Rates in the Washington Metropolitan Area as of January 1, 2019 (Unless otherwise noted)

ALCOHOLIC BEVERAGE TAX

District of Columbia

The tax is imposed on all alcoholic beverages manufactured by a holder of a manufacturer's license and on all alcoholic beverages brought into the District by the holder of a wholesaler's or retailer's license.

Maryland

The tax is imposed on all alcoholic beverages sold by manufacturers and wholesalers to retail dealers and sold by out-of-state dealers to wholesalers. The tax also applies to seized liquors.

Virginia

The tax is imposed on the sale of all alcoholic beverages in Virginia. Persons who have a mixed beverage carrier license are subject to tax on mixed drinks sold.

Table 10: Metropolitan Area Tax Rates on Alcohol

ITEMS	DISTRICT OF COLUMBIA ^{1/}	MARYLAND ^{1/}	VIRGINIA ^{2/}
Beer (per barrel)	\$2.79	\$2.79	\$8.06
Spirits (per gallon)	1.50	1.50	20% of retail price
Wine (per gallon)			
14% or less alcohol	.30	.40	1.51 ^{3/}
More than 14% alcohol	.40	.40	1.51 ^{3/}
Champagne and Sparkling Wine (per gallon)	.45	.40	1.51 ^{3/}

Source: Survey of local government officials and local government web sites.

^{1/} An additional 10.25% and 10% sales tax applies in DC, off-and on-premises, respectively, and an additional 9% sales tax applies in MD.

^{2/} Sales at ABC Stores in Northern Virginia are subject to the 6.0% sales tax rate in addition to the rate listed.

^{3/} Some localities may apply additional tax. In addition, state sales tax applies. This includes a \$.40 per liter wine tax, and 6% state sales tax (state sales tax plus local sales tax) applied at ABC stores in Northern Virginia and Hampton Roads. Wines with under 4% alcohol: \$0.2565/gallon.

CIGARETTE TAX

District of Columbia

The District's cigarette tax is imposed on the sale or possession of all cigarettes in the District. Exemptions from the tax are as follows: (1) cigarette sales to or by the federal or District governments; (2) possession of cigarettes by licensed wholesalers for sale outside the District or to licensed wholesalers; (3) possession of cigarettes bearing stamps of other jurisdictions by vending machine operators who are licensed in the other jurisdictions; (4) possession by a consumer of up to 200 cigarettes which were transported into or manufactured in the District by the consumer; and (5) possession of cigarettes being transported under conditions such that the cigarettes are not deemed to be contraband.

Maryland

The Maryland tax is imposed on all cigarettes possessed or held in the state by any person. Cigarettes for sale to Army, Air Force, Navy, or Coast Guard exchanges or commissaries are exempt.

Virginia

The Virginia tax is imposed upon the sale, storage or receipt of cigarettes for purposes of distribution within the state. In addition to the state tax, certain Virginia localities impose a cigarette tax. An exemption from taxation is provided for the free distribution of sample cigarettes in packages containing five or fewer cigarettes and for cigarettes customarily donated by manufacturers to cigarette factory employees (where such cigarettes are not subject to federal taxation).

Table 11: Metropolitan Area Tax Rates per 20 Cigarettes

JURISDICTION	STATE	LOCAL	COMBINED RATE
District of Columbia	\$4.94 ^{1/}	----	\$4.94
Maryland ^{2/}	\$2.00	----	\$2.00
Virginia ^{3/}	\$ 0.30	----	----
<i>Alexandria</i>		\$1.26	\$1.56
<i>Arlington County</i>		\$0.30	\$0.60
<i>Fairfax</i>		\$0.85	\$1.15
<i>Fairfax County</i>		\$0.30	\$0.60
<i>Falls Church</i>		\$0.85	\$1.15
<i>Prince William County</i>		\$0.00	\$0.30

Source: Survey of local government officials and local government web sites.

^{1/} Includes a per pack surtax in lieu of a retail sales tax calculated every March 31. The current rate is 44 cents.

^{2/} Does not include sales tax of \$0.37 per pack.

^{3/} Does not include sales tax of \$0.24 per pack

FINANCIAL INSTITUTION TAXES

District of Columbia

Financial institutions are subject to the corporate franchise tax. The franchise tax has been reduced from 9.2 percent on January 1, 2016 to 8.25 percent for tax year 2018. The minimum tax payable is \$250 if gross receipts are less than \$1 million. If District gross receipts are greater than \$1 million, the minimum tax payable is \$1,000.

Maryland

In the past, Maryland imposed a franchise tax on the net earnings of financial institutions in lieu of the Maryland Corporate Income Tax. Financial institutions formerly subject to the financial institution franchise tax are now subject to the corporate income tax, with special apportionment rules based on a three-factor formula of property, payroll, and receipts. Financial institutions are not subject to personal property taxes except on property leased to others.

Virginia

The Commonwealth of Virginia imposes a tax on the net taxable capital of banks and trust companies at the rate of \$1 per \$100 of net capital, with a prorated schedule for new banks. Net capital is determined in two steps. First, capital, surplus, and undivided profits of the institution are added. Next, the following are subtracted from this amount: the assessed value of real estate; the book value of tangible personal property; the pro rata share of government obligations; the capital accounts of any bank subsidiaries; the amount of any reserve for loan losses allowed by the Internal Revenue Service for income tax purposes (which amount is included in the definition of capital, surplus and undivided profits); and the amount of any reserve for marketable securities valuation that is included in capital, surplus and undivided profits to the extent that such reserve reflects the difference between the book value and the market value of such marketable securities. On July 1, 2016, an \$18 million cap was set on the maximum total annual bank franchise tax liability per bank; the cap will increase to \$20 million if at least 5 banks pay the maximum tax for 3 consecutive calendar years, and it will increase by 3 percent annually after 2 years at \$20 million.

Virginia has authorized its cities and counties to levy a tax not to exceed 80 percent of the state rate. The counties of Arlington, Fairfax, Loudoun, and Prince William, and the cities of Alexandria, Fairfax, and Falls Church levy the maximum of 80 cents per \$100 of net capital. The local tax is not in addition to the state tax, but rather creates a redistribution of 80 percent of the state tax to the localities.

INCOME TAXES

CORPORATE FRANCHISE

District of Columbia

Foreign and domestic corporations and financial institutions engaging in a trade or business within the District or receiving income from District sources are subject to tax. The franchise tax has been reduced from 9.2 percent on January 1, 2016 to 8.25 percent for tax year 2018. The minimum tax payable is \$250 if gross receipts are less than \$1 million. If District gross receipts are greater than \$1 million, the minimum tax payable is \$1,000.

Businesses that do not operate entirely within the District and/or receive income from sources not entirely within the District must allocate or apportion their income in accordance with general allocation or apportionment rules and regulations. Apportionment of business income is based on a single sales factor effective January 1, 2015. Special formulas may be applied to businesses where this formula does not fairly represent the corporation's business within the District.

Federal conformity is maintained pursuant to Public Law 105-100.

Maryland

In Maryland a tax is imposed upon the net income of corporations and financial institutions at the rate of 8.25 percent.

The net income of a corporation is allocated as detailed in state rules and regulations. A single-sales factor apportionment formula is being phased in beginning in 2018. (In 2017, the three-factor formula was based on property, payroll, and double-weighted sales. In 2018, a three-factor formula was based on property, payroll, and triple-weighted sales.) In 2019 the sales factor was quadruple-weighted; in 2020 the sales factor will be quintuple-weighted; in 2021 the sales factor will be sextuple-weighted; and in 2022 and thereafter a single-sales factor will apply.

Virginia

A tax of 6 percent is imposed on the Virginia taxable income of corporations. Professional corporations are also subject to the tax. Corporations having income from business activity taxable both within and outside of Virginia must allocate and apportion their Virginia taxable income as detailed by state rules and regulations. Multi-state corporate income is apportioned to Virginia by a three-factor formula based on property, payroll, and double-weighted sales.

INCOME TAXES

INDIVIDUAL INCOME

District of Columbia

Individuals who maintain a permanent home in the District at any time during the taxable year, or who maintain a place of residence for an accumulative total of 183 days or more, are subject to the individual income tax (see rates in Table 12). Nonresidents who are employed in the District are not liable for the tax.

Because the District of Columbia selectively conforms to federal provisions, legislative action is required whenever federal law changes with respect to federal individual income taxation. As a result of the 2017 Tax Cuts and Jobs Act and DC's federal conformity provisions, DC's personal exemptions was reduced to zero and the federal standard deduction applied for 2018 (married filing jointly - \$24,000; head of household - \$18,000, single - \$12,000). There is an additional standard deduction of \$1,300 for age 65+ or blind taxpayers (and/or spouse/registered domestic partner).

A credit to relieve property tax burdens is provided under the DC income tax law. This credit, called Schedule H, authorizes qualified homeowners and renters to claim a credit against their income tax liability, or a refund if no tax is due, for a portion of property taxes or rent paid when these payments exceed a certain percentage of household income. Renters use 20 percent of rent paid as a property tax equivalency figure. To qualify for the credit or refund, the homeowner or renter must have lived in the District during the entire taxable year, and the household income cannot exceed \$51,000 (\$62,600 if taxpayer is over 70). The maximum real property tax credit is \$1,025 for 2018. For 2019, the income limit increased to \$55,000, and the maximum credit was \$1,200.

Other personal income tax credits are those for: individual income taxes required to be paid to another state on income derived from sources outside the District and child and dependent care (32 percent of federal credit for full-year residents, or qualified expenses divided by number of months on returns filed for less than calendar year or fiscal year). In addition, the District has an earned income tax credit. This credit is currently 40 percent of the federal credit.

The District exempts all income of U.S. Senators, Representatives, Presidential Appointees, and Supreme Court Justices, provided such officials primary residence is not in the District. Also exempted is the income of personal staff and employees of members of Congress who remain bona fide residents of the congressperson's home state. Presidential appointees, to be exempt, must be subject to approval by the Senate and serve at the pleasure of the President. However, appointees are not exempt if they live in the District on the last day of the taxable year, even though they meet the other conditions. Congressional staff members are not exempt if their salaries are paid from committee funds.

Maryland

Persons who are Maryland residents on the last day of the tax year, or who have lived in the state for at least six months, are subject to the individual income tax. In addition, nonresidents are taxed on income earned in Maryland. Maryland's income tax law about income and deductions conforms closely to that of the federal government. Individuals carrying on business in a partnership are responsible for the tax only on their individual positions, that is, no tax is assessed on the partnership entity.

In addition to the state individual income tax, Charles, Montgomery, Prince George's, and other Maryland counties impose a local income tax. Until tax year 1998, this local tax (piggyback) was a share of the state tax. However, effective for tax year 1999, counties levy a tax using an income tax rate and state taxable income. The local rate generally ranges between 3.2 percent in Montgomery and Prince George's Counties to 3.03 percent in Charles County.

In addition, Montgomery County passed legislation making it the first local jurisdiction in the country with a local refundable earned income credit. This credit went into effect for tax year 1998.

Virginia

Virginia residents are subject to the individual income tax. In addition, nonresidents are taxed on income earned in Virginia, but a credit is allowed for taxes paid to their home states. Members of the armed forces are not subject to the tax on their active duty military income when stationed in Virginia, if they had no place of domicile in the state. A spouse of a service member shall neither lose nor acquire a residence or domicile for purposes of taxation with respect to the person, personal property, or income of the spouse by reason of being absent or present in any tax jurisdiction of the United States solely to be with the service member in compliance with the service member's military orders if the residence or domicile, as the case may be, is the same for the service member and the spouse.

Virginia's income tax law conforms very closely to that of the federal government. The tax is based on an individual's federal adjusted gross income with modifications, if applicable, personal exemptions and standard or itemized deductions. In Virginia, as in the District of Columbia, if taxpayers use itemized deductions on their federal return, they must itemize on their state return. If they use the standard deduction for federal purposes, then they must use it for state purposes.

Virginia generally allows the same itemized deductions as the federal government. However, no deduction is allowed for income taxes imposed by the state or any other taxing jurisdiction in determining the amount of the taxpayer's income subject to tax. Instead of allowing a credit for child and dependent care expenses (necessary for gainful employment), Virginia provides for a deduction equal to the amount allowed under federal law in computing the child and dependent care credit.

Table 12 on the following page compares tax rates, personal exemption amounts, and deduction amounts for the District, Maryland, and Virginia as of January 1, 2019.

Table 12: Individual Income Tax Washington Metropolitan Area

PERSONAL EXEMPTIONS	EXEMPTIONS	TAXABLE INCOME 5/	RATES
DISTRICT OF COLUMBIA			
Single	\$0 1/	\$0 - \$10,000	4.0%
Married Filing Separately	\$0	\$10,001-\$40,000	\$400 + 6.0% of excess > \$10,000
Married Filing Jointly	\$0	\$40,001-\$60,000	\$2,200 + 6.5% of excess > \$40,000
Head of Household	\$0	\$60,001-\$350,000	\$3,500 + 8.5% of excess > \$60,000
Dependent (additional)	\$0	\$350,000-\$1,000,000	\$28,150 + 8.75% of excess > \$350,000
Blind (additional)	\$0	Over \$1,000,000	\$85,025, plus 8.95% of the excess above \$1,000,000
Age 65 and over (additional)	\$0		
Standard Deduction	\$24,400		
MARYLAND 2/			
Single	\$3,200	\$0 - \$1,000	2.0%
Married Filing Separately	\$6,400	\$1,001-\$2,000	\$20 + 3.00% of excess > \$1,000
Married Filing Jointly	\$6,400	\$2,001-\$3,000	\$50 + 4.00% of excess > \$2,000
Head of Household	\$3,200	\$3,001-\$150,000	\$90 + 4.75% of excess > \$3,000
Dependent (additional)	\$3,200	\$150,001-\$175,000	\$7,072.50 + 5% of excess > \$150,000
Blind (additional)	\$1,000	\$175,001-\$225,000	\$8,322.50 + 5.25% of excess > \$175,000
Age 65 and over (additional)	\$1,000	\$225,001-300,000	\$10,947.50 + 5.5% of excess > \$225,000
Standard Deduction	3/	Over \$300,000	\$15,072.50 + 5.75% of excess > \$300,000
VIRGINIA			
Single	\$ 930	\$0 - \$3,000	2.0%
Married Filing Separately	\$ 930	\$3,001-\$5,000	\$60 + 3.00% of excess > \$3,000
Married Filing Jointly	\$1,860	\$5,001-\$17,000	\$120 + 5.00% of excess > \$5,000
Head of Household	\$ 930	Over \$17,000	\$720 + 5.75% of excess > \$17,000
Dependent (additional)	\$ 930		
Blind (additional)	\$ 800		
Age 65 and over (additional)	\$ 800		
Standard Deduction	4/		

Source: Survey of State Revenue Department Officials; State Web Sites; and Federation of Tax Administrators, "State Individual Income Taxes for tax year 2019." March 29, 2019. *2019 State Tax Handbook*, Wolters Kluwer/ CCH Group, 2018.

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.

2/ Maryland rates do not include local rates that may be as low as 1.75% in Worcester County and as much as 3.20% in Howard, Montgomery and Prince George's Counties, among others.

3/ The standard deduction for an individual is 15% of Maryland AGI not to exceed \$2,250 (\$4,550 for joint and head of household returns and those filing as qualifying widow(er) with dependent child). The minimum is \$1,500 for single, married filing separately and dependent taxpayers. All others are allowed a minimum of \$3,000.

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

5/ Brackets and rates are for married filing jointly.

INCOME TAXES

UNINCORPORATED BUSINESS FRANCHISE

District of Columbia

The District's franchise tax on unincorporated businesses is imposed on enterprises with gross income over \$12,000. The franchise tax has been reduced from 9.2 percent on January 1, 2016 to 8.25 percent for tax year 2018 and thereafter. The minimum tax payable is \$250 if gross receipts are less than \$1 million. If District gross receipts are greater than \$1 million, the minimum tax payable is \$1,000. The tax is payable by the person or persons jointly or severally conducting the unincorporated business.

Unincorporated businesses pay the franchise tax on 70 percent of net profits, less a \$5,000 exemption. Owners who participate in the operation of the business are allowed 30 percent of the net profit as a salary deduction. When 80 percent or more of income is derived from services, the unincorporated business income is taxed under the individual income tax.

Maryland

Unincorporated business income is taxed under the individual income tax.

Virginia

Unincorporated business income is taxed under the individual income tax.

Several Virginia jurisdictions also levy a license tax on the gross receipts derived from various businesses. Table 13 on the following page details the business license tax rates per \$100 of gross receipts imposed by metropolitan area jurisdictions on several occupations.

Table 13: Unincorporated Business Franchise and Business License Taxes

OCCUPATION 1/	DISTRICT OF COLUMBIA	ALEXANDRIA 2/	ARLINGTON COUNTY 3/	FAIRFAX 4/	FAIRFAX COUNTY 4/	FALLS CHURCH 5/	LOUDOUN COUNTY 6/	PRINCE WILLIAM COUNTY 7/
AMUSEMENTS/ RECREATIONAL SERVICES	8/	\$.36/\$100	\$.25/\$100	\$.27/\$100	\$.26/\$100	\$.36/\$100	\$30 or \$.21/\$100	\$.21/\$100
BUSINESS SERVICES	8/	\$.35/\$100	\$.35/\$100	\$.27/\$100	\$.19/\$100	\$.36/\$100	\$30 or \$.17/\$100	\$.21/\$100
PERSONAL SERVICES	8/	\$.35/\$100	\$.35/\$100	\$.27/\$100	\$.19/\$100	\$.36/\$100	\$30 or \$.23/\$100	\$.21/\$100
PROFESSIONALS	---	\$.58/\$100	\$.36/\$100	\$.40/\$100	\$.31/\$100	\$.52/\$100	\$30 or \$.33/\$100	\$.33/\$100
REPAIR SERVICES	8/	\$.35/\$100	\$.35/\$100	\$.27/\$100	\$.19/\$100	\$.36/\$100	\$30 or \$.16/\$100	\$.21/\$100
RETAIL SERVICES	8/	\$.20/\$100	\$.20/\$100	\$.20/\$100	\$.17/\$100	\$.19/\$100	\$30 or \$.17/\$100	\$.17/\$100
WHOLESALE MERCHANTS	8/	\$.05/\$100 on gross purchases	\$.08/\$100	\$.05/\$100 on gross purchases	\$.04/\$100 on gross purchases	\$.08/\$100	\$30 or \$.05/\$100 on gross purchases	\$.05/\$100 on gross purchases
FILLING STATIONS	8/	\$.20/\$100	\$.10/\$100	\$.20/\$100	\$.17/\$100	\$.19/\$100	\$30 or \$.17/\$100	\$.17/\$100
CONTRACTORS	8/	\$.16/\$100	\$.16/\$100	\$.16/\$100	\$.11/\$100	\$.16/\$100	\$30 or \$.13/\$100	\$.13/\$100
VENDING MACHINE SALES	8/	\$.20/\$100	\$.20/\$100	\$.20/\$100	\$.17/\$100	\$.19/\$100	\$30 or \$.17/\$100	\$.17/\$100
FEDERAL CONTRACTORS	8/	---	9/	\$.03/\$100	\$.03/\$100	\$.03/\$100	\$30 or \$.03/\$100	---
FINANCIAL AND REAL ESTATE SERVICES	8/	\$.58/\$100 10/	\$.36/\$100	\$.40/\$100	\$.31/\$100	\$.50/\$100	\$30 or \$.33/\$100	\$.33/\$100
RENTAL BY OWNER – RESIDENTIAL	8/	\$.50/\$100	\$.28/\$100	\$.50/\$100	---	\$.38/\$100	---	---
RENTAL BY OWNER – COMMERCIAL	8/	\$.35/\$100	\$.43/\$100	\$.23/\$100	\$.26/\$100	\$.52/\$100	\$30 or \$.16/\$100	---

Source: Survey of local government officials and local government web sites.

- 1/ Categories shown are not a comprehensive listing.
- 2/ Less than \$10,000 gross receipts-no tax; greater than \$10,000, but less than \$100,000-\$50.00 minimum.
- 3/ Rates apply to businesses having gross receipts exceeding \$100,000. Businesses having gross receipts less than \$10,000 owe no tax; businesses grossing between \$10,000-\$50,000 pay \$30.00; between \$50,001 and \$100,000 pay \$50.00.
- 4/ If gross receipts are less than \$10,000, there is no fee or license requirement; businesses with gross receipts from \$10,001 to \$50,000, a flat fee of \$30 is assessed; businesses with gross receipts from \$50,001 to \$100,000, a flat fee of \$50 is assessed; and businesses with gross receipts of \$100,001 or greater, the tax rate is determined by the business classification.
- 5/ Less than \$10,000 gross receipts-no tax; \$10,000-\$50,000 pays \$30.00.
- 6/ \$30 fee when gross receipts are under \$200,000. The rate applies to total of gross receipts.
- 7/ Rates apply to business gross receipts of \$250,000 or more for the license year. No license tax shall be imposed when gross receipts are less than \$250,000. Rates are for FY17.
- 8/ As of January 1, 2018 a rate of 8.25% is imposed on the taxable income of businesses, if not incorporated, with gross receipts over \$12,000. A 30% salary allowance for owners and a \$5,000 exemption are deductible from net income to arrive at taxable income.
- 9/ No separate category for federal contractors, they are taxed according to service provided.
- 10/ Financial only.

INHERITANCE AND ESTATE TAXES

INHERITANCE TAX

District of Columbia

The District of Columbia's inheritance tax was abolished for any deaths after April 1, 1987.

Maryland

Effective for decedents who died on or after July 1, 2000, Maryland does not tax property passing to a child or other lineal descendant, spouse of a child or other lineal descendant, spouse, parent, grandparent, stepchild or stepparent, siblings or a corporation having only certain of these persons as stockholders. The rate of 10 percent applies to property passing to all others.

Virginia

Virginia does not levy an inheritance tax. However, Virginia does levy a tax on the probate of wills and grants of administration equal to 10 cents per \$100 of the value of the estate in excess of \$15,000. Localities may impose a local probate tax equal to 1/3 of the state probate tax.

ESTATE TAX

District of Columbia

The estate tax is imposed on the estate of every decedent who died while still a resident of the District, and on the estate of every nonresident decedent owning property having a taxable situs in the District at the time of his or her death.

In response to the Federal Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001, the District decoupled from federal estate tax. By decoupling, the District chose to create its own estate tax threshold. Hence, some District estate taxpayers may be required to file and pay District estate taxes even when no federal filing or tax is due. The District's estate tax rates are linked to federal estate tax credits that were available prior to the enactment of EGTRRA. The highest rate of 16.0 percent applies to estates valued at more than \$10,000,000 (after allowable federal credits are taken).

The FY 2015 Budget Support Act instituted a revenue trigger for implementation of tax policy changes recommended by the District's Tax Revision Commission beyond FY 2015, one of which raised the estate tax threshold from \$1 million to \$2 million. The FY 2015 Budget Support Act additionally set a path for the District to recouple with federal estate tax rules. These

changes were stipulated upon meeting some revenue triggers that would go into effect before the increase in the estate tax threshold. This increase in the estate tax threshold from \$1 million to \$2 million became effective at the beginning of FY 2017.

Effective January 1, 2018, the Estate tax statute was amended to conform with the federal rules. That is, the estate tax exclusion will be equal to the basic exclusion amount prescribed in section 2010(c)(3)(A) of the Internal Revenue Code and any cost-of-living adjustments made pursuant to section 2010(c)(3)(B) of the Internal Revenue Code. The Estate Tax Clarification Amendment Act of 2018 included in the FY 2019 Budget Support Act of 2018 decouples the District of Columbia's estate tax exclusion threshold from the federal level that was set by Public Law 115-97, the Tax Cuts and Jobs Act of 2017 at \$11.18 million and establishes the District's threshold to \$5.6 million in 2018. The estate tax threshold will be increased annually, subject to inflation. The District's tax collections would decrease without the amendment. Estates of decedents who died January 1, 2019 - December 31, 2019 have an exclusion amount of \$5,681,760

Maryland and Virginia

The Maryland estate tax is based on the maximum credit for state estate taxes allowable under § 2011 of the Internal Revenue Code. The credit used to determine the Maryland estate tax cannot exceed 16 percent of the amount by which the decedent's taxable estate exceeds the Maryland estate tax exemption amount for the year of the decedent's death (\$5 million).

Legislation enacted by the 2006 General Assembly, House Bill 5018, repeals the Virginia estate tax for the estates of decedents whose date of death occurs on or after July 1, 2007. The estates of decedents whose date of death occurs before July 1, 2007 remain subject to the estate tax provisions.

INSURANCE PREMIUMS TAX

District of Columbia

All domestic and foreign insurance companies, except those specified below, pay tax on the premiums received in lieu of all other taxes, except taxes upon real property. The basis of this tax is gross premiums received less the following items: dividends paid to policyholders; premiums received for reinsurance assumed; and returned premiums.

Nonprofit relief associations composed solely of members of the armed services or employees of the United States, District of Columbia, or of any individual company, as well as fraternal organizations that issue contracts of insurance exclusively to their own members, are exempt from the tax.

Maryland

All insurance companies except nonprofit hospital service plan corporations, fraternal beneficiary associations, and domestic mutual fire insurance companies pay an annual tax on gross direct premiums. The tax is based on all new and renewal gross premiums allocable to Maryland. Deductions are allowed for returned premiums, dividends paid to policyholders, and refunds made to policyholders.

Virginia

A tax is imposed on all insurance companies transacting insurance business in Virginia, except local mutual fire insurance and fraternal beneficiary companies. The tax replaces all other taxes, except the tax on real estate and tangible personal property. No tax is imposed on premiums received by an insurer to provide group insurance for its employees. The basis of the tax is gross premiums from business in Virginia, except premiums received for reinsurance assumed from licensed insurance companies. The basis is reduced for premiums returned upon canceled or reduced policies; however, deduction for dividends paid or deduction for any other account is not allowed.

Table 14 on the following page presents various insurance premiums tax rates for DC, Maryland, and Virginia.

Table 14: Insurance Premiums Tax Rates

TAX	DISTRICT OF COLUMBIA	MARYLAND	VIRGINIA
Life Insurance Companies	1.70%	2.00%	2.25%
Life Insurance Special Benefits	1.70%	2.00%	2.25%
Domestic Mutual Companies	1.70%	2.00%	1.00%
Industrial Sick Benefit Companies	1.70%	2.00%	1.00%
Workman's Compensation	1.70%	2.00%	2.50%
Legal Service Insurance Companies	---	---	2.25%
Other	2.00% _{1/}	2.00% _{2/}	2.25% _{3/}

Source: Survey of local government officials and local government web sites.

1/ The rate is 2% on accident and health insurance policies, on surplus line brokers, and on health insurance premiums and HMO's.

2/ The rate is 3% on unauthorized insurers and surplus line brokers.

3/ Includes surplus line brokers.

MOTOR VEHICLE TAXES

MOTOR VEHICLE EXCISE

All three jurisdictions impose fees on cars, trucks, buses, and trailers based on weight.

District of Columbia

The District imposes a titling tax based on the manufacturer's shipping weight at the time the title is issued at the following rates: up to 3,499 pounds - 6 percent of fair market value; 3,500 pounds to 4,999 pounds – 7 percent of fair market value; and 5,000 pounds and over – 8 percent. Since October 1, 1998, vehicles previously titled by individuals moving into the District are no longer subject to the motor vehicle excise tax.

Maryland

Maryland imposes an excise tax of 6 percent of fair market value on each motor vehicle at the time the title is issued.

Virginia

Virginia taxes motor vehicles at the time of sale at 4.15 percent.

MOTOR VEHICLE REGISTRATION

Annual registration fees for the District of Columbia, Maryland, and Virginia are presented on the following page in Table 15.

Table 15: Annual Registration Fees for Passenger Cars

JURISDICTION	WEIGHT	FEE
DISTRICT OF COLUMBIA ^{1/2/}	Vehicles	
	0 to 3,499 pounds	\$ 72.00
	3,500 to 4,999 pounds	\$115.00
	5,000 pounds or more	\$155.00
	Motorcycles	\$ 52.00
	Clean fuel or electric vehicle	\$ 36.00
MARYLAND	Vehicles	
	3,700 pounds or less	\$ 67.50
	Over 3,700 pounds	\$ 93.50
VIRGINIA (State)	Vehicles	
	4,000 pounds or less	\$ 40.75
	Over 4,000 pounds	\$ 45.75
	Electric car	\$ 64.00
	Motorcycles	\$ 28.75
Alexandria ^{5/}	Vehicles ^{3/}	+\$ 33.00
	Motorcycles	+\$ 21.00
Arlington County	Vehicles ^{3/}	+\$ 33.00
	Motorcycles	+\$ 18.00
Fairfax	Vehicles ^{3/}	+\$ 33.00
	Motorcycles	+\$ 18.00
Fairfax County ^{4/}	Vehicles	
	4,000 pounds or less	+\$ 33.00
	Over 4,000 pounds	+\$ 38.00
	Motorcycles	+\$ 18.00
Falls Church ^{5/}	Vehicles	+\$ 33.00
	Motorcycles	+\$ 28.00
Loudoun County ^{5/}	Vehicles ^{3/}	+\$ 25.00
	Motorcycles	+\$ 16.00
Prince William County ^{5/}	Vehicles ^{3/}	+\$ 24.00
	Motorcycles	+\$ 12.00

+ In addition to state rate.

Source: Survey of local government officials and local government web sites.

1/ The fee for motorized bicycles is \$25.00.

2/ An additional fee of \$35.00 is charged for vehicle inspection every two years.

3/ Flat rate applied regardless of weight.

4/ Businesses and citizens residing in the towns of Vienna, Herndon, and Clifton pay vehicle registration fees set by those jurisdictions in lieu of the Fairfax County fee.

5/ Taxpayers who satisfy certain household gross income and net worth limitations (these requirements are the same as those applicable to the county's real property tax relief program) may exempt one vehicle from the annual registration fee.

MOTOR VEHICLE FUEL TAX

District of Columbia

This tax is imposed on every importer or user of motor vehicle fuels, including gasoline, diesel fuel, benzol, benzene, naphtha, kerosene, heating oils, all liquefied petroleum gases, and all combustible gases and liquids suitable for the generation of power for motor vehicles. Fuel exported from the District is exempt.

Effective October 1, 2013, the District levies the motor fuel vehicle tax at the wholesale level, equal to 8 percent of the average wholesale price of a gallon of regular unleaded gasoline. The average wholesale price is calculated, based on the average wholesale rate for regular gasoline in the Central Atlantic Region (PADD 1B), for adjustment twice a year. As a result, the tax rate may change each year. The average wholesale price will be determined by the District and published by February 1 and August 1 of each year. The floor on the wholesale price for the calculation of the tax is \$2.94, or 23.5 cents per gallon. This is the average wholesale price that was in effect as of October 2018; it may increase in the future.

Maryland

Every dealer pays a tax on all motor vehicle fuels sold or used in Maryland. Motor carriers with commercial vehicles having seats for more than nine passengers or having more than two axles are subject to a tax on the amount of motor fuel used in their operations in Maryland. Credit is allowed for taxes paid on all motor fuel purchased in Maryland.

Virginia

A motor fuel tax is imposed on all dealers and other persons selling motor fuel in the Commonwealth.

A 2.1 percent sales tax is imposed on retail sales of fuels sold within a city or county that is a member of any transportation district in which a commuter mass transportation system is operated.

RATE PER GALLON

DISTRICT	MARYLAND	VIRGINIA
23.5 cents	35.5 cents <small>^{1/}</small>	22.3 cents <small>^{2/}</small>

^{1/} This represents a combined rate of the motor fuel tax and the sales and use tax equivalent (SUTE).

^{2/} From January 2018 to December 2018, the rate was 16.2 cents per gallon plus a \$0.006/gal storage tank fee. An additional 2.1 percent local tax is applied in the Northern Virginia jurisdictions of Alexandria, Arlington County, Fairfax, Fairfax County, Falls Church, Manassas, Loudoun County, Prince William County, and Stafford County. This is charged by fuel distributors to retail dealers in the Northern Virginia Transportation District for commuter mass transit systems. This local rate is included in the tax burdens calculated in this study.

PROPERTY TAXES

REAL PROPERTY

District of Columbia

All real and personal property is subject to taxation unless expressly exempt by statute. The District of Columbia real property tax is based on four classifications:

- (a) **Class One Property** - improved residential real property that contains five or fewer dwelling units (whether as a row, detached, or semi-detached structure), or a single dwelling unit owned as a condominium and used exclusively for non-transient residential dwelling purposes. Improved residential real property owned by a cooperative housing association also shall be classified as Class One Property, provided that at least 50 percent of the dwelling units are occupied by the shareholders or members of the cooperative housing association.

Unimproved (vacant) property that abuts and has identical ownership with a Class One Property also shall be considered Class One Property. A \$73,350 homestead deduction was applied to property that was owner-occupied for 2018. The homestead deduction increased to \$74,850 for 2019.

- (b) **Class Two Property** - improved commercial property. Hotels, motels, and inns are included in this class. The first \$5 million in assessed value rate is \$1.65 per \$100 of assessed value; \$1.77 per \$100 on properties with assessed values between \$5 million and \$10 million; and \$1.89 per \$100 on properties with assessed values above \$10 million.
- (c) **Class Three Property** - vacant real property.
- (d) **Class Four Property** – improved blighted property.

All property in the District is annually assessed at a statutory level of 100 percent of its estimated market value.

To limit the increase of real property taxes for homeowners, eligible homeowners are provided an Assessment Cap Credit. The Assessment Cap Credit provides that a real property tax bill will not increase by more than 10 percent above the prior year's real property tax bill. The credit only applies to the principal residence of the property owner (homestead property) and is based on the total assessment for the dwelling and land associated with the dwelling. Senior citizens (age 65 and older) now receive additional real property tax relief with the senior homestead 5 percent cap on real property tax increase that was effective October 1, 2018.

Maryland

The state property tax rate of 11.2 cents per \$100 of assessed market value applies to real property only. It is imposed annually on all taxable land and improvements. The tax is applied to an assessed value.

The Maryland Department of Assessments and Taxation makes assessments. Real property for state and county tax purposes is assessed according to a three-year assessment schedule. A physical review of each property is made every three years. Reassessments are updated based on an analysis of sales, cost, and rental data in the area. The amount of the increase in the established market value of one-third of the properties reassessed each year is phased in over a three-year period. A decline in assessed value, however, becomes effective in the first year. Real property is assessed at 100 percent of its value.

Residential property owners are entitled to an assessment limitation tax credit. For state tax purposes, this is a credit against property taxes equal to the tax rate, times that part of the 2018 total assessment greater than 110 percent of the 2017 assessment. County and municipal governments may choose a percentage amount lower than 110 percent of assessment.

Virginia

The Commonwealth of Virginia does not levy a real property tax. However, local jurisdictions are required to tax real property at 100 percent of estimated market value.

Tax rates for the jurisdictions of the Washington Metropolitan Area are presented in Table 16.

Table 16: Real Property Tax Rates
As of December 31, 2018, 1/ 2/

JURISDICTION	NOMINAL RATE	STATUTORY ASSESSMENT LEVEL (% OF MARKET VALUE)	EFFECTIVE ASSESSMENT LEVEL (INCL. MEDIAN ASSESSMENT RATIO) 13/	EFFECTIVE RATE (PER \$100 OF VALUE)
DISTRICT OF COLUMBIA	Class I (residential) \$ 0.85 Class II (commercial) \$ 1.85 4/ Class III (vacant) \$ 5.00 Class IV (blighted) \$10.00	100% 100% 100% 100%	97.4%	\$0.8279
MARYLAND 5/				
Charles County	\$1.205 6/ (\$0.04 - 0.320)	100%	95.10%	\$1.1460
Montgomery County	\$1.0934 (\$0.01 - \$0.622) 7/	100%	92.8%	\$1.0147
Prince George's County	\$1.465 (\$0.895-\$1.069) 8/	100%	94.30%	\$1.3815
VIRGINIA				
Alexandria	\$1.130	100%	95.08%	\$1.0744
Arlington County	\$1.026	100%	93.29%	\$0.9572
Fairfax City	\$1.075	100%	96.57%	\$1.0381
Fairfax County	\$1.180 9/10/	100%	91.98%	\$1.0854
Falls Church	\$1.355	100%	94.14%	\$1.2756
Loudoun County	\$1.045 10/ 11/	100%	91.37%	\$0.9548
Prince William County	\$1.208 12/	100%	90.92%	\$1.0983

Source: Survey of local government officials and local government web sites.

1/ In the District of Columbia the 2018-2019 real property tax year is October 1, 2018 - September 30, 2019. For the Maryland area jurisdictions, the 2018-2019 real property tax year is July 1, 2018 to June 30, 2019. The rates presented are those in effect as of December 31, 2018, which is FY 2019 for each jurisdiction.

2/ Rates are per \$100 of value. Special area rates in effect are shown in parentheses.

3/ Effective tax rates listed here are net of assessment value and do not reflect any exemptions or credits, nor does they incorporate median sales ratios, as in Table 3 for the property tax calculations in the report.

4/ 1st \$5(M) rate is \$1.65 per \$100 of assessed value; a rate of \$1.77 per \$100 assessed value applies to value over \$5 million up to \$10,000,000; and a rate of \$1.89 per \$100 of assessed value applies over \$10 million in value.

5/ Rates shown include the state rate of \$0.112 per \$100 of assessed value.

6/ Rate shown excludes municipal taxes; tax rates for these incorporated areas range from \$0.04 to \$0.32 per \$100.

7/ Rates shown exclude municipal and special taxing district taxes. Tax rates for these incorporated areas range from \$0.01-\$0.62. Rate includes a special tax levy in each fiscal year on all taxable real property for the benefit of all fire & rescue companies, and a transit tax applicable to all properties. Includes Maryland National Capital Park and Planning Commission (MNCPPC) taxes.

8/ Includes MNCPPC taxes, and Washington Suburban Transit Commission (WSTC) taxes.

9/ Relatively few residential properties in three areas pay an additional \$0.02, 0.023, and 0.047 cents per \$100 of assessed value for community centers. Those in tax districts with a special assessment for leaf collection pay an additional \$0.012 cents per \$100 of assessed value.

10/ Loudoun County and Fairfax County have a Route 28 taxing district. Residents of this district are subject to an additional \$0.18 cents per \$100 of assessed value.

11/ Loudoun County has a Dulles Rail service district. Residents of this district are subject to an additional \$0.20 per \$100 of assessed value.

12/ Rates ranging from \$0.02 to \$.201 are applied in special tax districts for recreation, and roads improvements. Includes \$0.0025 per assessed value of \$100 is applied for Mosquito and Forest Pest Management and \$0.08 Fire and Rescue levies (except in the Town of Quantico).

13/ See page 9 for an explanation of the addition of the median sales ratio statistic for this year.

PROPERTY TAXES

PROPERTY TAX RELIEF PROGRAMS

District of Columbia

Class One (owner-occupied residential) property owners may obtain a homestead deduction. DC Law 4-129, effective July 24, 1982, requires the filing of the homestead deduction application once every five years. This deduction eliminates property taxes on the first (\$73,350 of assessed value for homeowners in 2018 (\$74,850 in 2019) and has been indexed annually (by the CPI) since October 1, 2012. In addition to the homestead deduction, senior citizens age 65 or older with total household adjusted gross income below \$133,100 (for 2019) may have their real property tax payments reduced by half.

Owner-occupied residential properties are also subject to a 10 percent property tax cap whereby a property may not be taxed on more than a 10 percent increase in the property's assessed value each year. Effective beginning in 2019, there will be a 5 percent cap annually on taxable assessed value on real properties owned and occupied by senior citizens and person with disabilities.

The District provides several property tax relief programs for qualified homeowners and renters who live in the District during the entire taxable year. A credit can be claimed against their individual income tax liability (a refund if the credit exceeds any tax due) for a portion of the property taxes paid or rent paid constituting property taxes that exceeds a stated percentage of household income. The specific percentages are presented in Table 17, page 49-50.

In addition, the District has a tax deferral program. All owner-occupied residential property taxpayers may apply to defer real property taxes that exceed 110 percent of the previous year's liability. Deferred real property taxes may not exceed 10 percent of the current year's assessed value.

Eligible homeowners who meet the income level requirement and whose property is less than \$479,066 (as of 2019) in value may be eligible for abatement of real property taxes for a 5 year period beginning October 1 following the recordation of the homeowner's deed as well as abatement of deed recordation and transfer taxes. Application must be made at the time the deed conveying the real property involved is offered for recordation with the Recorder of Deeds.

The District also has a special tax relief program for qualified historic properties approved by the Joint Committee on Landmarks of the National Capital. Owners of the property must be willing to enter into an agreement with the DC government to preserve the building as historic property for at least 20 years.

Maryland

The Maryland homeowner's property tax credit program (circuit breaker) is designed to provide relief for property tax burdens in excess of a certain percentage of income. The

maximum assessment that can be used to calculate the credit is \$300,000. Applications must be filed by September 1 of each year.

The state of Maryland also makes available a refundable renter's tax credit of up to \$1,000 a year for renters who are age 60 or over, or who are permanently and totally disabled and will qualify based on income. Renters under 60 years of age, with at least one dependent under the age of 18, who receive no federal or state housing subsidies or reside in public housing, and meet certain income limits, may be eligible. The applicant's entitlement to the credit is tied to a flexible scale that relates the annual rent paid to the applicant's annual gross income. In comparing the applicant's gross income to his or her annual rent paid, an allowance is made for utilities paid by the renter. For example, if the renter pays for gas only, it is assumed that 6 percent of his or her gross income is dedicated to that item. By way of contrast, if the renter must pay for heat, gas, and electricity, it is assumed that 18 percent of income is devoted to these items. (Note: the income limits preclude the hypothetical family earning \$25,000 in this report from receiving a renter's credit).

The Renter's Tax Credit Program is independent of the state individual income tax. Applications must be filed by September 1 of each year. The applicant must, however, submit a copy of his or her most recent Federal Tax Form 1040 and all the accompanying forms with the renter's tax credit application.

Virginia

In Arlington County each owner of property for which an exemption or deferral or both are claimed must be age 65 or older during the current taxable year and occupy such property as their sole dwelling or be permanently and totally disabled. A dwelling jointly held by a husband and wife shall qualify if either spouse is or becomes 65 years old or is or becomes permanently and totally disabled during the current taxable year.

Income cannot be more than \$82,800 and the value of assets may not exceed \$407,600 for an exemption (or \$550,260 for a deferral). Total financial worth shall include the value of all assets, including equitable interest, of the owner(s) and the owner's relatives living in the dwelling for which the exemption or deferral or both are claimed, and shall exclude the fair market value of the dwelling and the land upon which it is situated, not exceeding one acre, for which the exemption is claimed.

Fairfax and Prince William Counties, and Falls Church provide an exemption from, or deferral of, real property taxes on dwellings owned and occupied by persons who are age 65 or older, or who are permanently and totally disabled and whose income is not more than \$72,000 (Fairfax County), \$89,900 (Prince William County), and \$97,100 (Falls Church). In Falls Church, those with incomes from \$62,101 - \$97,100 are eligible for a deferral only. Income of \$7,500 may be excluded by a permanently and totally disabled applicant. Household gross income includes the income of all relatives residing therein. From this amount, the homeowner excludes the first \$6,500 of income for each relative residing in the household other than the spouse of the owner. In Falls Church and Prince William County, the homeowner may deduct \$10,000 for non-spouse income (caregiver income). The combined financial net worth of the

owner and spouse cannot exceed \$340,000, for up to one acre of land in Fairfax County and \$340,000 in Prince William County, for up to 25 acres of land, excluding the value of the home. The asset limit is \$400,000 in Falls Church (There was a change in 2019 to lower the asset limit from \$540,000 to \$400,000, but current recipients with assets over \$400,000 but below \$540,001 who would otherwise qualify for relief are allowed to continue in the program for 2 years).

Loudoun County provides a tax relief program that exempts real property taxes on the dwelling and up to three acres of land on which the dwelling is situated. The dwelling must be owned and occupied as the full-time residence of the applicant(s) seeking tax relief. Applicants must be 65 years or older or certified permanently and totally disabled by January 1st of the current tax year. Loudoun County's gross household income limitation is \$72,000 to receive a full exemption. The first \$7,500 of disability income may be excluded by applicants who are permanently and totally disabled. Not including the spouse of the applicant, the first \$10,000 of income of each relative residing in the dwelling may be excluded when computing gross household income. Loudoun County's net worth limitation is \$440,000, which does not include the value of the dwelling, and up to ten acres of land on which the dwelling is situated. The value of land in excess of three acres is not eligible for tax relief.

The City of Alexandria has two programs for real estate tax relief: First, tax relief for the elderly and permanently and totally disabled. This program allows for both exemption from and deferral of real estate taxes. To qualify for an exemption, the total household income of the applicant cannot exceed \$100,000 for the calendar year immediately preceding the year in which the application is made. For household incomes up to \$40,000, taxes are exempted in full. For household incomes between \$40,001 and \$55,000, up to 50 percent of the applicant's real estate tax bill is exempted. For household incomes between \$55,001 and \$72,000, up to 25 percent of the applicant's real estate bill is exempt. Up to \$10,000 in income of any relative (not a spouse) living in the property is excluded, as well as up to \$10,000 in income of any owner residing in the property who is permanently disabled is also excluded. To qualify for deferral, the total household income of Alexandria city applicants cannot exceed \$72,000 for the calendar year immediately preceding the year in which the application is made. The date of deferral of taxes is the date the taxes would ordinarily be due.

The second program provides a full real estate tax exemption for veterans with 100 percent service-connected disability: The veteran must be rated at 100 percent or service-connection is rated at less than 100 percent, but the veteran is paid at the 100 percent disability rate due to un-employability under either standard. The disability must be considered total and permanent. Veterans with temporary disability, no matter how severe, do not qualify.

Table 17: Property Tax Relief Programs

FILING UNIT GROSS INCOME	TAX CREDIT EQUALS:			
DISTRICT OF COLUMBIA ^{1/}	Regular Property Tax Circuit Breaker (Schedule H renters' credit)			
\$ 0 - 24,999	100% of property tax exceeding 3.0% of household income – up to \$1,200			
\$ 25,000 – 51,999	100% of property tax exceeding 4.0% of household income – up to \$1,200			
\$ 52,000 – 55,000	100% of property tax exceeding 5.0% of household income – up to \$1,200			
	Senior (Age 70 and Over) Circuit-Breaker Relief (Schedule H renters' credit)			
\$ 0 – 75,000	100% of property tax exceeding 3.0% of household income – up to \$1,200			
	Senior Citizen or Disabled Owner Property Tax Relief			
\$ 0 – 134,550	Reduces qualified owners' property tax by 50%			
JURISDICTION	HOUSEHOLD GROSS INCOME LESS THAN:	NET WORTH LESS THAN:	RELIEF AMOUNT:	TAX LIMIT:
	Rates			
MARYLAND ^{2/}	\$60,000	\$200,000	Determined by state	\$4,380

1/ Renters use 20 percent of rent paid as a property tax equivalency. Income and credit limits are for Tax Year 2019.

2/ Maryland counties may provide county supplemental programs. Prince George's County does not offer a supplement to the homeowners' tax credit program. However, several Prince George's County municipalities offer a supplemental program including the cities of Bowie, College Park, Greenbelt, Hyattsville, and Mount Rainier.

Table 17: Property Tax Relief Programs, Continued

JURISDICTION	HOUSEHOLD GROSS INCOME LESS THAN:	NET WORTH LESS THAN:	RELIEF AMOUNT:
VIRGINIA			
Alexandria ^{3/ 4/}	\$100,000	\$430,000	^{5/}
Arlington County ^{6/}	\$82,800	\$407,600 for exemption \$550,260 for deferral	^{7/}
Fairfax ^{3/ 4/}	\$72,000	\$340,000	^{8/}
Fairfax County ^{3/ 4/}	\$72,000	\$340,000	^{8/}
Falls Church ^{3/}	\$97,100	\$400,000	^{9/}
Loudoun County	\$72,000	\$440,000	^{10/}
Prince William County ^{3/}	\$89,900 ^{11/}	\$340,000	^{12/}

Source: Survey of local government officials and local government web sites.

- ^{3/} Tax relief program is for residents 65 years of age or older, or permanently and totally disabled. Disabled applicants may exclude the first \$10,000 of income. For each relative other than a spouse residing in the household, the first \$7,500 may be excluded.
- ^{4/} Excludes home and two acres of land from net worth calculation in Alexandria, and one acre of land in Fairfax County.
- ^{5/} Household income less than \$40,000 receives full exemption; income \$40,001 to \$55,000 receives a 50 percent partial exemption; income \$55,001 to \$72,000 receives 25 percent partial exemption; income not more than \$72,000 can receive deferral of tax.
- ^{6/} For deferrals, net worth cannot exceed \$195,000; for deferrals with interest, income cannot exceed \$52,000; for deferrals without interest, income cannot exceed \$47,000; for exemptions, net worth cannot exceed \$100,000 and income cannot exceed \$20,000.
- ^{7/} The asset level excludes the value of the residence. The amount of relief received, if eligible, is based on household income and the value of the household's assets.
- ^{8/} Income less than \$42,000, receive 100 percent tax relief; from \$42,001 to \$52,000, receive 50 percent tax relief; and from \$52,001 to \$72,000 receive 25 percent tax relief.
- ^{9/} There was a change in 2019 to lower the asset limit from \$540,000 to \$400,000, but current recipients with assets over \$400,000 but below \$540,001 who would otherwise qualify for relief can continue in the program for 2 years.
- ^{10/} Total exemption is granted for home and up to three acres.
- ^{11/} Income limit is as of December 31, 2019.
- ^{12/} Total exemption of the tax on a home and up to one acre of land it occupies is granted to applicants whose gross household income does not exceed \$62,000 annually (as of December 2019). Partial exemption of the tax on a home and up to twenty-five acres of land it occupies is granted to applicants whose gross household income is greater than \$62,000 but does not exceed \$89,900.

PROPERTY TAXES

TANGIBLE PERSONAL PROPERTY

District of Columbia

The tax is imposed on all tangible personal property, except inventories, used in a trade or business. Such property includes machinery, equipment, furniture, fixtures and supplies. Tangible personal property leased to another business or individual located in the District of Columbia is taxable to the owner. Tangible personal property must be assessed at full and true value. Renters under a "lease purchase" or a "security purchase" agreement who are obligated to become the owner must report the property on the personal property tax return. The first \$225,000 of taxable value is exempt from tax.

Maryland

The state of Maryland exempts business property (including commercial inventory, manufacturing R&D inventory, and manufacturing R&D machinery) from tangible personal property taxation. The state is responsible for the assessment, at full cash value, of corporate tangible personal property.

A county rate may apply to commercial and manufacturing inventories; most, but not all, Maryland counties levy a personal property tax. The county rates of tax on tangible personal property are 2.5 times those for real property.

Virginia

The tax on tangible personal property is a local tax in Virginia. The rates shown in Table 18, page 53 are nominal. Counties and cities impose different rates on tangible personal property and classify certain items separately from other tangible personal properties.

Virginia jurisdictions are the only ones in the Washington Metropolitan Area that tax automobiles (as well as motorcycles, recreational vehicles, boats, airplanes, and trailers) under the tangible personal property tax. Mobile homes are taxed at the real property tax rate. Motor vehicles must be listed separately and are assessed at trade-in value according to the January 1 (of each year) National Automobile Dealers Association handbook in Alexandria, Falls Church, Fairfax City, Fairfax County, and Prince William County. The clean loan value is the basis used in Arlington County and Loudoun County. All Northern Virginia jurisdictions included in the report prorate vehicle personal property taxes based on the length of time the vehicle is in their locality.

Beginning in 1999, Virginia adopted a personal property tax relief program on the first \$20,000 of a vehicle's assessed value. For calendar year 2018, personal property taxes paid by citizens were reduced by various percentages based on the 2017 level of state reimbursement in which the state reimbursed the locality for that reduced assessment amount. Owners of vehicles

valued at less than \$1,000 pay no tax (the state pays 100 percent). In Arlington County, vehicles that are valued at \$3,000 or less, and are PPTR eligible have no tax liability and pay only an annual decal fee. Each vehicle that is PPTR eligible pays no tax on the first \$3,000 of value.

Several counties offer additional relief for taxpayers meeting income, age, or other eligibility criteria. Prince William County allows an exemption of personal property taxes on one automobile per qualifying applicant for the low-income elderly and the permanently and totally disabled. County tax relief applicants who meet the income and net worth requirements may qualify for a reduced tax rate on one vehicle per qualifying applicant. Qualifications for personal property tax relief for the low-income elderly and disabled are as follows:

- Gross income of the applicant may not exceed \$89,900 (as of December 2019).
- The combined net assets of the applicant and spouse may not exceed \$340,000.
- Personal property relief for this program is limited to one vehicle.
- Disabled applications may exclude the 1st \$7,500 of income from the calculation of total income, i.e., an effective gross income of \$29,500.

Loudoun County provides an alternative personal property tax rate on one vehicle per qualified applicant who is age 65 or over or declared permanently and totally disabled by January 1st of the current year. The vehicle must be used primarily by or for the applicant, and if co-owned, the gross income limitation includes income from all sources of the owners of the vehicle and the spouse of the applicant. The gross income limit for the alternative tax rate is \$52,000. The applicant's net worth cannot exceed \$195,000, which may exclude the value of the applicant's Loudoun County residence and up to one acre of land on which it is situated. The alternative tax rate is established annually by the Board of Supervisors. The current rate is \$2.10 per \$100 of assessed value for qualified applicant's vehicles.

Falls Church allows an exemption of up to the first \$25.00 of personal property taxes plus \$33 of decal relief (total \$58) on one automobile per household for the low-income elderly and the permanently and totally disabled (income limit is \$20,000 per year).

**Table 18: Tangible Personal Property
Tax Year 2018– 2019 (FY 2019) ^{1/}**

RATE PER \$100 OF VALUE	
DISTRICT OF COLUMBIA	\$3.40 ^{2/}
MARYLAND ^{3/}	
Charles County	\$3.0125
Montgomery County	\$1.85
Prince George’s County	\$2.50 ^{4/}
VIRGINIA	
Alexandria	\$5.00 ^{5/} (\$4.50) ^{6/} (\$3.55) ^{7/}
Arlington County	\$5.00 ^{5/}
Fairfax	\$4.13 ^{5/}
Fairfax County	\$4.57 ^{5/} (\$1.09) ^{8/} (\$0.01) ^{9/}
Falls Church	\$5.00
Loudoun County	\$4.20 ^{5/ 10/} (\$2.75) ^{6/} (\$1.205) ^{8/} (\$1.00) ^{11/} (\$0.01) ^{9/} (\$4.00) ^{12/} (\$2.10) ^{13/}
Prince William County	\$3.70 ^{4/ 12/} (\$0.00) ^{13/} (\$1.25) ^{14/} (\$1.00) ^{15/} (\$1.125) ^{16/}

Source: Survey of local government officials and local government web sites.

- 1/ The personal property tax year in Virginia area jurisdictions is on a calendar year basis. The rates submitted by Virginia jurisdictions for this report are applicable to calendar year 2018. In the District of Columbia and the Maryland area jurisdictions, the 2018 personal property tax year is July 1, 2018 to June 30, 2019. The rates presented are those in effect for this period. Rates in parentheses apply to specific items detailed in the corresponding footnote.
- 2/ First \$225,000 of value is exempt from tax.
- 3/ Maryland property tax rate is not levied against personal property. Rates listed for all three counties are unweighted county rates.
- 4/ Rate applies to non-town businesses. The county rate for municipalities ranges from \$2.012 to \$2.294.
- 5/ Rate applied to regular individual personal property and business tangible personal property. Alexandria offers 100% relief on the total assessed value of vehicles valued \$1,000 and under; 52.5% relief on the total assessed value for vehicles valued between \$1,001 and \$20,000. For CY 2018, Arlington County provided 100% tax relief for assessed vehicle value at or below \$3,000. For assessed value between \$3,001 and \$20,000 for conventional vehicles, the taxpayer paid 72% of the tax liability, with the State block grant funds contributing the remaining 28%. For calendar year 2017, taxpayers in Fairfax County received a 60% tax relief on their Personal Property tax liability on the first \$20,000 of the value for vehicles owned by individuals. Vehicles valued less than \$1,000 received a 100% tax relief. Taxpayers in Falls Church received tax relief of 44.05%. For CY 18, taxpayers in Loudoun County received 39% tax relief on their Personal Property tax liability on the first \$20,000 of the value for vehicles owned by individuals. Vehicles valued less than \$1,000 received a 100% tax relief. Prince William County taxpayers received 47.5% tax relief on assessed values under \$20,000.
- 6/ Rate applied to machinery and tools, personal property used in a research and development business, and Interstate Motor Carrier vehicles.
- 7/ Vehicles with special equipment designed to aid the handicapped are assessed at a rate of \$3.55 per \$100 of value.
- 8/ Rate applied to mobile homes and public service corporation non-vehicular personal property
- 9/ Rate applies to vehicles specifically equipped for the handicapped, privately-owned vans used for van pools, and vehicles belonging to volunteer fire and rescue squad members, vehicles owned by reserve deputy sheriffs and auxiliary police officers. The same rate also applies to boats, antique automobiles, aircraft and flight simulators, and property owned by homeowners' associations. One vehicle owned by a fully disabled veteran is included in this special subclass.
- 10/ Vehicles using clean special fuels.
- 11/ Rate applied to four-wheeled electrically powered low-speed vehicles.
- 12/ Rate applied to heavy construction machinery.
- 13/ Rate applied to vehicles specially equipped for use by the handicapped and vehicles owned by certain elderly and disabled individuals.
- 14/ Rate applied to computer equipment and peripherals used in a trade/business.
- 15/ Rate applied to property used for research and development.
- 16/ Rate applied to mobile homes.

PUBLIC UTILITIES TAX

District of Columbia

The District imposes a gross receipts tax on utilities operating in the District of Columbia. The rate is 10 percent of gross receipts from sales to residential customers and 11 percent of gross receipts from sales to nonresidential customers. In addition, similar taxes are assessed on heating oil companies, natural and artificial gas marketers, long distance telephone companies, and subscription television, video, and radio service providers. Under provisions of the Telecommunications Competition Act of 1996, the District assesses an 11 percent gross receipts tax on local telephone companies, including wireless telecommunications providers. The regulated utilities pay the bulk of the revenues associated with these taxes.

Maryland

Called the franchise tax in Maryland, the public utilities tax applies to any company engaged in a telegraph, telephone, oil pipeline, electric, or gas business in the state. The tax is based on gross receipts for the preceding calendar year. The rate is 2 percent and receipts subject to this tax are not subject to state income tax except for long distance phone companies, which surcharge the tax to their customers.

In addition, retail sales of natural or artificial gas, oil, electricity, coal, nuclear fuel assemblies, and steam for nonresidential use are also taxed by several local subdivisions.

Virginia

Electric and gas; water or heat; light and power companies; and telegraph and telephone companies are subject to tax at different rates. Telephone and telegraph taxes are based on mileage of poles or conduits, including mileage of buried cable; an additional charge is applicable to gross receipts from intrastate business.

Virginia exempts consumers from tax for the use or consumption of gas, electricity, and water delivered through mains, lines, or pipes. However, some Virginia localities do tax consumers for these services at different rates.

Table 19: Public Utilities Tax to Residential Consumers

JURISDICTION	ELECTRICITY	MAXIMUM MONTHLY TAX	TELEPHONE	MAXIMUM MONTHLY TAX	GAS	MAXIMUM MONTHLY TAX	WATER	MAXIMUM MONTHLY TAX
DISTRICT OF COLUMBIA	\$0.0070/kwh	---	---	---	\$.0707/ therm	---	---	---
MARYLAND	\$0.00062/kwh	---	---	---	\$0.00402/therm	---	---	---
Montgomery County	\$0.01106/ kwh 1/	---	\$2.00 2/	---	\$.09515/ therm 1/	---	---	---
Prince George's County	\$0.0099/kwh 1/	---	9% 2/	---	\$0.084949/therm 1/	---	---	---
VIRGINIA	\$0.00155/kwh 6/		3/		\$0.0135/ccf			
Alexandria	\$ 1.12 plus \$0.012075/kwh	\$3.00	3/	---	\$ 1.28 plus \$0.124444/ccf	\$3.00	15.0%	
Arlington County	\$0 plus \$0.0111/kWh with first 400 kwh exempt	\$3.00	3/	---	\$0 plus \$1.038/ccf with first 20 ccf exempt	\$3.00	---	---
Fairfax	\$1.05 plus \$0.01136/kwh	\$2.25	3/	---	\$1.05 plus \$0.05709/ccf	\$2.25	15.0%	\$15.00
Fairfax County 4/	\$ 0.56 plus \$0.00605/kwh	\$ 4.00 4/	3/	---	\$ 0.56 plus \$0.05259/ccf	\$ 4.00 4/	---	---
Falls Church	\$0.70 plus \$007535/kwh	\$ 5.00 5/	3/	\$ 5.00 5/	\$0.70 plus \$0.0039/ccf	\$ 5.00 5/	10.0%	\$ 5.00 5/
Loudoun County	\$0.63 plus \$0.006804/kwh	\$ 2.70	3/	---	\$0.63 plus \$0.06485/ccf	\$ 2.70	---	---
Prince William County	\$1.40 plus \$0.01509/kwh	\$ 3.00 5/	3/	\$ 3.00 5/	\$1.60 plus \$0.06/ccf	\$ 3.00 5/	---	---

Source: Survey of local government officials and local government web sites.

- 1/ This energy tax is levied upon every person transmitting, distributing, manufacturing, producing, or supplying electricity, gas, steam, coal, etc., in Montgomery and Prince George's Counties. Although the tax is levied upon the distributor, it is effectively borne by the consumer.
- 2/ Montgomery County telephone tax per line and \$3.50 per wireless telephone each month.
- 3/ All local telephone utility taxes in Virginia are taxed with 5 percent statewide communications sales and use tax.
- 4/ Per month maximum shown is for residential consumers only; separate rates are in effect for commercial consumers.
- 5/ Maximum monthly tax for commercial consumers is \$100.
- 6/ For up to 2,500 kwh used. Between 2,500 and 50,000 kwh, the rate is \$0.00099; and over 50,000 kwh, the rate is \$0.00075.

Table 20: Public Utilities Tax to Suppliers

JURISDICTION	UTILITIES SUBJECT TO TAX	RATE	BASIS
DISTRICT OF COLUMBIA			
	Telecommunications	10.0%	Gross receipts
	Residential	11.0%	Residential
	Non-residential		Non-residential
MARYLAND			
	Telegraph, telephone, oil pipeline, light and power, electric, or gas companies	2.0%	Gross Receipts
VIRGINIA			
	Water	2.0%	Gross Receipts
	Telephone	2/	

Source: "DC Tax Facts, 2019." Government of the District of Columbia, Office of the Chief Financial Officer, Office of Revenue Analysis, p. 26.

1/ Local consumption tax rates and a special regulatory tax rate may also apply.

2/ All local telephone utility taxes in Virginia are taxed with 5 percent statewide communications sales and use tax.

RECORDATION AND TRANSFER TAXES

District of Columbia

A tax of 1.1 percent of the consideration is imposed on each deed when it is submitted for recording if the fair market value is under \$400,000; otherwise, the rate is 1.45 percent on fair market value \$400,000 and above. The minimum recordation tax is \$1.00.

The Fiscal Year 2018 Budget Support Act of 2017 provides a reduced recordation tax rate of 0.725 percent, or reduced economic interest in a cooperative unit tax rate to qualified first-time District homebuyers, based on their residency status and income, provided that the entire benefit of the reduced recordation tax rate is allocated to the first-time District homebuyer, as shown on the settlement statement or closing disclosure form.

Another tax of 1.1 percent of the consideration paid is imposed on each transferor for each transfer if the fair market value is under \$400,000 and is payable at the time the deed is submitted for recording; otherwise, the rate is 1.45 percent on fair market value \$400,000 and above. The minimum transfer tax is \$1.00.

Transfers of economic interests in the District of Columbia are subject to a 2.9 percent tax based on consideration paid. For qualified first-time home buyers, the rate for an economic interest in a cooperative unit is: (i) 1.825 percent when consideration allocable to the real property is less than \$400,000; or (ii) 2.175 percent when consideration allocable to the real property is \$400,000 or greater.

Maryland

The Maryland state realty transfer tax is 0.5 percent of the consideration, there is a 0.25 percent rate for first-time homebuyers. Recordation taxes differ by county and range from a rate of \$2.50/\$500 of consideration (0.5%) in Baltimore and Howard Counties, to a high of \$6.00/\$500 of consideration (1.2%) in Frederick and Talbot Counties.

Charles County

The recordation tax in Charles County is 1.00 percent. A new county transfer tax took effect on August 8, 2016, the rate of which is 0.5 percent of the purchase price of the property. First-time homebuyers who will live in their home are exempt from paying the tax on the first \$50,000 of the purchase price.

Montgomery County

Montgomery County's recordation tax is \$8.90 per thousand of consideration rounded up to the next increment of \$500 up to \$500,000 of consideration (this is a rate of 0.89%). (For property valued over \$500,000 it is computed at 1.35 percent). A \$890 exemption may be

available for owner occupied residential property.

The county transfer tax is typically 1 percent of the selling price of a property.

Prince George's County

The recordation tax rate in Prince George's County is \$5.00 per \$1,000 of consideration (0.50%). In addition, the county imposes a transfer tax of 1.4 percent of the selling price.

Virginia

The state recordation tax is \$0.25 per \$100, or fraction thereof, of the consideration of the deed or the actual value of the property conveyed, whichever is greater. The state also levies a tax on the grantor of \$0.50 per \$500, excluding any liens or encumbrances, on the purchase price. In the Northern Virginia region, an additional grantor's tax of \$0.15 per \$100 (or portion of \$100) of the purchase price or fair market value of the property is levied and revenue goes to the Northern Virginia Transportation District Fund. In addition, the state allows cities and counties to impose a recordation tax of up to one-third of the state tax. The cities of Alexandria, Fairfax, Falls Church, and the counties of Arlington, Fairfax, Loudoun, and Prince William impose this tax at the rate of \$0.0833 per \$100.

The state transfer tax is \$0.50 for each \$500 of consideration, or fraction thereof, exclusive of any lien or encumbrance remaining thereon when the consideration or the value of the interest exceeds \$100. One half of the conveyance tax collected is returned to the state treasury and one half goes into the treasury of the locality of the property. The land transfer fee is one dollar and is collected whenever improved or unimproved land of any amount of acreage is transferred between two parties.

SALES AND USE TAXES

District of Columbia

The District of Columbia has five tax categories that fall under the general sales and use tax. The retail sales tax rate of 6 percent is imposed on all tangible personal property sold or rented at retail in the District and on certain selected services. Grocery-type foods, prescription and non-prescription drugs, and professional services such as consulting, engineering, legal, and physician services, are among the items exempt from the sales tax. Construction materials and business purchases of public utility services are among those included. The Tax Revision Commission Implementation Amendment Act of 2014 (BSA Subtitle (VII) (B)) expanded the sales tax base to include some services not taxed in the District of Columbia. These include bottled water delivery services and other direct selling establishments, carpet and upholstery cleaning services, fitness and recreational sports centers, and other personal care services such as tanning, car washes, bowling centers and billiard parlors. The other rate categories apply to goods and services as indicated below.

The FY 2019 Budget Support Act of 2018, effective October 1, 2018 increased the various sales tax rates that will be dedicated to the increase in funding for the Washington Metropolitan Area Transit Authority (WMATA). The general retail sales tax rate increased from 5.75 percent to 6 percent; the tax rate on hotels increased to 14.95 percent; the rate for spirituous or malt liquors, beers, and wine sold for consumption off the premises and rental vehicles increased to 10.25 percent. The Act additionally exempts feminine hygiene products and diapers from the general retail sales tax.

The use tax is imposed at the same rate on property sold or purchased outside the District and then brought into the District to be used, stored, or consumed. Vendors who are subject to the jurisdiction of the District are required to collect and pay the sales or use tax. When the vendor is not subject to the jurisdiction of the District, or when the purchaser brings the property into the District, the purchaser is required to pay the tax.

ITEMS	2018 SALES TAX RATE
Retail rate for sales of certain tangible personal property and selected services, non-alcoholic soft drinks, food, or drinks sold in vending machines	6.0%
Medical marijuana	6.0%
Restaurant meals, liquor prepared for immediate consumption on the premises, and prepaid telephone cards,	10.0%
Off-premises alcohol, rental vehicles, tickets sold for games and events at the ballpark, merchandise sold at the baseball stadium, tickets sold for games and events at the Capital One Center and merchandise sold at the Capital One Center	10.25%
Hotels (transient accommodations)	14.95%
Parking motor vehicles in commercial lots	18.0%

Source: "DC Tax Facts 2019." Government of DC, Office of the Chief Financial Officer, Office of Revenue Analysis, p. 33.

Maryland

A 6 percent tax is imposed on retail sales, including the rental, lease or royalty of tangible personal property, including: (a) sales of food and drink on purchases over \$1.00; (b) production, fabrication or printing of tangible personal property on special order; (c) sales of tangible personal property to contractors, builders or landowners for use or resale in the form of real estate; (d) lodgings or accommodations; and (e) sales of tangible personal property and/or services to persons who will use them as facilities, tools, machinery or equipment, even though the intention is to transfer title to the property. Alcoholic beverage sales are subject to a 9 percent tax.

Rental of passenger cars for 180 days or less is taxed at the rate of 11.5 percent, while certain short-term truck rentals are taxed at 8 percent.

Residential public utilities (natural or artificial gas, electricity, steam, and coal) are exempt from the sales tax. This exemption covers residential properties containing not more than four units, including cooperative housing, condominiums, and other similar residential living arrangements.

In addition to the state rate of 6 percent, Maryland localities impose a tax ranging from 0.5 percent to 10 percent on admissions to movie theaters, concerts, amusement parks, and various other events.

Virginia

A 5.0 percent state tax and a state-administered 1.0 percent local tax is imposed on retail sales, proceeds from leases and rentals, and proceeds from transient accommodations. Among the exempt items are gas, electricity, home heating fuel, water, alcoholic beverages sold by the state, certain medical supplies, and charitable purchases.

Vending machine dealers are taxed at 6.3 percent (there is an additional 0.7 percent state tax imposed in the localities that make up Northern Virginia and Hampton Roads, making the rate in these regions 7 percent, and the sales tax rate on groceries is 2.5 percent.

Table 21: Metropolitan Area Sales and Use Tax Rates

JURISDICTION	GENERAL RATE		ADMISSIONS		TRANSIENT ACCOMMODATIONS		RESTAURANT MEALS	
	STATE	LOCAL	STATE	LOCAL	STATE	LOCAL	STATE	LOCAL
DISTRICT OF COLUMBIA	6.0%	---	10.0%	---	14.95%	---	10.0%	---
MARYLAND	6.0%	---	10.0%	---	6.0%	---	6.0%	---
Charles County	---	---	---	4.5-10% 2/	---	5.0% 1/	---	---
Montgomery County	---	---	---	7.0% 2/	---	+7.0% 3/ 4/	---	---
Prince George's County	---	---	---	+0.5- 10.0%	---	+7.0%	---	---
VIRGINIA	5.0%	---	---	---	2.0% 5/	---	6.0% 6/	---
Alexandria	---	+1.0%	---	10.0% 7/	---	+6.5% plus \$1.00 per night/room	---	+4.0%
Arlington County	---	+1.0%	---	---	---	+5.25%	---	+4.0%
Fairfax	---	+1.0%	---	---	---	+4.0%	---	+4.0%
Fairfax County	---	+1.0%	---	---	---	+4.0%	---	---
Falls Church	---	+1.0%	---	8/	---	+6.0%	---	+4.0%
Loudoun County	---	+1.0%	---	---	---	+5.0%	---	---
Prince William County	---	+1.0%	---	---	---	+5.0%	---	---

Source: Survey of local government officials and local government web sites.

+ In addition to state rate.

- 1/ Permanent residents of 120 days or more are exempt from the tax.
- 2/ Rates are limited to 5% when the state sales tax is applied, since the combination of the two taxes may not exceed 10%.
- 3/ Rates range from 5 to 10%.
- 4/ 3.5% is allocated to the Montgomery County Conference and Visitors Bureau, and Convention Center.
- 5/ This is called the "state transient occupancy tax."
- 6/ This is the state general sales tax rate for the Northern Virginia area (5% state + 1% local add-on).
- 7/ Alexandria admissions tax not to exceed \$0.50 per person.
- 8/ There is a \$0.05 tax per admission for bowling.

WATER AND SEWERAGE USER CHARGES (RESIDENTIAL)

Charges for water and sanitary sewerage and basic rates for each jurisdiction are presented in Table 22, on the following page. Average cost per 1,000 gallons is the common standard used. Special charges for service connections, availability, demand and account service and front foot (a foot measured along the front of a piece of property) assessments are not included in Table 22.

The rates for Loudoun and Prince William Counties are those that exist in the town of Leesburg. This is done to simplify the rates because rates differ throughout these counties according to the city or town of residency.

In Virginia and Maryland jurisdictions, billing is quarterly, while the District of Columbia bills monthly.

**Table 22: Water and Sewerage User Charges
(Residential), 2018 (unless noted)**

JURISDICTION	WATER	SEWERAGE	MINIMUM
DISTRICT OF COLUMBIA	\$3.89/1,000 gal.	\$10.36/1,000 gal.	None
MARYLAND			
Charles County	\$4.01/1,000 gal.	\$7.78/1,000 gal.	None
	18,000 gallons or less per quarter for Residential Customers		
Montgomery County	Low \$3.61 /1,000 gal. Usage 49 gal. or less/day	\$ 4.70 /1,000 gal. 49 gal. or less/day	None
	High \$ 8.34 /1,000 gal. Usage 9,000 gal./day or more	\$ 11.89 /1,000 gal. Usage 9,000 gal./day or more	
Prince George's County	Low \$3.61/1,000 gal. Usage 49 gal. or less/day	\$4.70/1,000 gal. 49 gal. or less/day	None
	High \$8.34/1,000 gal. Usage 9,000 gal./day or more	\$11.89/1,000 gal. 9,000 gal./day or more	
VIRGINIA			
Alexandria	\$10.83 fee up to 6,000 gal./qtr.	\$9.91/1,000 gal. + sewer service charge 1/	None
Arlington County 2/	\$4.7/1,000 gal.	\$9.10/1,000 gal.	None
Fairfax 3/	\$2.94/1,000 gal.	\$8.22/1,000 gal	\$17.49 water \$26.70 sewer

**Table 22: Water and Sewerage User Charges
(Residential) FY 2018, Continued**

JURISDICTION	WATER	SEWERAGE	MINIMUM
Fairfax County	\$3.07/1,000 gal.	\$7.28/1,000 gal.	None
Falls Church ^{4/}	\$5.00/1,000 gal. over 5,000 gal.	\$9.87/1,000 gal.	None
Loudoun County	\$4.45/1,000 gal.	\$4.97/1,000 gal.	None
Prince William County (Service Authority)	\$4.33/1,000 gal.	\$6.65/1,000 gal.	None

Source: Survey of local government officials and local government web sites.

- 1/ As of July 1, 2019, these rates represent the first of two rate increases and include \$7.63/1,000 gal for wastewater charge, and \$2.28/1,000 gal for a City Sanitary Sewer System Capital Investment and Maintenance Fee.
- 2/ As of July 1, 2019.
- 3/ Residential customers are taxed on water and sewer at a rate of 10 percent each, with a maximum of \$15 each.
- 4/ As of January 3, 2014, water service is provided to City of Falls Church residents and businesses by Fairfax Water. All customers of the Falls Church Water Utility automatically became customers of Fairfax Water on January 3. The rates originally effective with service rendered July 1, 2016 will continue to be effective through June 30, 2019.

Miscellaneous Taxes

District of Columbia

Uniform Disposition of Unclaimed Property

The District of Columbia is authorized to act as conservator over property presumed abandoned and held by businesses and financial corporations by mandating the reporting and delivery of such property into the custody of the Mayor.

The Uniform Disposition of Unclaimed Property Act includes all tangible and/or intangible personal property and requires that reports be filed annually. Banks, businesses and other financial corporations must report on or before November 1 for property abandoned by the preceding June 30. Life insurance companies must report by May 1 for property abandoned by the preceding December 31.

Other Miscellaneous Taxes

911 Emergency	
Wireless/Wireline Subscribers	\$0.76 per line per month
Centrex Lines	\$0.62 per line per month
Private Branch Exchange (PBX) Station	\$0.62 per line per month

Maryland

Uniform Disposition of Abandoned Property

Maryland's unclaimed property law is custodial in nature. The law covers tangible and intangible personal property and requires holders to file a report annually.

The reporting period for an insurance company is from January 1 through December 31, of each year and the report is due no later than April 30 of the following year. Reports for all other entities (banks, financial organizations, utilities and corporations) cover the period of July 1 through June 30 of each year and must be filed no later than October 31 of that year.

Other Miscellaneous Taxes

Montgomery County:

911 Emergency	\$1.00 per bill per month
Telephone Service	\$0.75 to county
Charge	\$0.25 to state trust fund

Other Miscellaneous Taxes-continued

Prince George's County:

911 Emergency	\$1.00 per line per month
Telephone Service	\$0.75 to county
Charge	\$0.25 to state trust fund

Charles County:

911 Emergency	\$1.00 per line per month
Telephone Service	\$0.75 to county
Charge	\$0.25 to state trust fund

Virginia

Business Litter Tax

Virginia imposes an annual \$10 litter tax on each business establishment that produces litter. An additional \$15 tax is levied on each business operating as a manufacturer, wholesaler, distributor, or retailer of groceries, soft drinks, carbonated water, beer, or other malt beverages.

Uniform Disposition of Unclaimed Property

All unclaimed property is subject to the custody of the Commonwealth of Virginia, including funds or other property, tangible and intangible, including any income or increments thereon, less any lawful charges that are held, issued or owing in the ordinary course of the holder's business and have remained unclaimed by the owner.

Banking organizations, business associations and financial organizations must file an unclaimed property report before November 1 of each year as of June 30 preceding. Insurance corporations must file a report before May 1 of each year as of the preceding December 31.

Other Miscellaneous Taxes

VA E-911

All local E-911 fees have been replaced with a statewide \$0.75 per line per month fee. Also, all local mobile telecommunications taxes in Virginia have been replaced with a 5 percent statewide communications sales and use tax.

Alexandria:

Daily Rental Tax	1 percent on the gross proceeds of a short-term rental business 1.5 percent on the gross proceeds of the rental on heavy equipment
Public Rights-of-Way Use Fee	\$1.09 per line per month

Arlington County:

Short-term Rental Tax	1 percent on the gross proceeds of short-term rental receipts
Solid Waste & Recycling Fee	\$306 per year

Fairfax County:

Short-term Daily Rental	1 percent on the gross proceeds of a short-term rental business
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Falls Church:

Short-term Rental	1 percent on gross proceeds of a short-term rental business
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Loudoun County:

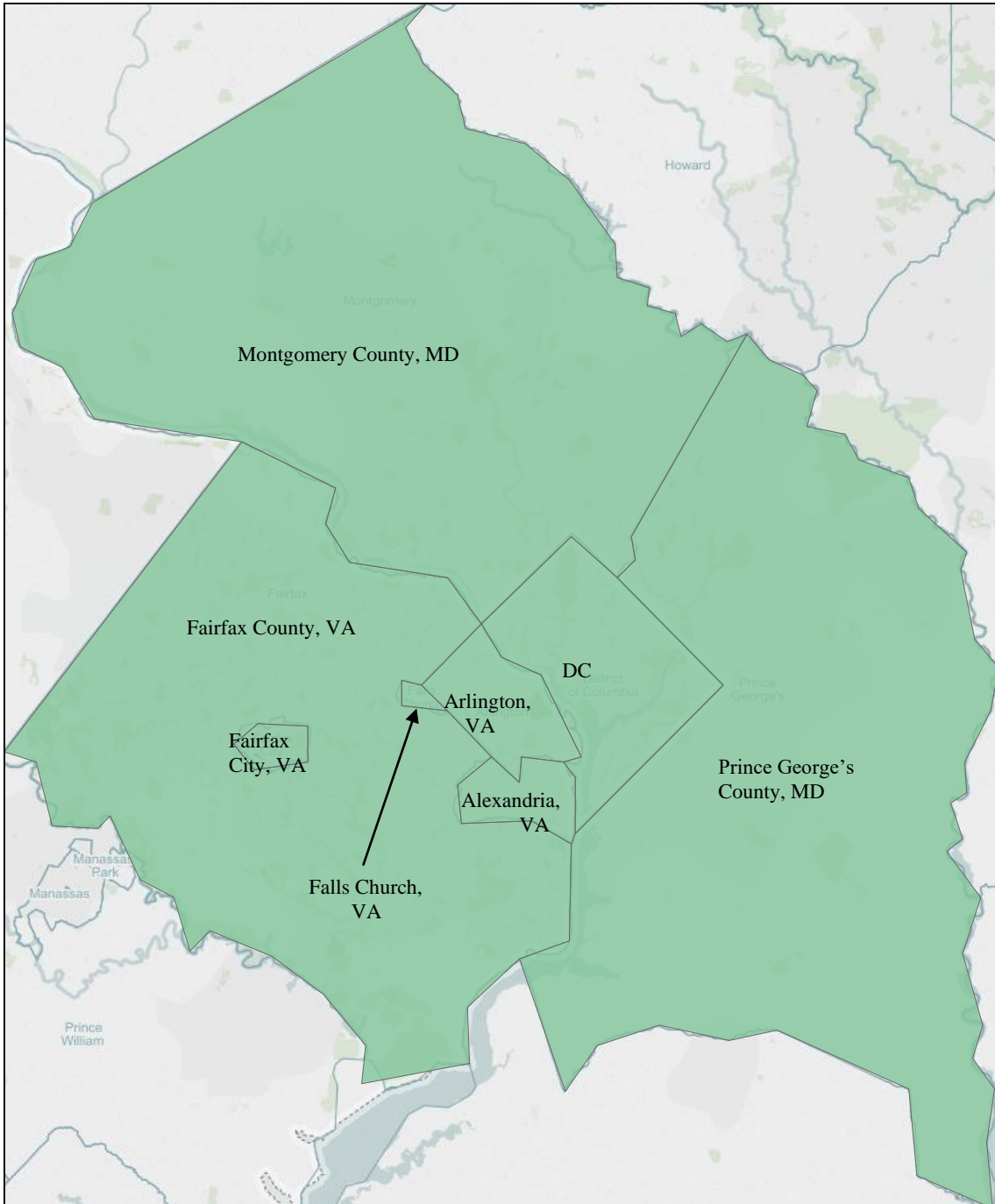
Daily Short-term Rental Tax	1 percent on gross proceeds of a short-term rental business
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Prince William County:

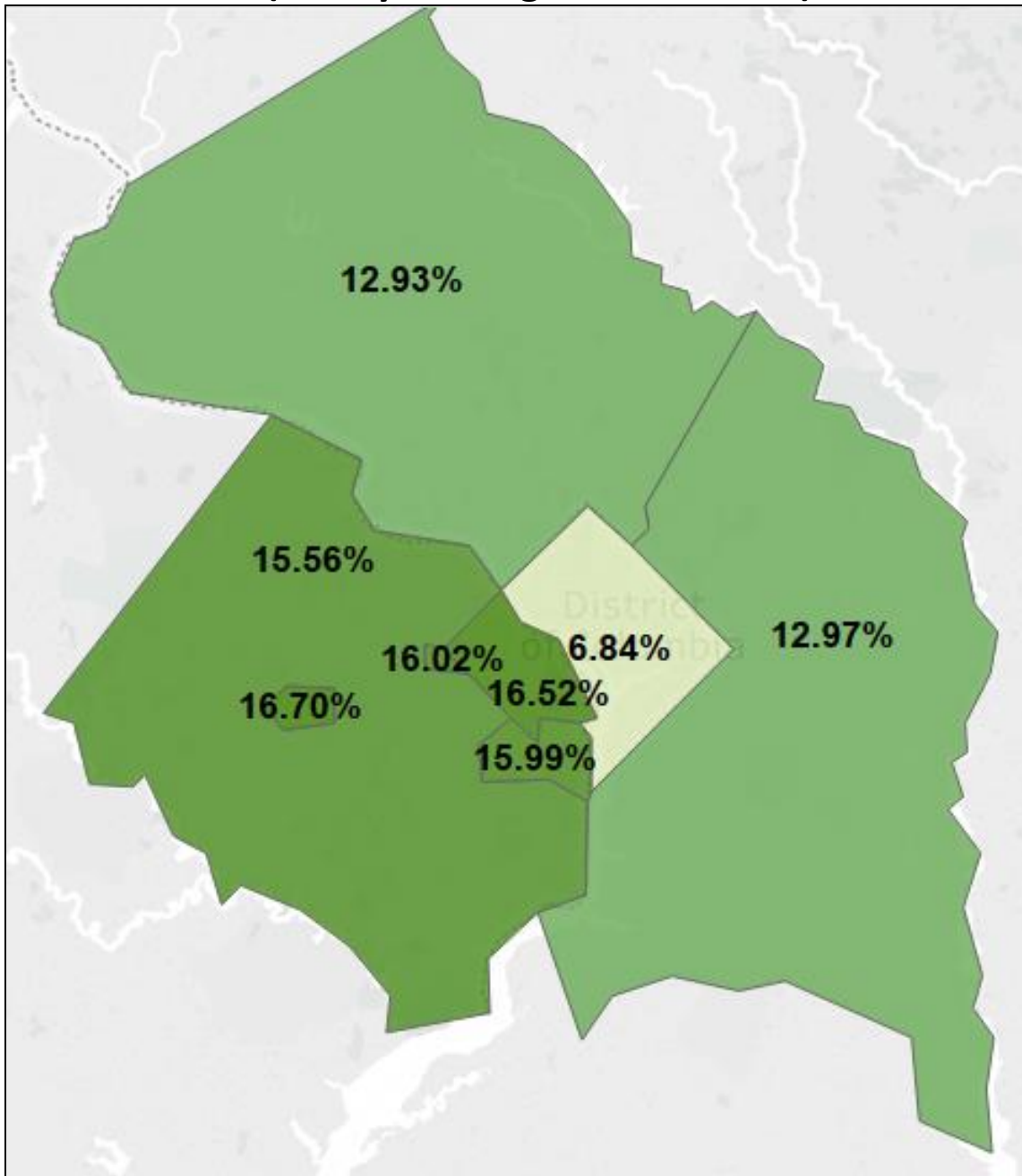
Daily Rental Tax	1 percent daily rental tax; 1.5 percent of the proceeds from heavy equipment
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Appendix A: Additional Maps

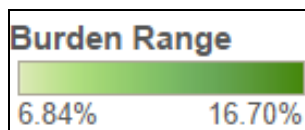
Map 2: DC Metropolitan Area Map



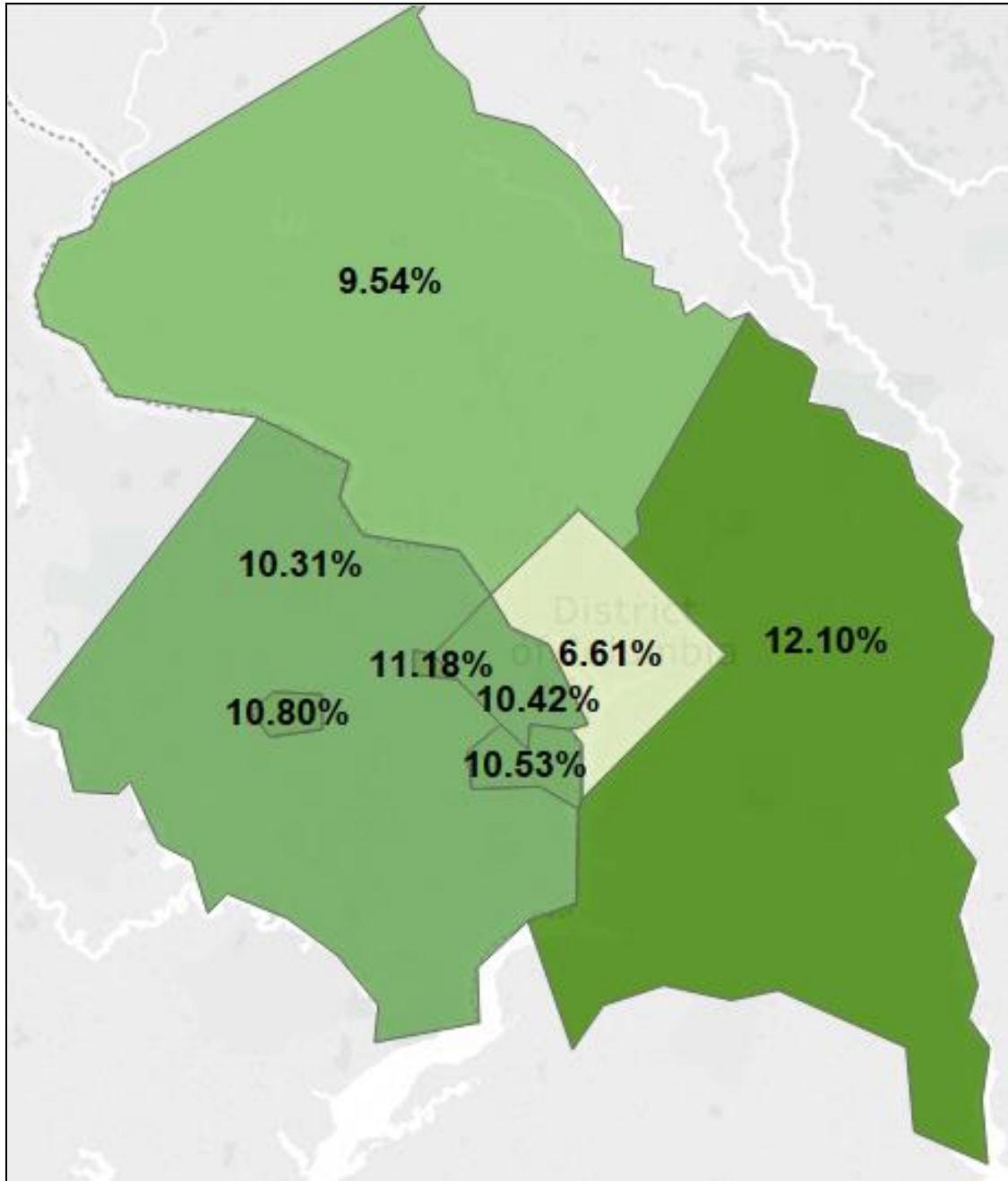
Map 3: Combined 2018 Metropolitan Area Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$25,000/ Year)



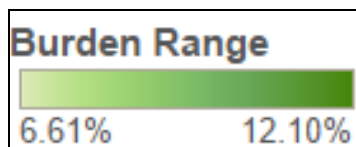
Source: ORA Analysis. Note: The lighter green shading represents a lower tax burden.



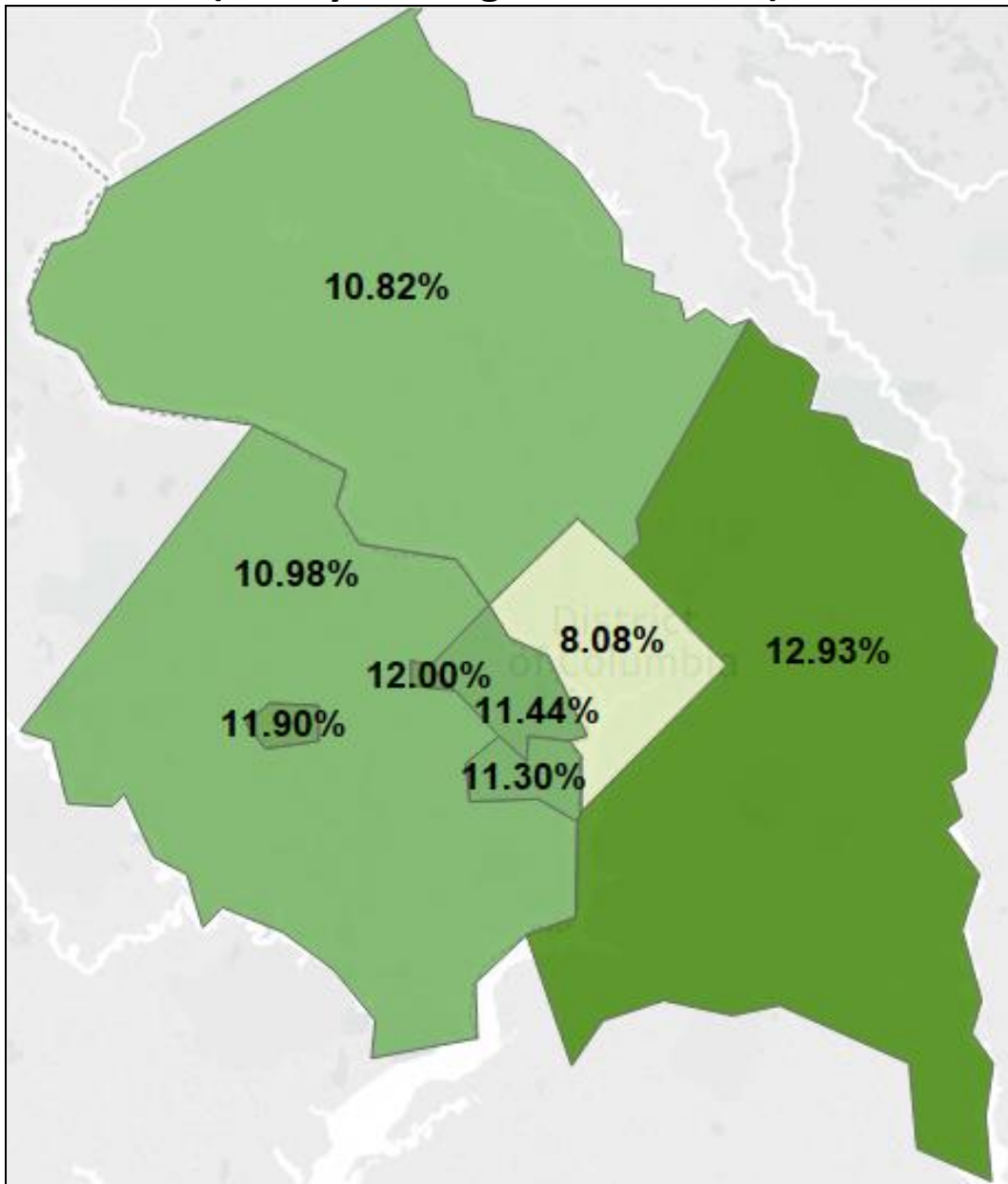
Map 4: Combined 2018 Metropolitan Area Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$50,000/ Year)



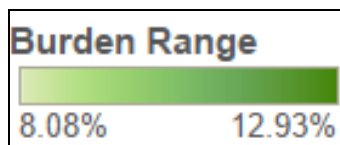
Source: ORA Analysis. Note: The lighter green shading represents a lower tax burden.



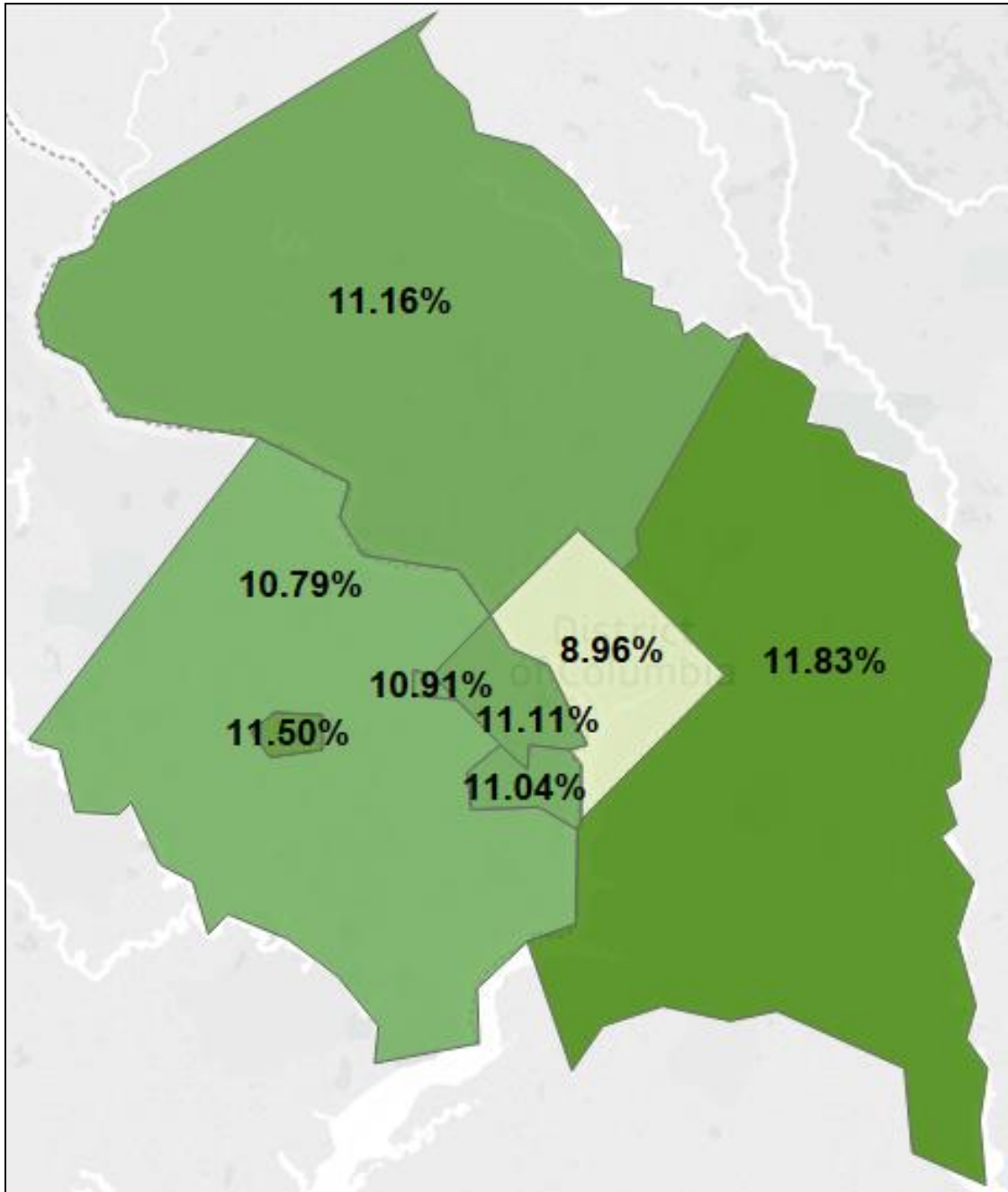
Map 5: Combined 2018 Metropolitan Area Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$75,000/Year)



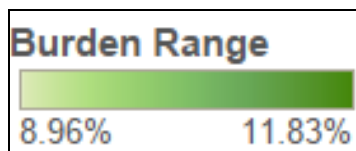
Source: ORA Analysis. Note: The lighter green shading represents a lower tax burden.



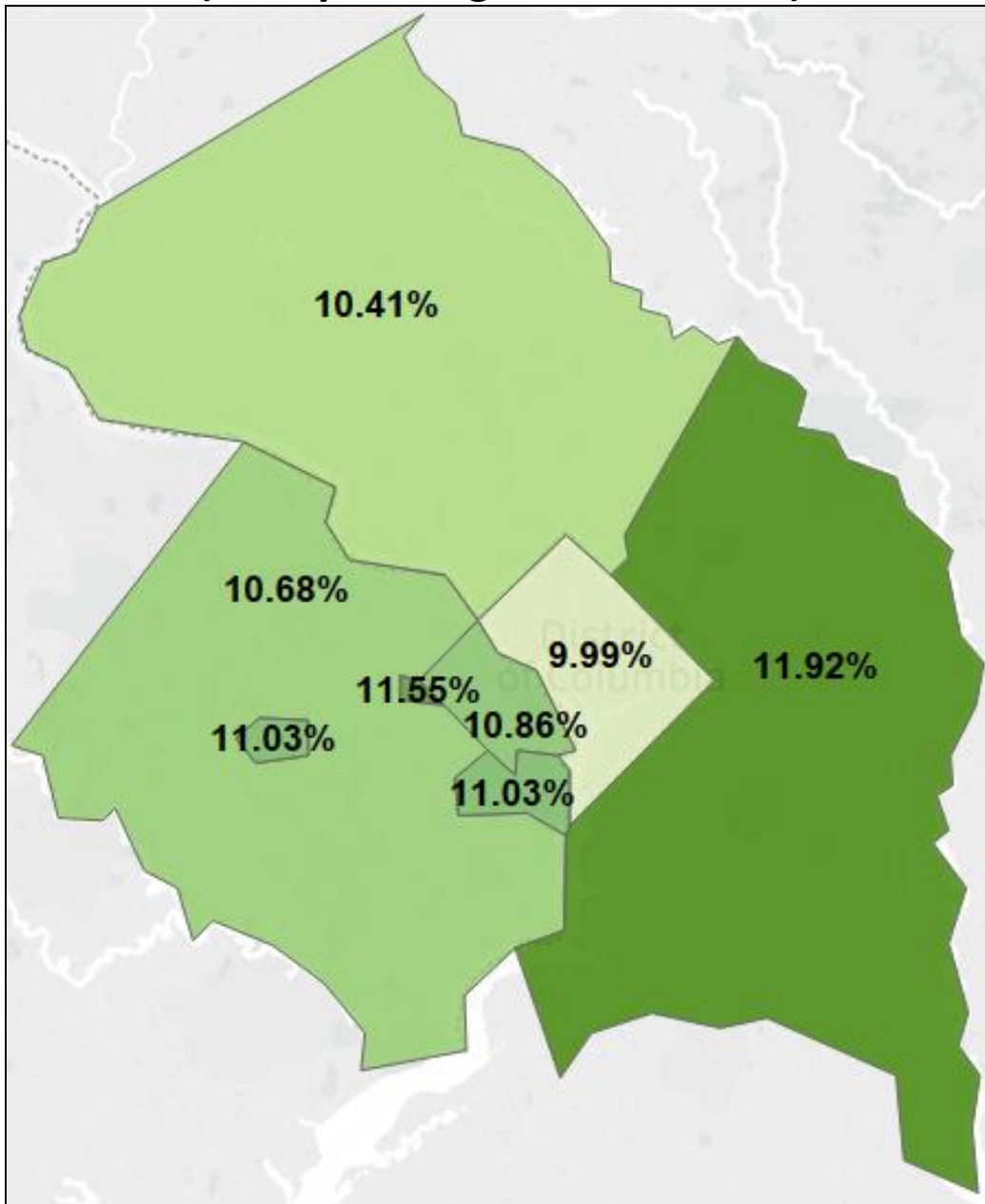
Map 6: Combined 2018 Metropolitan Area Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$100,000/ Year)



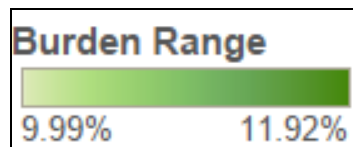
Source: ORA Analysis. Note: The lighter green shading represents a lower tax burden.



Map 7: Combined 2018 Metropolitan Area Tax Burdens (Income, Property, Sales, & Auto) as a % of Income (Family Earning \$150,000/ Year)



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



Appendix B: Impacts of the Tax Cuts and Jobs Act of 2017

The federal Tax Cuts and Jobs Act (TCJA) became effective on January 1, 2018 and had significant impacts on federal and state income taxes across the country. In addition to lowering federal income tax rates for all incomes above \$19,050, the TCJA modified the federal income tax code in a variety of ways. Several changes had a direct impact on state individual income taxes, depending on how states conformed to the federal tax code and how the various provisions interacted with each other.¹⁵

Two changes passed as part of TCJA had a large impact on the assumed families in the Tax Burden Study. First, the federal standard deduction nearly doubled to \$24,000 for a married couple filing jointly. Generally, this meant that taxpayers taking the standard deduction in states that conformed to the federal standard deduction likely saw a decrease in their state income taxes based on the increased standard deduction amount. However, taxpayers in states that did not conform to the federal standard deduction but still required taxpayers to take the state standard deduction if they took the federal standard deduction could have seen an increase in state income taxes.

Second, the allowance of state and local tax deductions ('SALT' deductions) for those who itemize on the federal Schedule A was capped at \$10,000, possibly raising federal income taxes for taxpayers with high local property taxes, for example, because they could no longer deduct the full amount of state or local taxes paid from their income before calculating taxes. The SALT cap also potentially led to increased state income taxes in states where state itemized deduction allowances are dependent on federal itemized deduction levels.

Other TCJA changes had an impact on some taxpayers' state income taxes depending on how states conformed to the federal tax code, including the elimination of federal personal exemptions. While some states conform to federal personal exemptions amounts, others do not, and in many cases the increased federal standard deduction offset the effect the elimination of personal exemptions may have had.

Because economic assumptions in this report change from year to year (such as house values, personal expenditures on consumption, and vehicle prices), the changes in income tax burdens reported from 2017 to 2018 cannot all be attributable tax policy changes in general, or to TCJA, in particular. However, supplemental research was undertaken in the summer of 2019 to assess how tax burdens would have changed for the hypothetical families in this study if the exact same economic assumptions from 2017 were used for calculating 2018 income taxes with the TCJA changes in effect.¹⁶ There were some overall trends related to how the federal tax changes impacted tax burdens across the states; however, further research into the tax burden changes revealed that in some states, the changes were a result of state tax changes that were implemented independently of federal tax reform.

For example, the research found that for the hypothetical family earning \$25,000 per year,

¹⁵ The changes discussed here primarily include those that had a major impact on the tax burden calculation for the families and income levels in the study. For example, a change in the limit on the amount of mortgage interest that could be deducted (reduced from \$1 million of home mortgage debt to \$750,000), did not impact the MID assumptions in the study.

¹⁶ "Impact of TCJA on Families' Tax Burdens." Presentation to the Federation of Tax Administrators Revenue Estimating Conference, September 25, 2019. New Orleans, LA. https://www.taxadmin.org/assets/docs/Meetings/19rev_est/metcalf.pdf.

the state and local income tax liability stayed the same in 11 states, it decreased in 27 states, and increased in four states. In the four states where income tax liabilities increased, in only one of those states (North Dakota) was the change attributable to federal tax reform and the state's conformity to the federal code (in this case, for the definition of taxable income). Similarly, in the 11 states where state and local income tax liabilities decreased, in only one state was TCJA the cause of the decrease. In this single case, Missouri's conformity to the federal standard deduction led to a decrease in Missouri taxable income after TCJA, and thus a lower state tax liability. In the other 10 states, state tax reforms passed prior to TCJA (or in the case of Iowa, a policy change to *not* conform to federal law in 2018) meant the state and local income tax burdens were lower (eight states increased earned income tax credit amounts for 2018).

At the highest income level, the family earning \$150,000/year saw an increase in their state and local income taxes in 17 states. However, in only one of those states (Maryland) was the increase in state/local income tax liability *not* offset by the federal income tax decreases in 2018 as compared to 2017. Notably, the federal income tax liability decreased for the family at this income level between 2017 and 2018 in all states except three: Connecticut, Maryland, and New Jersey. This was primarily due to the study's high property tax assumption for these three states being capped by the new SALT deduction limit and thus leading to a higher federal income tax.

At this higher income level, almost all the increases in state tax liability from 2017 to 2018 were attributable to changes resulting from TCJA. For example, in Georgia, Kansas, Nebraska, and Oklahoma, the family's deductions were limited by the new \$10,000 SALT cap and since their total itemized deductions were less than \$24,000 (the 2018 federal standard deduction), it was more advantageous to take the federal standard deduction instead of itemizing as in 2017. This in turn required the family to take the state standard deductions, which are lower than the federal standard deduction and lower than their 2017 itemized deductions, leading to a higher tax liability in 2018.

Notably, in only three states were the tax increases at this level unrelated to TCJA: in Indianapolis, Indiana, there was a local income tax increase; in Chicago, Illinois, there was a state tax rate increase; and in Portland, Oregon, budget triggers led to the elimination of a "kicker credit" in 2018 that had been available in 2017.

At the \$150,000 income level, residents in 17 states saw a state and local income tax decrease in 2018 as compared to 2017. In seven of those states, the state made proactive changes to mitigate the effects of TCJA, such as conforming to a 2015 version of federal tax law (Iowa and California), decoupling from the federal standard deduction and personal exemption (such as in Rhode Island), or increasing the state property tax deduction from \$10,000 to \$15,000 (New Jersey). In several states, state tax changes unrelated to TCJA led to the decrease. For example, state tax rate reductions in Missouri, Arkansas, and Mississippi (passed in 2014, 2015, and 2016, respectively) all had the effect of lowering state tax burdens in these states.

To view tables, charts, and maps elaborating on the information summarized above, see the presentation referenced in footnote 16 on the previous page.

Office Locations and Telephone Numbers

Office of the Chief Financial Officer
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 203
Washington, DC 20004

Office hours: Monday through Friday, 8:00 a.m. – 6:00 p.m.
(202) 727-2476

Office of the Chief Financial Officer

Jeffrey DeWitt, Chief Financial Officer
Angell Jacobs, Chief of Staff and Deputy Chief Financial Officer
David Tseng, General Counsel
Alok Chadda, Chief Information Officer
Paul Lundquist, Executive Director for Management and Administration
David Umansky, Public Affairs Officer
Timothy Barry, Executive Director for Integrity & Oversight
Marshelle Richardson, Chief Risk Officer
Jeffrey Gander, Continuous Improvement Officer

Office of Revenue Analysis (ORA)

Fitzroy Lee, Deputy Chief Financial Officer (202) 727-7775
1101 4th Street, SW, Suite W770, Washington, DC 20024

Office of Budget and Planning (OBP)

Gordon McDonald, Deputy Chief Financial Officer (202) 727-6234
1350 Pennsylvania Avenue, NW, Suite 229, Washington, DC 20004

Office of Finance and Treasury (OFT)

Bruno Fernandes, Deputy Chief Financial Officer and Treasurer (202) 727-6055
1101 4th Street, SW, Suite W800, Washington, DC 20024

Office of Financial Operations and Systems (OFOS)

Bill Slack, Deputy Chief Financial Officer (202) 442-8200
1100 4th Street, SW, Suite E800, Washington, DC 20024

Office of Tax and Revenue (OTR)

Keith Richardson, Deputy Chief Financial Officer (202) 442-6200
1101 4th Street, SW, Suite W750, Washington, DC 20024

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Beth A. Bresnahan, Executive Director

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Henry Mosley, Associate Chief Financial Officer

Angelique Hayes Rice, Associate Chief Financial Officer

George Dines, Associate Chief Financial Officer

Delicia Moore, Associate Chief Financial Officer

Lilian Chukwuma, Chief Financial Officer, United Medical Center

Deloras Shepherd, Associate Chief Financial Officer

David Garner, Associate Chief Financial Officer



Prepared By:

Government of the District of Columbia
Office of Revenue Analysis
1101 4th Street, S.W.
Suite W770
Washington, DC 20024
(202) 727-7775