

Individual and Business Tax Burdens in Local Jurisdictions

Kristen Latham

Leslie Rubin

Individual and Business Tax Burdens in Local Jurisdictions

OLO Report 2016-7

June 21, 2016

Executive Summary

The cost of living or doing business varies from jurisdiction to jurisdiction based on the amount of taxes imposed by the federal, state, and local governments. An individual's or business' tax burden ultimately is a reflection of the programs and services provided by a jurisdiction – with tax revenue reflecting one source of revenue to pay for government services. Residents living in a jurisdiction pay taxes such as state and local income taxes, property tax, and sales tax. Businesses that operate in a jurisdiction may pay corporate income taxes or gross receipt taxes.

This Office of Legislative Oversight (OLO) report responds to the Council's request to analyze the tax burden for individuals and businesses in Montgomery County compared to other local jurisdictions. The report analyzes the tax burden for individuals living in and businesses based in Montgomery County compared to:

- Prince George's County (MD),
- Howard County (MD),
- Frederick County (MD),
- Fairfax County (VA), and
- The District of Columbia.

The data in this report come from two reports conducted for the District of Columbia's government: *Tax Rates and Tax Burdens: Washington Metropolitan Area*, written by the D.C. Office of Revenue Analysis; and *Case Studies of Business Taxes in the District of Columbia: A Comparison of Neighboring Jurisdictions*, completed by the accounting firm of Councilor Buchanan & Mitchell for the D.C. Tax Revision Commission.

Demographic Characteristics of the Six Jurisdictions

The demographic characteristics of the jurisdictions examined in this report provide context when examining the similarities and differences among the jurisdictions regarding revenue collection and government spending. Montgomery and Fairfax Counties have the largest populations and public school enrollment among the six jurisdictions selected for this report.

Demographic Characteristics of the Six Jurisdictions, 2014 Estimates

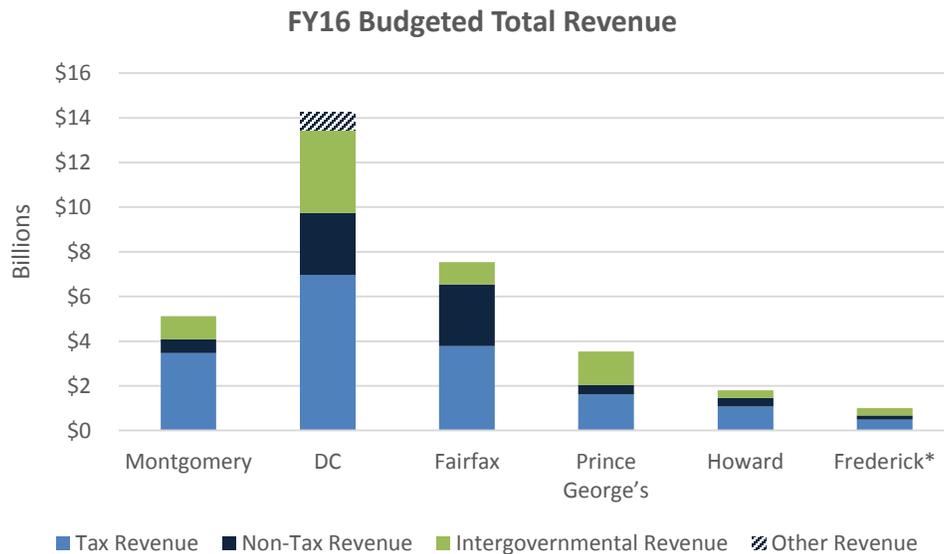
		Montgomery	Frederick	Howard	Prince George's	Fairfax	DC
Population	Total population	1,030,447	243,675	309,284	904,430	1,137,538	658,893
	Number Households	364,854	89,084	109,651	307,022	391,479	277,378
	Median age (years)	39	39	38	36	38	34
	School System Enrollment	153,852	40,668	53,637	128,937	186,785	47,548
Income	Median Household Income	\$97,765	\$84,203	\$107,490	\$72,290	\$110,674	\$71,648
	Poverty Rate (all families)	4.6%	4.2%	4.8%	7.0%	4.3%	14.2%
Housing	Number of Housing Units	385,713	93,592	115,318	330,514	410,280	306,184
	Median Owner-Occupied Housing Value	\$460,900	\$309,900	\$443,300	\$254,000	\$519,300	\$486,900
Business & Employment	Total Business Establishments	26,739	5,955	8,946	14,281	29,556	21,919
	Unemployment Rate	3.3%	3.9%	3.3%	4.5%	3.0%	6.6%

Individual and Business Tax Burdens in Local Jurisdictions

Budgeted Revenue in the Six Jurisdictions

Local jurisdictions raise revenue for government programs and services through a variety of sources such as taxes, fees/charges, and Federal and/or state funding. The following comparison of revenue and spending data in the six jurisdictions provides additional context for the tax burden analyses.

FY16 budgeted revenue in the six jurisdictions ranged from \$1 billion in Frederick County to \$14 billion in the District (Note: the District’s budget is large compared to the other jurisdictions because it provides and pays for services typically provided by two separate levels of government). The proportion of revenue from the various revenue sources varies significantly among the jurisdictions. For example, the District and Fairfax each projected around \$2.8 billion in non-tax revenue in FY16 – making up 20% of the District’s operating budget and 37% of Fairfax’s. And, while Montgomery and Fairfax Counties have similarly-sized populations (1.0 million and 1.1 million), respectively, Fairfax’s total operating budget is 47% higher than Montgomery’s (\$7.5 billion compared to \$5.1 billion).



Tax Revenue. Revenue collection from taxes varies among the jurisdictions – ranging from \$491 million in Frederick County to \$7 billion in the District. The district is an outlier with per capita tax revenue of over \$10,000. Montgomery and Fairfax Counties have nearly identical per capita tax revenue – \$3,359 and \$3,325, respectively.

FY16 Total Tax Revenue, by Revenue Source (\$ in millions)

Source of Revenue	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick
Total Tax Revenue	\$3,461.8	\$6,950.2	\$3,782.8	\$1,611.1	\$1,077.4	\$490.7
% of Total Budget	68%	50%	50%	46%	60%	49%
Per Capita Tax Revenue (\$ in dollars)	\$3,359	\$10,548	\$3,325	\$1,781	\$3,483	\$2,014
Property Tax	\$1,582.6	\$2,410.2	\$3,197.6	\$812.8	\$633.8	\$276.7
Income Tax	\$1,433.4	\$1,862.0	--	\$550.9	\$407.4	\$192.9
Local Sales Tax	--	\$1,304.7	\$175.8	--	--	--
Business Franchise/Licensing Tax	--	\$443.1	\$150.4	--	--	--
Transfer/Recordation Tax	\$163.0	\$390.1	\$24.9	\$123.0	\$21.0	\$19.6
Energy/Consumption Tax	\$206.2	\$154.2	\$49.9	\$63.4	--	--
Telecommunications Tax	\$50.4	\$52.5	--	\$34.7	--	--
Other Local Tax Revenue	\$26.1	\$333.3	\$184.2	\$26.3	\$15.3	\$1.5

Individual and Business Tax Burdens in Local Jurisdictions

Tax Burden and Utility Burden Analysis for Individual Taxpayers

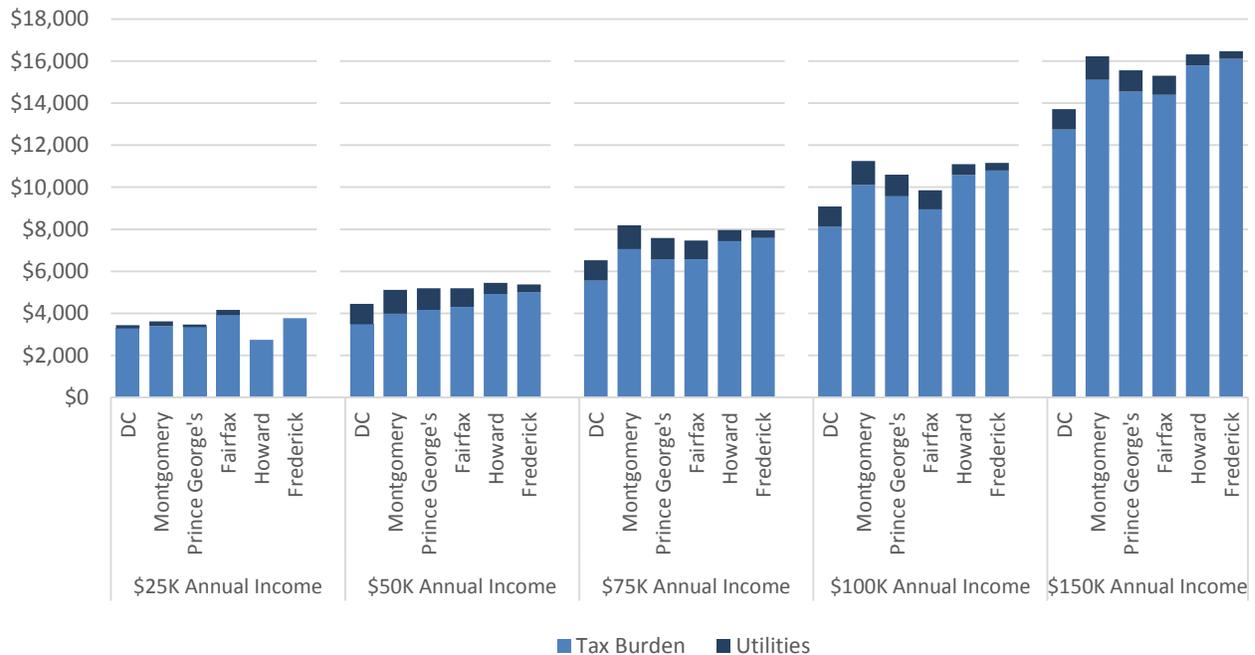
This OLO report examines the tax burden (income, property, sales, and automobile taxes) for a family of three living in each of the six jurisdictions, looking at the burden for a family at each of five income levels of \$25K, \$50K, \$75K, \$100K and \$150K. Among the six jurisdictions, Montgomery County ranks third in annual tax burden for a family of three at all income levels except for \$50K, where Montgomery County is fifth out of the six jurisdictions. At income levels of \$50K and above, Frederick and Howard Counties have the highest and second highest tax burdens, respectively.

When charges for public utility taxes and water/sewer are included in the analysis, the total burden for a family in Montgomery County is near the average of the six jurisdictions for families making \$50K or less annually. At income levels of \$75K and above, Howard and Frederick, and Montgomery Counties have comparable total burdens – the top three among the six jurisdictions. Montgomery County has the highest burden among the three jurisdictions at income levels of \$75K and \$100K and the third highest at the \$150K income level.

Select Assumptions from the Tax Burden Analysis

Category	Assumption
# of Adults in Family	2 (married, both wage-earning, filing joint tax returns, earnings split 70/30)
# of Children in Family	1 (school-age)
Gross Income Level	Either \$25K, \$50K, \$75K, \$100K, or \$150K
Home Ownership	\$25K family income – renters All others – own a single-family home

Total Annual Family Burden, Including Utilities



Individual and Business Tax Burdens in Local Jurisdictions

Tax Burden Analysis for Business Taxpayers

This OLO report also examines the tax burden for different types of business entities operating in Montgomery, Prince George’s, and Fairfax Counties and the District of Columbia, summarizing the amount of corporate income tax, personal property tax, individual income tax, and gross receipts tax paid by businesses located in these four jurisdictions. The analysis examines two types of business structures:

- **C Corporations** – these business entities pay taxes on net business income at the corporate level. When corporate income is distributed to business owners, that income is taxed (again) as personal income.
- **Pass-Through Entities (e.g., S corporations, LLCs, partnerships)** – these businesses do not pay taxes on income at the corporate level. Business income (or losses) are divided among the business owners, who report the income (or loss) on their individual tax returns.

Only Fairfax County and the District have a gross receipts tax, which is a tax levied on businesses based on the total gross revenue of the company. Businesses in Montgomery and Prince George’s Counties are not subject to a gross receipts tax.

The report summarizes the business-related taxes incurred in three scenarios:

- A C corporation with (a) a single state of operation and (b) locations in multiple states.
- A C corporation high technology software development company.
- A pass-through entity with owners living in (a) the District, (b) Maryland, or (c) Virginia.

Each scenario presents different tax implications based on the location of the business and/or residence of the business owner(s). Among the six scenarios, the tax burden is the lowest in Montgomery County in four scenarios (except for the high technology company in the first five years of operation and for the C corporation operating in multiple jurisdictions). A primary reason for the different tax amounts owed in each jurisdiction stems from the imposition of different business taxes (e.g., the gross receipts tax) and different tax rates among jurisdictions.

Summary of Total State/Local Annual Tax Burdens for Case Studies

Case Study	Scenario	Montgomery Tax Burden	Difference from Montgomery Tax Burden		
			Base of Operations		
			Prince George’s	Fairfax	DC
C Corporation	(a) Single jurisdiction operation	\$216,378	+2%	+14%	+22%
	(b) Multiple jurisdiction operation	\$242,497	+2%	–3%	+7%
High-Tech Company	C corporation receiving high-tech-business-related tax credits	\$126,378*	+2%	+2%	Years 1-5: –86% Years 6+: +27%
Pass-Through Entity	(a) Owned by DC Residents	\$233,117	+2%	+35%	+13%
	(b) Owned by MD Residents	\$233,117	+2%	+35%	+46%
	(c) Owned by VA Residents	\$186,487	+2%	+29%	+108%

*In the first five years, the District would have the lowest total tax burden. In years six and beyond, Montgomery County would have the lowest total tax burden.

Source: Aceituno, R. and Yingst, K., *Case Studies of Business Taxes in the District of Columbia: A Comparison of Neighboring Jurisdictions*, September 2013. http://media.wix.com/ugd/ddda66_2587ee60d87e9069a51195947320308c.pdf

Individual and Business Tax Burdens in Local Jurisdictions

OLO Report 2016-7

Executive Summary		i
Introduction		vi
Chapter 1. Demographics in the Six Jurisdictions		1
Chapter 2. Revenues and Expenditures in the Six Jurisdictions		5
Chapter 3. Tax Burden Analysis for Individual Taxpayers		14
Chapter 4. Comparison of Business Tax Burdens in Local Jurisdictions		25
Chapter 5. Findings.....		34
Chapter 6. Agency Comments on Final Draft.....		43

Appendix

Appendix 1.	Methodology excerpt from <i>Tax Rates and Tax Burdens: Washington Metropolitan Area 2014</i>	©1
Appendix 2.	Summary of Tax Rates Related to the Individual Tax Burden Analysis.....	©22

Introduction

The cost of living or doing business varies among jurisdictions based on the amount of taxes imposed by the federal, state, and local governments. OLO Report 2016-7, requested by the Council on OLO's FY16 work program, analyzes the tax burden for individuals and businesses in Montgomery County compared to Prince George's, Howard, and Frederick Counties in Maryland; Fairfax County in Virginia; and the District of Columbia.

Specifically, this report:

- Compiles demographic data for households and businesses in the six jurisdictions,
- Summarizes annual revenue and spending for the six jurisdictions from their FY16 adopted annual operating budgets,
- Identifies the major taxes imposed on individuals and businesses in different jurisdictions,
- Compares individual tax burdens for families living in the six jurisdictions with incomes ranging from \$25,000 to \$150,000 annually, and
- Summarizes the findings from a report that analyzes the tax burden for different types of companies doing business in Montgomery and Prince George's Counties, Fairfax County, and the District of Columbia.

Office of Legislative Oversight (OLO) staff members Leslie Rubin and Kristen Latham conducted this study, gathering information through document reviews and interviewing staff from the District of Columbia's Office of Revenue Analysis in the Office of the Chief Financial Officer. OLO also received guidance and assistance from staff in the Montgomery County Department of Finance and the Office of Management and Budget.

OLO received a high level of cooperation from everyone involved in this study. OLO appreciates the information shared and the insights provided by all who participated. In particular, OLO thanks: Fariba Kassiri, Assistant Chief Administrative Officer; Joseph Beach, Robert Hagedoorn, and David Platt from the Department of Finance; Jennifer Hughes and Alex Espinoza from the Office of Management and Budget; and Farhad Niemi and Lori Metcalf from the District of Columbia's Office of Revenue Analysis in the Office of the Chief Financial Officer.

CHAPTER 1. Demographics in the Six Jurisdictions

This chapter describes the demographic characteristics of Frederick, Howard, Montgomery, and Prince George's Counties in Maryland; Fairfax County in Virginia, and the District of Columbia. These demographic data provide context when examining the similarities and differences among these jurisdictions in terms of revenue collection and government spending. For example, the number of employed residents in a jurisdiction impacts income tax revenue collection while the number of students in a jurisdiction drives school-related spending.

The data in this chapter include demographics on the general population, housing, employment and income, and businesses. These data come primarily from the United States Census Bureau's American Community Survey (ACS) 2014 1-Year Estimates, supplemented with data from the Bureau of Economic Analysis and the Bureau of Labor Statistics.

General Population. The first table summarizes population and household data in the local jurisdictions. Population varies significantly among the jurisdictions. Montgomery and Fairfax Counties have the largest populations and public school enrollment and Frederick and Howard Counties have the smallest. The data show:

- Aside from the District, each jurisdiction has a 6:1 or 7:1 ratio of residents to students. The District has a 14:1 ratio of residents to students.
- The median age in the District (34 years old) is between two and five years younger than in the other jurisdictions (36-39 years old).

Table 1-1. Population and School Enrollment for Selected Jurisdictions, 2014 Estimates

	Montgomery	Prince George's	Howard	Frederick	Fairfax	DC
Total population	1,030,447	904,430	309,284	243,675	1,137,538	658,893
Number Households	364,854	307,022	109,651	89,084	391,479	277,378
Average Household Size	2.8	2.9	2.8	2.7	2.9	2.2
Median age (years)	39	36	38	39	38	34
School System Enrollment	153,852	128,937	53,637	40,668	186,785	47,548
Ratio Population:Students	7:1	7:1	6:1	6:1	6:1	14:1

Source: US Census Bureau ACS 2014 1-Year Estimates and School System Websites

Housing. The next table summarizes select housing data for the six local jurisdictions, including home ownership, rentals, types of utilities, and available vehicles. The data show that:

- Fairfax County had the highest median home value (\$519K), followed by the District (\$487K) and Montgomery County (\$461K).
- Approximately 80-90% of all households in each jurisdiction lived in the same house as the prior year.
- Montgomery, Howard, and Fairfax Counties had the highest median owner costs for homes with a mortgage and had the highest median rent.
- Except for the District, 90% of households in the other jurisdictions had access to at least one vehicle. Only 66% of District households had access to a vehicle.

Table 1-2. Housing Characteristics for Selected Jurisdictions, 2014 Estimates

	Montgomery	Prince George's	Howard	Frederick	Fairfax	DC
Total Housing Units	385,713	330,514	115,318	93,592	410,280	306,184
% Owner-occupied	66%	60%	73%	74%	67%	41%
% in Same House as Last Year	86%	85%	87%	89%	85%	79%
Owner-Occupied Housing Units						
Median Value	\$460,900	\$254,000	\$443,300	\$309,900	\$519,300	\$486,900
Median Monthly Owner Costs*	\$2,408	\$1,906	\$2,480	\$1,922	\$2,470	\$2,194
Renter-Occupied Housing Units						
Median Gross Rent	\$1,636	\$1,297	\$1,647	\$1,295	\$1,756	\$1,360
Type of Utilities						
Gas	57%	58%	42%	31%	57%	55%
Electricity	38%	35%	48%	49%	40%	40%
Other	6%	7%	10%	20%	4%	5%
# of Vehicles Available						
0	7%	10%	3%	5%	5%	34%
1	35%	37%	27%	24%	29%	46%
2+	57%	54%	70%	71%	66%	20%

*For units with a mortgage

Source: US Census Bureau ACS 2014 1-Year Estimates

Employment and Income. The next table summarizes employment and income data for each jurisdiction. The data show that:

- Unemployment rates in Montgomery, Howard, and Fairfax Counties range from 3.0-3.3%. Frederick and Prince George’s Counties are slightly higher at 3.9% and 4.5%, respectively. The District’s unemployment rate is the highest – 6.6%.
- The District and Fairfax each have over 180,000 more jobs than Montgomery County.
- Fairfax and Howard Counties have the highest median household incomes (\$110,674 and \$107,490, respectively).
- The poverty rate for all families is between 4-5% in Montgomery, Frederick, Howard and Fairfax Counties, 7% in Prince George’s County, and 14% in the District.

Regarding employment by local governments:

- Montgomery and Fairfax Counties have the largest number of total government employees (36,159 and 32,469, respectively) and Frederick County has the fewest (8,927).
- Prince George’s County has the largest number of government employees per capita (36 per capita) and the District has the fewest (23 per capita).

- Except for the District (see note in table), the school systems in the jurisdictions account for a majority of employees (ranging from 63% of employees in Montgomery and Frederick Counties to 68% in Prince George's County).

Table 1-3. Employment and Income Characteristics for Selected Jurisdictions, 2014 Estimates

	Montgomery	Prince George's	Howard	Frederick	Fairfax	DC
General Employment						
Unemployment Rate (BLS Dec. 2015)	3.3%	4.5%	3.3%	3.9%	3.0%	6.6%
Number of FT and PT Jobs (BEA)	678,273	444,721	206,433	134,090	875,279	858,685
Total Civilian Employed Population [^]	543,411	466,470	165,890	129,376	606,363	345,592
Professional, Scientific, Mgmt., Waste Mgmt. Svcs.	22%	14%	20%	17%	25%	23%
Educational Services, Health Care & Social Assistance	22%	24%	24%	22%	19%	19%
Public Administration	11%	14%	12%	10%	11%	15%
Arts, Entertainment, Rec., Accom. & Food Services	8%	9%	6%	8%	9%	10%
Retail Trade	8%	9%	9%	10%	8%	5%
Finance and Insurance, and Real Estate	7%	4%	7%	7%	6%	7%
Construction	6%	9%	5%	8%	6%	3%
Other	17%	18%	18%	19%	17%	17%
Public Employment						
Total Employees (FTEs)	32,469	24,968	11,442	8,927	36,159	28,530
Education FTEs*	20,610	16,869	7,666	5,613	23,881	8,702
# of Employees Per Capita	32	36	27	27	31	23
Income and Poverty						
Median Household Income	\$97,765	\$72,290	\$107,490	\$84,203	\$110,674	\$71,648
Owner-Occupied Housing	\$124,038	\$95,656	\$130,728	\$99,812	\$137,509	\$109,643
Renter-Occupied Housing	\$60,553	\$50,946	\$67,346	\$51,918	\$73,527	\$46,965
Poverty Rates						
All families	4.6%	7.0%	4.8%	4.2%	4.3%	14.2%
With related children under 18 years	7.0%	11.2%	6.1%	6.1%	6.7%	21.8%
With related children under 5 years only	6.6%	11.1%	3.1%	8.3%	4.1%	15.2%

*Does not include DC Charter School Employees

[^]Full-time positions

Source: US Census Bureau ACS 2014 1-Year Estimates unless otherwise noted

Individual and Business Tax Burdens in Local Jurisdictions

Business. Data from the US Census Bureau’s County Business Patterns dataset show the number of business establishments in the six jurisdictions. The latest release of data, 2013, shows that:

- Fairfax County had the most number of business (29,556), followed by Montgomery County (26,739) and the District (21,919).
- Approximately 70-75% of establishments in each jurisdiction had less than ten employees.
- Less than 5% of establishments in each jurisdiction had 100 or more employees.

Table 1-4. Business Characteristics for Selected Jurisdictions, 2014 Estimates

	Montgomery	Prince George's	Howard	Frederick	Fairfax	DC
Total Establishments	26,739	14,281	8,946	5,955	29,556	21,919
Industry*						
Professional, Scientific, and Technical	21%	12%	22%	14%	28%	24%
Health Care and Social Assistance	14%	13%	11%	11%	10%	10%
Retail Trade	10%	16%	10%	12%	9%	8%
Accommodation and Food Services	7%	9%	6%	8%	7%	11%
Construction	8%	10%	10%	15%	8%	2.0%
All Other	40%	35%	42%	40%	32%	41%
Number of Employees*						
1 to 9	74%	69%	69%	72%	71%	68%
10-49	20%	24%	23%	22%	22%	24%
50-99	3%	4%	5%	3%	4%	4%
100-499	2%	3%	3%	2%	3%	4%
500+	<1%	<1%	<1%	<1%	<1%	<1%

*May not sum to 100% due to rounding

Source: US Census Bureau 2013 County Business Patterns

CHAPTER 2. Revenues and Expenditures in the Six Jurisdictions

Local governments raise revenue to provide a variety of services within the jurisdiction, including:

- Public safety,
- Education,
- Health and Human Services,
- Public Works,
- Transportation,
- Parks and Libraries, and
- Community Development.

Local jurisdictions raise revenues for government programs and services through a variety of sources such as taxes, fees/charges, and Federal and/or state funding. Local government revenues and expenditures typically do not vary dramatically from year-to-year (absent significant economic disruptions); jurisdictions generally make incremental changes to annual budgets based on current spending priorities. When spending priorities change, a jurisdiction can shift around existing revenues (impacting existing services), establish new sources of revenue, or increase the revenues it brings in (allowing new or expanded services without impacting existing ones).

This report focuses on the cost of taxes for residents and businesses in local jurisdictions. In order to provide some context for the tax burden analyses later in this report, this chapter compares the sources of revenue for the annual spending for Montgomery, Prince George's, Howard, and Frederick Counties in Maryland, Fairfax County, Virginia, and the District of Columbia. The budgets of these jurisdictions vary dramatically – the FY16 approved operating budgets ranged from just under \$1 billion in Frederick County, MD, to approximately \$14 billion in the District. In this chapter:

- **Part A** summarizes revenues from the jurisdictions' FY16 approved operating budgets, and
- **Part B** summarizes expenditures from the same budgets.

A Note about Comparing Budgets

Because local jurisdictions operate under different grants of legal authority and have adopted different government structures, comparing tax and budget data among jurisdictions is complex and often inexact. In reviewing the data presented in this chapter, some important facts to keep in mind include:

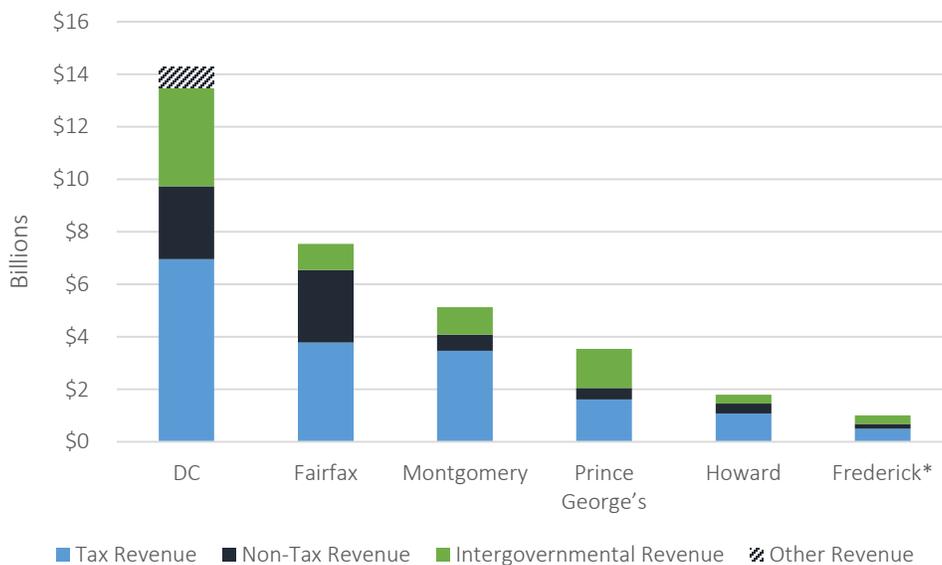
- The District functions as both a state and a local government. The District receives federal funding for services such as Medicare and Medicaid that the county jurisdictions reviewed in this report do not receive. Consequently, the District's budget is disproportionately large compared to the county budgets.
 - Some revenue sources are controlled entirely by a jurisdiction – such as rates for fees or services. Other sources of revenue may come with limitations or restrictions on local control – such as Maryland law capping local income tax rates, Virginia law establishing local sales tax rates, and Montgomery County's Charter provision establishing a mechanism to limit local property tax increases.
 - The revenue and expenditure data are from the jurisdictions' FY16 approved budgets and do not reflect changes in revenue projections or expenditure reductions that may have occurred after the budgets were approved.
 - This chapter does not include data on capital spending and associated revenue.
 - A multitude of factors impacts the cost of providing services in a given jurisdiction – from the number of students in a school system to whether a jurisdiction permits collective bargaining by its employees to the level of assistance provided to lower-income residents. This report does not attempt to assess the level or quality of services provided by each jurisdiction.
-

A. Revenues of Selected Jurisdictions

This section summarizes projected revenue from the jurisdictions’ FY16 approved operating budgets broken down by the source of revenue. As indicated above, the total revenue projected by each jurisdiction differs significantly. The FY16 data in the chart below show that:

- While Montgomery and Fairfax Counties have similarly-sized populations (1.0 million and 1.1 million, respectively), Fairfax’s FY16 total revenue is 47% higher than Montgomery’s (\$7.5 billion compared to \$5.1 billion).
- The District projects the highest amount of revenue (\$13.8 billion) and Frederick projects the lowest (\$997.4 million).
- The proportion of revenue from the different sources varies significantly among jurisdictions. For example, the District and Fairfax each project collecting around \$2.8 billion in non-tax revenue in FY16 – making up 20% of the District’s operating revenue and 37% of Fairfax’s.
- Montgomery County projects the largest proportion of revenue derived from taxes (68% or \$3.5 billion) and Prince George’s County the lowest (46% or \$1.6 billion). At the same time, the District has the largest dollar amount of tax revenue (\$7.0 billion) and Frederick County has the lowest (\$491 million).

Chart 2-1. FY16 Total Revenue, by Revenue Type



* See Note on page 6 regarding why the District’s budget is disproportionate compared to the county budgets.
 +Frederick’s budget subtracts \$6.2 million in “interfund transfers” for a final revenue total of \$997.4 million.
 Source: FY16 Approved Operating Budgets

Individual and Business Tax Burdens in Local Jurisdictions

Per Capita Revenue. Because the six jurisdictions vary significantly in population size,¹ examining per capita revenue provides a more apples-to-apples comparison. Looking at the amount of money collected per resident in the jurisdictions’ FY16 operating budgets, the data below show that:

- Among the six jurisdictions, Montgomery County has the third highest per capita tax revenue of the six jurisdictions and the fourth highest per capita total revenue.
- The District was an outlier in the area with over \$20,000 in total budgeted revenue per capita.
- Except for intergovernmental revenue, Prince George’s County has the lowest per capita revenue from each of the sources. Prince George’s has the second highest per capita intergovernmental revenue.

Table 2-1. FY16 Per Capita Revenue, by Source

Total Revenue		Tax Revenue	
	Per Capita		Per Capita
DC	\$20,970	DC	\$10,548
Fairfax	\$6,626	Howard	\$3,484
Howard	\$5,802	Montgomery	\$3,359
Montgomery	\$4,974	Fairfax	\$3,325
Frederick	\$4,093	Frederick	\$2,014
Prince George's	\$3,911	Prince George's	\$1,781
Non-Tax Revenue		Intergovernmental Revenue	
	Per Capita		Per Capita
DC	\$4,225	DC	\$4,969
Fairfax	\$2,426	Prince George's	\$1,647
Howard	\$1,223	Frederick	\$1,345
Frederick	\$760	Howard	\$1,095
Montgomery	\$604	Montgomery	\$1,011
Prince George's	\$483	Fairfax	\$874

Source: FY16 Approved Operating Budgets

Tax Revenue. This section describes the difference sources and amounts of tax revenue in each jurisdiction, summarized in the next table. Tax revenue accounts for approximately one-half to two-thirds of the jurisdictions’ total revenue.

The data highlight that the proportion of revenue derived from each tax source varies among jurisdictions. As noted above, the District is distinct from the other jurisdictions because it functions like both a city/county and a state. As a result, the District receives tax revenues typically collected by states that the other five jurisdictions do not receive – such as taxes on insurance premiums, estates, and healthcare providers. Of note in these data:

¹ Population data are from the American Community Survey 2014 1-Year Estimates: Montgomery – 1,030,447. The District – 658,893. Fairfax – 1,137,538. Prince George’s – 904,430. Howard – 309,284. Frederick – 243,675.

- Property tax and income tax combined account for approximately 85-95% of tax revenue for the four Maryland jurisdictions.
- Fairfax County (and all Virginia local governments) does not have an income tax – 85% of Fairfax’s tax revenue comes from property taxes.
- Only the District and Fairfax County collect sales tax, which accounts for 19% (\$1.3 billion) of the District’s tax revenue and 5% (\$176 million) of Fairfax’s.
- Only the District and Fairfax County collect a business franchise/licensing tax, making up 6% (\$443 million) and 4% (\$150 million) of their respective tax revenue.

Table 2-2. FY16 Total Tax Revenue, by Revenue Source (\$ in millions)

Source of Revenue	Montgomery	DC*	Fairfax	Prince George’s	Howard	Frederick
Total Tax Revenue	\$3,461.8	\$6,950.2	\$3,782.8	\$1,611.1	\$1,077.4	\$490.7
% of Total Budget	68%	50%	50%	46%	60%	49%
Property Tax	\$1,582.6	\$2,410.2	\$3,197.6	\$812.8	\$633.8	\$276.7
Income Tax	\$1,433.4	\$1,862.0	--	\$550.9	\$407.4	\$192.9
Local Sales Tax	--	\$1,304.7	\$175.8	--	--	--
Business Franchise/Licensing Tax	--	\$443.1	\$150.4	--	--	--
Transfer/Recordation Tax	\$163.0	\$390.1	\$24.9	\$123.0	\$21.0	\$19.6
Energy/Consumption Tax	\$206.2	\$154.2	\$49.9	\$63.4	--	--
Telecommunications Tax	\$50.4	\$52.5	--	\$34.7	--	--
Other Local Tax Revenue	\$26.1	\$333.3	\$184.2	\$26.3	\$15.3	\$1.5
% of Tax Revenue						
Property Tax	46%	35%	85%	50%	59%	56%
Income Tax	41%	27%	--	34%	38%	39%
Local Sales Tax	--	19%	5%	--	--	--
Business Franchise Tax/BPOL	--	6%	4%	--	--	--
Transfer/Recordation Tax	5%	6%	1%	8%	2%	4%
Energy/Consumption Tax	6%	2%	1%	4%	--	--
Telecommunications Tax	1%	1%	--	2%	--	--
Other Local Tax Revenue	1%	5%	5%	2%	1%	<1%

*See Note on page 6 regarding why the District’s budget is disproportionately large compared to the county budgets.
Source: FY16 Approved Operating Budgets

Non-Tax Sources of Revenue. In addition to tax revenue, each jurisdiction collects revenue from sources such as charges for services, licenses and permits, and fines and forfeitures. Like the tax revenue, this revenue varies considerably among the jurisdictions – making up between 12% and 37% of each jurisdiction’s FY16 operating budget.

-

Individual and Business Tax Burdens in Local Jurisdictions

- Montgomery and Prince George’s Counties have the lowest proportion of revenue from non-tax sources – 12% each (\$622 and \$437 million, respectively).
- Fairfax’s operating budget has the highest proportion of non-Tax revenue (37% or \$2.8 billion) followed distantly by Howard County (21% or \$378 million) and the District (20% or \$2.8 billion).
- 67% (\$418 million) of Montgomery County’s non-tax revenue comes from charges for services – significantly higher than the other jurisdictions. However, Fairfax collects more revenue from charges for services on a dollar-for-dollar basis than Montgomery County – \$479 million compared to \$418 million.

Table 2-3. FY16 Total Non-Tax Sources of Revenue, by Revenue Source (\$ in millions)

Source of Revenue*	Montgomery	DC	Fairfax	Prince George’s	Howard	Frederick
Total Non-Tax Revenue	\$622.0	\$2,783.8	\$2,759.9	\$436.5	\$378.4	\$185.2
% of Total Budget	12%	20%	37%	12%	21%	19%
Charges for Services	\$418.4	\$75.4	\$478.6	\$152.3	\$148.6	\$53.5
Licenses and Permits	\$50.9	\$77.7	\$70.8	\$30.8	\$8.9	\$3.4
Fines and Forfeitures	\$32.1	\$135.5	\$13.4	\$14.1	\$5.1	\$0.5
Use of Money and Property	--	--	\$814.9	\$3.8	\$20.2	\$2.2
Miscellaneous	\$116.1	\$95.4	--	\$1.0	--	\$75.1
Prior Year Funds	--	--	--	\$37.2	\$31.9	\$25.7
Special Purpose Revenue Funds	--	\$533.5	--	--	--	\$15.6
Sale of Bonds	--	--	\$182.1	--	--	--
Enterprise Funds	--	\$1,803.9	--	--	--	--
Other Revenue	\$4.4	\$62.5	\$1,200.1	\$197.32	\$163.7	\$9.6
% of Non-Tax Revenue						
Charges for Services	67%	3%	17%	35%	39%	29%
Licenses and Permits	8%	3%	3%	7%	2%	2%
Fines and Forfeitures	5%	5%	--	3%	1%	<1%
Use of Money and Property	--	--	30%	1%	5%	1%
Miscellaneous	19%	3%	--	--	--	41%
Prior Year Funds	--	--	--	9%	8%	14%
Special Purpose Revenue Funds	--	19%	--	--	--	8%
Sale of Bonds	--	--	7%	--	--	--
Enterprise Funds	--	65%	--	--	--	--
Other Revenue	1%	2%	43%	45%	43%	5%

* Several jurisdictions’ budget documents do not fully disaggregate non-tax sources revenue by revenue source. Consequently, this table categorizes a large proportion of non-tax revenue in categories such as “miscellaneous,” “enterprise funds,” or “other revenue” in some jurisdictions.

Source: FY16 Approved Operating Budgets

Intergovernmental Revenue. Intergovernmental revenue refers to funds that jurisdictions typically receive from the Federal or state governments. In FY16:

- Intergovernmental revenue made up between 13% (\$994 million in Fairfax) and 42% (\$1.5 billion in Prince George's) of total projected revenue for the jurisdictions.
- Intergovernmental revenue amounts ranged from a low of \$328 million in Frederick County to a high of \$3.3 billion in the District.

Table 2-4. FY16 Intergovernmental Revenue, by Revenue Source (\$ in millions)

Source of Revenue	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick
Total Intergovernmental Revenue	\$1,041.7	\$3,274.0	\$994.3	\$1,489.4	\$338.6	\$327.7
% of Total Budget	20%	24%	13%	42%	19%	33%
Federal Funds	\$168.1	\$3,274.0	\$221.0	\$250.9	\$58.7	\$20.8
State Revenue	\$826.9	--	\$773.3	\$1,146.6	\$279.9	\$283.4
Other Intergovernmental	\$46.7	--	--	\$91.9	--	\$23.6
% of Intergovernmental Revenue						
Federal Funds	16%	100%	22%	17%	17%	6%
State Revenue	79%	--	78%	77%	83%	86%
Other Intergovernmental	4%	--	--	6%	--	7%

*See Note on page 6 regarding why the District's budget is disproportionately large compared to the county budgets.
Source: FY16 Approved Operating Budgets

B. Expenditures of Selected Jurisdictions

This section summarizes, at the macro level, projected spending from the jurisdictions' FY16 approved operating budgets. Like revenues, dollar amounts vary significantly from jurisdiction to jurisdiction and in some jurisdictions, total spending is slightly less than the jurisdiction's projected revenue. Note that no two jurisdictions categorize every expenditure in the same way. For example, in one jurisdiction spending for libraries may be included in education while in another it may be included in culture and recreation.

The data in the next table show that:

- All jurisdictions except the District spend 40-60% of their operating budgets on education – ranging from approximately \$600 million in Howard and Frederick Counties to \$3.5 billion in Fairfax.
- The District spends 35% (\$4.5 billion) of its budget on health and human services compared to 1-7% (\$10 million - \$531 million) of spending in the other jurisdictions. However, this includes the District's spending of federal government funds for Medicare and Medicaid.

Individual and Business Tax Burdens in Local Jurisdictions

Table 2-5. Total Expenditures, by Category (\$ in millions)

Expenditure Category	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick
Total Expenditures	\$5,067.8	\$13,000.0	\$7,129.9	\$3,537.0	\$1,457.9	\$997.4
Total Revenue	\$5,125.5	\$13,829.5	\$7,536.9	\$3,537.0	\$1,794.4	\$997.4
Education (incl. Community College)	\$2,614.9	\$2,200.0	\$3,486.2	\$1,938.6	\$594.0	\$593.7
Public Safety and Courts	\$621.4	\$1,300.0	\$565.0	\$630.4	\$252.6	\$111.0
Debt Service	\$367.6	\$1,100.0	\$321.9	\$247.5	\$106.2	\$52.5
General Government	\$338.7	\$800.0	\$114.1	\$91.0	\$150.8	\$70.1
Health and Human Services	\$285.6	\$4,500.0	\$531.4	\$24.2	\$104.0	\$10.3
Other	\$276.8	\$1,800.0	\$1,206.8	\$355.2	\$17.9	\$33.1
Transportation/Public Works	\$205.4	\$800.0	\$477.9	\$31.6	\$232.4	\$40.1
Environment	\$137.2	\$500.0	--	\$183.0	--	\$64.6
Community Development/Planning	\$136.9	--	\$355.4	\$9.0	--	--
Libraries, Culture, and Recreation	\$83.3	--	\$71.1	\$26.5	--	\$22.0
% of Expenditures						
Education (incl. Community College)	52%	17%	49%	55%	41%	60%
Public Safety and Courts	12%	10%	8%	18%	17%	11%
Debt Service	7%	8%	5%	7%	7%	5%
General Government	7%	6%	2%	3%	10%	7%
Health and Human Services	6%	35%	7%	1%	7%	1%
Other	5%	14%	17%	10%	1%	3%
Transportation/Public Works	4%	6%	7%	1%	16%	4%
Environment	3%	4%	--	5%	--	6%
Community Development/Planning	3%	--	5%	0%	--	--
Culture and Recreation	2%	--	1%	1%	--	2%

Source: FY16 Approved Operating Budgets

Per Capita Expenditures. As with revenue, examining per capita expenditures provides a more apple-to-apple spending comparison. The next exhibit summarizes per capita expenditures in each jurisdiction – including total expenditures and by major spending categories. The data show that:

- Montgomery County is ranked third or fourth in per capita spending in each category (including total expenditures) except for debt service where it is ranked second.
- The District is an outlier with almost \$19,730 in total per capita spending, largely a function of its city/state status. Fairfax County has the second highest per capita spending at \$6,268 – less than one-third of the District’s.
- The District has the highest per capita spending in each category – ranging from 60% to 370% higher than the spending of the second-ranked jurisdiction for public safety, transportation, general government, and debt service.
- The District’s per capita spending on education (\$3,339) is only 9% higher than the second-ranked jurisdiction (Fairfax at \$3,065).

- Because the District receives Medicare and Medicaid funding from the federal government and the local governments do not, the District's per capita health and human services spending (\$6,830) is over 14 times as much as the second-ranked jurisdiction – Fairfax County (\$467).

Table 2-6. FY16 Per Capita Expenditures, by Source

Total Expenditures	
	Per Capita
DC	\$19,730
Fairfax	\$6,268
Montgomery	\$4,918
Howard	\$4,714
Frederick	\$4,093
Prince George's	\$3,911

Education		Public Safety & Courts	
	Per Capita		Per Capita
DC	\$3,339	DC	\$1,973
Fairfax	\$3,065	Howard	\$817
Montgomery	\$2,538	Prince George's	\$697
Frederick	\$2,436	Montgomery	\$603
Prince George's	\$2,143	Fairfax	\$497
Howard	\$1,921	Frederick	\$455

Health & Human Services		Transportation/Public Works	
	Per Capita		Per Capita
DC	\$6,830	DC	\$1,214
Fairfax	\$467	Howard	\$752
Howard	\$336	Fairfax	\$420
Montgomery	\$277	Montgomery	\$199
Frederick	\$42	Frederick	\$164
Prince George's	\$27	Prince George's	\$35

General Government		Debt Service	
	Per Capita		Per Capita
DC	\$1,214	DC	\$1,669
Howard	\$487	Montgomery	\$357
Montgomery	\$329	Howard	\$343
Frederick	\$288	Fairfax	\$283
Prince George's	\$101	Prince George's	\$274
Fairfax	\$100	Frederick	\$215

CHAPTER 3. Tax Burden Analysis for Individual Taxpayers

Calculating the same family's tax burden across different jurisdictions provides one point for comparison among jurisdictions. Each year, the Washington D.C.'s Office of Revenue Analysis in the Office of the Chief Financial Officer completes an extensive analysis of tax burdens for local jurisdictions entitled *Tax Rates and Tax Burdens: Washington Metropolitan Area* [hereinafter "the DC report"]. OLO met with staff from the District's Office of Revenue Analysis to discuss the report's methodology and conclusions and determined that the Office uses a sound methodology to produce the report. Executive Branch staff concurred that the report is a reliable source of data on comparative tax burdens.

This OLO report focuses on data from Montgomery, Prince George's, Howard, and Frederick Counties in Maryland, Fairfax County in Virginia, and the District of Columbia. The DC report does not include Howard and Frederick Counties in its analysis, so OLO worked with the report's author to replicate the report findings for those Counties. This chapter summarizes comparative 2014 tax burdens for families living in the six jurisdictions.

- **Part A** summarizes assumptions and methodology from the DC report,
- **Part B** summarizes the tax burden analysis and OLO's methodology for calculating tax burdens in Howard and Frederick Counties,
- **Part C** describes OLO's methodology and findings for calculating public utility and water/sewer burdens in the various jurisdictions, and
- **Part D** summarizes changes to tax rates in the selected jurisdictions since the release of the DC report.

A. Summary of DC Report Assumptions and Methodology

The DC report summarizes the state and local tax rates of eleven local jurisdictions in the metropolitan area: DC, Maryland (Charles, Montgomery, and Prince George's Counties), and Virginia (Arlington, Fairfax, Loudon, and Prince William Counties along with Alexandria, Fairfax City, and Falls Church). The study compares the tax burdens on a hypothetical family in each jurisdiction at five different income levels, including the combined state and local tax burdens, but does not compare the level of services/programs available in each jurisdiction to that family.¹

To complete this report, the Office of Revenue Analysis surveyed local jurisdiction tax officials and conducted research on tax rates, household/consumption averages, and income. The DC study focuses on four major taxes: income, property, sales, and automobile. OLO analyzed the impact on families of two additional taxes/user fees: public utility taxes and water/sewer user charges.

Neither the DC report nor OLO's additional analysis addresses additional taxes that may be paid by a hypothetical family living in an incorporated area in any of the jurisdictions. Those living in an incorporated area in Virginia or Maryland may be subject to additional taxes compared to those living in the same county outside the incorporated area – including various property taxes, meals and lodging taxes, amusement taxes, or water/utility fees.

¹ State tax burdens are included to make the burdens more comparable because the District collects taxes typically collected by state governments and taxes typically collected by local governments.

1. General Assumptions

The DC report includes critical assumptions about hypothetical families, including household characteristics, sources of income, and consumption patterns.

Table 3-1. Select Assumptions from DC Tax Burden Report

Category	Assumption
# of Adults in Family	2 (married, both wage-earning, filing joint tax returns, earnings split 70/30)
# of Children in Family	1 (school-age)
Gross Income Level	Either \$25K, \$50K, \$75K, \$100K, or \$150K
Income Sources	Wages, interest income, capital gains
Deductions	Medical, deductible taxes, mortgage interest, contributions, and miscellaneous
Home Ownership	\$25K Family – renters All others – own a single-family home
Car Ownership	\$25K, \$50K Families – 1 car \$75K, \$100K, and \$150K Families – 2 cars

Source: *Tax Rates and Tax Burdens: Washington Metropolitan Area 2014*, DC Office of Revenue Analysis

The following sections provide additional details related to specific categories of taxes included in the methodology. For a fuller description of the DC report's methodology and assumptions, see the Appendix.

2. Income Tax

Governments impose income tax on financial income earned by people and businesses in the jurisdiction. The next table summarizes the range of income tax rates in the jurisdictions that apply to the 2014 tax year. Maryland and Virginia have the same range of rates for state income tax although the income brackets differ. Virginia does not allow local jurisdictions to charge an income tax while Maryland does.

Table 3-2. Summary of Income Tax Rates, Selected Jurisdictions, on January 1, 2015

Jurisdiction	State Rate	Local Rates	Imposed on:
DC	4.0%-8.95%	--	Individuals who maintain a permanent home (at any time) or a permanent residence (183+ days)
Fairfax	2.0%-5.75%	0%	All Virginia residents
Montgomery/Prince George's/Howard	2.0%-5.75%	3.20%	Individuals who are Maryland residents on the last day of the tax year or who lived in the State for 6+ months during the year
Frederick	2.0%-5.75%	2.96%	

Source: *Tax Rates and Tax Burdens: Washington Metropolitan Area 2014*, DC Office of Revenue Analysis

3. Property Tax

Home owners in the District, Maryland, and Virginia pay annual property tax based on the value of their house and property. Calculating a property tax burden requires an assumption about property values. To calculate house values, the DC report scaled area median house values from the Census Bureau’s ACS 2014 – so that house values reflected the variance in family income.

Table 3-3. House Value Assumptions, 2014

Family Income	Housing Value Assumption
\$ 50,000	\$159,544
\$75,000	\$239,317
\$100,000	\$319,089
\$150,000	\$478,633

The report assumes that the family earning \$25K per year are renters. For this family, property taxes are assumed to be paid indirectly through rent. Background research summarized in the DC report indicates that about 20% of rent goes towards paying property taxes. Using that assumption, the DC report bases property tax calculations on median rent data for the Washington, D.C. MSA from the Department of Housing and Urban Development.² The DC report also uses the housing values to calculate a mortgage interest amount – used in the calculation of income tax.

Property taxes in the District, Maryland, and Virginia are based on 100% of the market value of the property. The next table summarizes the tax rates in effect in property tax year 2014-2015 excluding exemptions or credits.

Table 3-4. Residential Real Property Tax Rates, Property Tax Year 2014-2015*

Jurisdiction	Tax Rate** (per \$100 of assessed value)
DC	\$ 0.85
Maryland^^	\$.112
Montgomery	\$1.10#
Prince George’s	\$1.072#
Howard	\$1.014
Frederick	\$1.060#
Virginia	--
Fairfax	\$1.114#

*Real property tax year in Virginia jurisdictions is based on the calendar year. The District’s tax year is Oct. 1, 2014 – Sept. 30, 2015. The Maryland tax year is July 1, 2014 to June 30, 2015.

**Tax rates do not reflect any exemptions or credits.

^^County rates incorporate the State rate.

Rates exclude municipal or special taxing district taxes ranging from \$0.003-\$0.732 in Montgomery, \$0.895-\$1.069 in Prince George’s, \$.04-\$0.7305 in Frederick, and \$0.02-\$0.047 in Fairfax.

Source: DC Tax Report and Howard and Frederick County data

² OLO’s additional analysis uses the Baltimore MSA median rent for Howard County.

4. Sales and Use Tax

The government imposes sales and use taxes on the consumption of goods and services. Tax rates and the goods and services on which the tax is imposed vary by jurisdiction. The next table summarizes the jurisdictions' tax rates for general goods and services and restaurant meals. The District, Maryland, and Virginia also impose taxes on admissions to theaters, concerts, etc. and a transient accommodations tax on hotel/motel room rentals (see appendix). In Virginia, a portion of the sales tax rate is state sales tax and a portion is local sales tax with the revenue going to the local jurisdiction. In Maryland, local jurisdictions are not permitted to impose a sales and use tax.

For spending assumptions related to the sales tax, the DC report used the U.S. Department of Labor's average consumption expenditures for select items.

Table 3-5. Summary of Certain Sales and Use Tax Rates, 2014

Jurisdiction	General Sales Tax	Restaurant Meal Tax
DC	5.75%	10.0%
Maryland	6.00%	6.0%
Virginia*	6.00%	6.0%

* 4.3% state tax rate + 1% Fairfax County tax rate + 0.7% state transportation tax

Source: *Tax Rates and Tax Burdens: Washington Metropolitan Area 2014*, DC Office of Revenue Analysis

5. Automobile Taxes

The DC report tax burden analysis includes three taxes related to ownership of automobiles: the gasoline tax, motor vehicle registration fees, and, in some cases, personal property taxes.³ The following table summarizes the automobile assumptions used in this analysis.

Table 3-6. Summary of Vehicle-Related Taxes and Fees, 2014

Jurisdiction	Vehicle Excise Tax	Annual Vehicle Registration Fee	Motor Vehicle Fuel Tax
DC	6-8%	\$52.00-155.00	23.5¢ per gallon
Maryland	6%	\$76.50-93.50	23.5¢ per gallon
Virginia	State Tax/Fee	\$28.75-45.75	3.5% of statewide wholesale price/gallon + 2.1% sales tax on fuel sold in a County* that is a member of a transportation district and has a commuter mass transit system
	Fairfax Fee	\$18.00-38.00	

* Fairfax County charges the additional 2.1% sales tax

Source: *Tax Rates and Tax Burdens: Washington Metropolitan Area 2014*, DC Office of Revenue Analysis

³ Virginia localities levy a personal property tax on automobiles. Fairfax County assesses the tax based on the trade-in value of a vehicle. The DC report used values from the January 2014 National Automobile Dealers Association Used Car Pricing Guide, Eastern Division.

Individual and Business Tax Burdens in Local Jurisdictions

The DC report assumes that families at the \$25,000 and \$50,000 income levels each own one car and the families at the \$75,000 and above income levels own two cars. Additional assumptions related to the cars in the report are in the appendix.

B. Tax Burden Analysis

This section summarizes the findings from the Washington D.C. Office of Revenue Analysis' report on *Tax Rates and Tax Burdens: Washington Metropolitan Area 2014*.

1. Howard County and Frederick County Methodology

The DC Tax Burden report analyzes the tax burden (including income, property, sales and use, and automobile taxes) for several local jurisdictions. OLO included in this summary of the tax burden analysis data for the District of Columbia, Montgomery and Prince George's Counties in Maryland, and Fairfax County in Virginia. At the Council's request, OLO worked with staff in the Office of Revenue Analysis (ORA) to replicate the DC report methodology and include Howard and Frederick Counties.

Table 3-7. Summary of Methodology for Howard County and Frederick County Analysis

Tax	Methodology Used
Income Tax	The DC Office of Revenue Analysis provided an analysis of Howard and Frederick Counties' income tax burdens.
Property Tax	Frederick County: OLO used a weighted property tax of 1.38177, inclusive of municipality property tax rates and the state property tax. Frederick County is in the Washington, D.C. MSA, so the same housing values used for other jurisdictions were used for Frederick County. ORA staff reviewed the final analysis. Howard County: OLO used a property tax rate of 1.386, inclusive of a fire tax, ad valorem tax, and state property tax. Howard County is in the Baltimore MSA, so OLO used average home values for that area provided by ORA to calculate property tax. ⁴ ORA staff reviewed the final analysis.
Sales and Use Tax	Same sales and use tax burdens as other Maryland Counties.
Automobile Tax	Same automobile tax burdens as other Maryland Counties.

⁴ Howard County house values based on the Baltimore MSA: \$50,000 income: \$143,857. \$75,000 income: \$215,785. \$100,000 income: \$287,714. \$150,000 income: \$431,570.

2. Tax Burdens

The next table summarizes the total tax burdens for the selected local jurisdictions. Some specific highlights include:

- In all jurisdictions, the tax burden as a percentage of income for the lowest income family (\$25K) was higher than the tax burden for the highest income family (\$150K).
- The tax burden for the lowest income family in Montgomery County (13.6%) was 3.5 percentage points higher than the burden for the highest income family in Montgomery County (10.1%).
- The District has the lowest tax burden for income levels of \$50K and above analyzed in the report.
- Frederick County has the highest tax burden for four of the five income levels analyzed in the report – for incomes of \$50K - \$150K.
- Montgomery County had the third highest tax burden for all income levels except \$50K, where the County had the fifth highest tax burden.
- At the highest income levels (\$100K and \$150K), the Maryland counties all had higher tax burdens than Fairfax County or the District.
- Fairfax County has the highest automobile tax burden at all income levels and the automobile tax burden for the highest income family is almost four times higher than in the other jurisdictions.

Table 3-8. Major 2014 State and Local Tax Burdens for a Family of Three in Select Washington Metro Area Jurisdictions (rank in parentheses)

Income Level	Tax	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick	Average
\$25,000	Income	-419	-732	0	-419	0	0	-393
	Real Estate	3,053	3,053	3,053	3,053	2,033	3,053	2,883
	Sales and Use	497	749	560	497	497	497	550
	Automobile	214	219	313	214	214	214	231
	Total	\$3,345	\$3,289	\$3,926	\$3,345	\$2,744	\$3,764	\$3,330
	% of Income	13.4% (3)	13.2% (5)	15.7% (1)	13.4% (3)	11.0% (6)	15.1% (2)	13.3%
\$50,000	Income	2,135	1,557	1,489	2,119	2,115	1,978	1,899
	Real Estate	1,033	759	1,819	1,230	1,994	2,205	1,507
	Sales and Use	603	946	669	603	603	603	671
	Automobile	214	219	322	214	214	214	233
	Total	\$3,985	\$3,481	\$4,299	\$4,166	\$4,926	\$5,000	\$4,310
	% of Income	8.0% (5)	7.0% (6)	8.6% (3)	8.3% (4)	9.9% (2)	10.0% (1)	8.6%
\$75,000	Income	3,348	2,577	2,357	3,392	3,365	3,195	3,039
	Real Estate	2,630	1,437	2,728	2,085	2,991	3,307	2,530
	Sales and Use	707	1,115	767	707	707	707	785
	Automobile	374	426	714	374	374	374	439
	Total	\$7,059	\$5,555	\$6,566	\$6,558	\$7,437	\$7,583	\$6,793
	% of Income	9.4% (3)	7.4% (6)	8.8% (4)	8.7% (5)	9.9% (2)	10.1% (1)	9.1%
\$100,000	Income	5,255	4,148	3,597	5,275	5,229	5,023	4,755
	Real Estate	3,507	2,116	3,638	2,941	3,988	4,409	3,433
	Sales and Use	846	1,291	911	846	846	846	931
	Automobile	512	555	803	512	512	512	568
	Total	\$10,120	\$8,110	\$8,949	\$9,574	\$10,575	\$10,790	\$9,686
	% of Income	10.1% (3)	8.1% (6)	8.9% (5)	9.6% (4)	10.6% (2)	10.8% (1)	9.7%
\$150,000	Income	8,301	7,158	5,862	8,349	8,265	7,944	7,647
	Real Estate	5,260	3,472	5,456	4,651	5,982	6,613	5,239
	Sales and Use	1,056	1,588	1,097	1,056	1,056	1,056	1,152
	Automobile	486	529	1,984	486	486	486	743
	Total	\$15,103	\$12,747	\$14,399	\$14,542	\$15,789	\$16,099	\$14,780
	% of Income	10.1% (3)	8.5% (6)	9.6% (5)	9.7% (4)	10.5% (2)	10.7% (1)	9.9%

C. Public Utility and Water/Sewer Charges

OLO also analyzed the impact of public utility and water/sewer charges to get a more comprehensive look at the overall burden for a family in the selected jurisdictions. **These scenarios only calculate public utility and water/sewer charges and do not include other charges associated with public utilities or water/sewer such as water house connection charges, water meter settings, or sewer availability charges.**

Public Utilities. To create a hypothetical public utility tax burden, OLO determined the average monthly use for electricity and natural gas in the region. OLO used the United States Energy Information Administration’s data for the South Atlantic region (comprised of nine states in the region including DC, Virginia, and Maryland) on average monthly electricity use for residential dwellings.⁵ OLO used Washington Gas’ estimated average usage for natural gas consumption rates.⁶

The following data summarize the average monthly consumption OLO used for this analysis. OLO did not adjust these numbers based on income or house size.

Table 3-9. Average Monthly Consumption and Bill Amount for Hypothetical, Electricity and Gas

Utility	Monthly Average Consumption
Electricity	1,117 kWh
Natural Gas	66.9 therms

Sources: U.S. Energy Information Administration; Washington Gas

The next table summarizes state and local energy tax rates for electricity and natural gas in the selected jurisdictions. Howard and Frederick Counties do not have specific public utility taxes. Frederick County residents do pay a public utility tax as part of the property tax, but the specific amount for the public utility portion is not available.

Table 3-10. FY14 Energy Tax Rates

	Electricity	Natural Gas
DC	\$0.007/therm	\$0.0707/therm
Maryland	--	--
Montgomery	\$0.01146/kwh	\$0.10019/therm
Prince George’s	\$0.005908/kwh	\$0.061328/therm
Frederick	--	--
Howard	--	--
Virginia	\$0.00152/kwh	\$0.0195/ccf up to 500 ccf
Fairfax (max of \$4 monthly)	\$0.56 plus \$0.00605/kwh	\$0.56 plus \$0.05259/ccf

Source: Jurisdictions’ websites

⁵ http://www.eia.gov/electricity/sales_revenue_price/pdf/table5_a.pdf

⁶ https://www.washingtongas.com/-/media/washgas/pdf/my-account/customer-choice/dc_histgaspricecomp_dec2015.pdf

Individual and Business Tax Burdens in Local Jurisdictions

Water/Sewage Usage. The number of average gallons of water used by a typical person varies among sources. For this analysis, based on Washington Suburban Sanitary Commission’s data that people use, on average, 70 gallons of water per person per day, OLO used an estimated 210 gallons per day of water for a three person family.⁷ The following rates were used.

Table 3-11. FY14 Water and Sewer Rates

	Water Rate	Sewer Rate	Total Rate
DC	\$4.83/1,000 gallons	\$5.89/1,000 gallons	\$10.72/1,000 gallons
Montgomery	\$4.73/1,000 gallons	\$6.96/1,000 gallons	\$11.69/1,000 gallons
Prince George’s	\$4.73/1,000 gallons	\$6.96/1,000 gallons	\$11.69/1,000 gallons
Howard*	Summer \$2.15/748 gallons Winter \$1.93/748 gallons	\$3.10/748 gallons	Summer \$5.25/748 gallons Winter \$5.30/748 gallons
Frederick	\$2.86/1,000 gallons for 1 st 8,000 gallons/quarter \$3.66/1,000 gallons for next 8,001-16,000 gallons/quarter \$4.35/1,000 gallons for next 16,001-24,000 gallons/quarter	\$21 (flat fee)+\$65 (based on usage of 16,001- 24,000 gallons/quarter)	\$86 + \$2.86/1,000 gallons for 1 st 8,000 gallons/quarter + \$3.66/1,000 gallons for next 8,001-16,000 gallons/quarter + \$4.35/1,000 gallons for next 16,001-24,000 gallons/quarter
Fairfax	\$2.16/1,000 gallons	\$6.55/1,000 gallons	\$8.71/1,000 gallons

*OLO used summer rate for six months and winter rate for six months for calculations.

Source: Jurisdictions’ websites

The next table summarizes the public utility and water/sewer costs based on the above assumptions. The average total burden for water/sewer and public utility taxes for the six jurisdictions was \$821.

Table 3-12. FY14 Public Utility and Water/Sewer Hypothetical Cost Burdens (\$)

	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick	Average
Public Utility	234	151	233	128	0	0	124
Water/Sewer	896	822	668	896	527	371	696
Total Burden	\$1,130 (1)	\$972 (3)	\$901 (4)	\$1,024 (2)	\$527 (5)	\$371 (6)	\$821

Total Burden Analysis. The next table summarizes the total burden for a family of three at various incomes – combining the tax burden data from the DC Report with OLO’s calculation of public utility and water/sewer cost burdens. As noted above, the utility and water/sewer burdens were not adjusted for house size. The data show:

- At the \$25K income level, Fairfax County has the highest total burden. Montgomery County has the third highest total burden.
- At the \$50K income level, Montgomery County has the 5th highest total burden.
- At income levels of \$75K and above, Montgomery, Howard and Frederick Counties have comparable total burdens – the highest among the six jurisdictions. The District and Fairfax County have the lowest total burdens at these income levels.

⁷ <https://www.wsscwater.com/customer-service/rates/water-usage.html>

Table 3-13. Major 2014 State and Local Tax Burdens for a Family of Three in Selected Washington Metro Area Jurisdictions, Including Public Utility and Water/Sewer Charges (rank in parentheses)

Income Level		Montgomery	DC	Fairfax	Prince George's	Howard	Frederick	Average
\$25,000	Tax Burden	3,345	3,289	3,926	3,345	2,744	3,764	3,402
	Public Utility Only	234	151	233	128	0	0	124
	Total Burden	\$3,579	\$3,440	\$4,159	\$3,473	\$2,744	\$3,764	\$3,527
	% of Income	14.3% (3)	13.8% (5)	16.6% (1)	13.9% (4)	11.0% (6)	15.1% (2)	14.1%
\$50,000	Tax Burden	3,985	3,481	4,299	4,166	4,926	5,000	4,310
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$5,115	\$4,453	\$5,200	\$5,190	\$5,453	\$5,371	\$5,130
	% of Income	10.2% (5)	8.9% (6)	10.4% (3)	10.4% (4)	10.9% (1)	10.7% (2)	10.30%
\$75,000	Tax Burden	7,059	5,555	6,566	6,558	7,437	7,583	6,793
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$8,189	\$6,527	\$7,467	\$7,582	\$7,964	\$7,954	\$7,614
	% of Income	10.9% (1)	8.7% (6)	10.0% (5)	10.1% (4)	10.6% (2)	10.6% (3)	10.20%
\$100,000	Tax Burden	10,120	8,110	8,949	9,574	10,575	10,790	9,686
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$11,250	\$9,082	\$9,850	\$10,598	\$11,102	\$11,161	\$10,507
	% of Income	11.3% (1)	9.1% (6)	9.8% (5)	10.6% (4)	11.1% (3)	11.2% (2)	10.50%
\$150,000	Tax Burden	15,103	12,747	14,399	14,542	15,789	16,099	14,780
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$16,233	\$13,719	\$15,300	\$15,566	\$16,316	\$16,470	\$15,601
	% of Income	10.8% (3)	9.1% (6)	10.2% (5)	10.4% (4)	10.9% (2)	11.0% (1)	10.40%

D. Changes in Tax Rates since Release of the DC Tax Burden Report

The District's Office of Revenue Analysis released its latest tax burden report in December 2015 using tax rates from 2014-2015. Since then, some of the jurisdictions in this report have amended tax rates and laws. This section summarizes those changes.

Montgomery County. In the past few years, Montgomery County has made several changes to tax and user rates, including a 4% decrease in solid waste charges, a 6% rate increase for WSSC, and a 7% reduction in the fuel-energy tax. The County's FY17 Adopted Budget included a property tax rate increase of 3.94 cents (increasing the weighted average rate to \$1.03 per \$100 of assessed value), an increase in the recordation tax by \$1 per \$500 of property value and in the recordation tax premium by \$0.075 per \$500 of property value during the sale or refinancing of real estate.

Fairfax County. Fairfax County has changed several taxes in the past two years, including an increase in the property tax rate from \$1.085 to \$1.09 and then from \$1.09 to \$1.13 per \$100 of assessed value, an increase in the sewer base quarterly charge from \$12.79 to \$20.15, an increase in the sewer service charge from \$6.55 to \$6.65, and an increase in stormwater services charges from \$0.02 to \$0.0225.

Individual and Business Tax Burdens in Local Jurisdictions

Washington, D.C. The District created a Tax Revision Commission to review the City's tax system. The Commission issued a series of recommendations in December 2013. The District is currently in the midst of making significant changes to individual income, business income, and sales taxes. Some of the changes made in FY15 were:

- Establishing a new individual income tax bracket of \$40K - \$60K, with a reduced income tax rate;
- Expanding the local earned income tax credit (EITC) to childless workers;
- Raising the standard deduction to \$5,200 for singles, \$8,350 for married residents;
- Expanding the general sales tax to include additional services, including carpet/upholstery cleaning, health clubs and tanning studios, bottled water delivered for home use, bowling alleys;
- Phasing out the personal exemption by 2% for each \$2,500 above \$150,000, with a complete phase out at \$275,000, making the personal income tax more progressive at the upper tiers;
- Reducing the unincorporated business franchise tax from 9.975% to 9.2% and the incorporated business franchise tax to 9.4%; and
- Changing the franchise tax apportionment method to a single weighted sales formula.

The District also adopted changes that would occur in future years if revenue triggers were met after the budget was adopted. Some of those changes, triggered in FY16 include:

- Expanding the Earned Income Tax Credit (EITC);
- Raising the standard deduction;
- Phasing-out the personal exemption for higher income households;
- Eliminating the homebuyer credit, long-term care insurance deduction and government pension exclusion;
- Reducing the rate on the new individual income tax middle bracket;
- Lowering taxes through a "Millionaire Bracket" for incomes from \$350K to \$1M;
- Reducing the business franchise tax;
- Reducing the rate for the middle income tax bracket;
- Increasing the personal exemption; and
- Increasing in the estate tax threshold to conform to the federal level.

The District's FY17 budget, awaiting approval from the United States Congress, continues implementation of the Tax Revision Commission's recommendations, including a reduction in middle-income and high-income tax rates, reduction in business income tax rate, and elimination of some estate taxes.

Howard County. Howard County has not changed tax rates since the release of the DC report. However, Howard County anticipates increased property tax revenue in FY17 and does not intend to decrease the tax rate.

Frederick County. The County's real property tax rate increased from \$1.060 to \$1.064 per \$100 in assessed value in the time period since the release of the report, resulting in changed tax differential rates for Frederick City and Myersville. Further, two of the three lighting tax districts in the County changed their rates: Braddock Lights decreased from .018 to .015 and New Addition Lights increased from \$0.013 to \$0.017. In FY17, Frederick County did not change any tax rates but anticipates increased property tax revenue and, like Howard County, does not intend to decrease the tax rate.

Prince George's County. Prince George's County increased the property tax by 4% in FY16, along with several other small revenue increases, including an increase in energy and telecom taxes.

CHAPTER 4. Comparison of Business Tax Burdens in Local Jurisdictions

In September 2013, the D.C. Tax Revision Commission¹ received a report from the accounting firm of Councilor Buchanan & Mitchell comparing the tax burden of running a business in the District compared to surrounding jurisdictions. *Case Studies of Business Taxes in the District of Columbia: A Comparison of Neighboring Jurisdictions*² examines the tax burden of different types of businesses entities in six jurisdictions – the District, the City of Alexandria (VA), Arlington County (VA), Fairfax County (VA), Montgomery County (MD), and Prince George’s County (MD).

This chapter summarizes the findings in *Business Case Studies* to highlight jurisdictional differences that lead to different tax burdens. With one exception, the chapter summarizes data for Montgomery County, Prince George’s County, Fairfax County, and the District – excluding Alexandria and Arlington because the remainder of this OLO report does not focus on those jurisdictions.

Note that the tax rates used in the *Business Case Studies* report and described in this chapter are as of July 31, 2013. Some tax rates have changed since the report’s release.

This chapter is organized as follows:

- **Part A** summarizes details from the report to provide context for the case studies,
- **Part B** summarizes the tax burden case studies from the report, and
- **Part C** summarizes the recommendations from the D.C. Tax Revision Commission and from Maryland’s Economic Development and Business Climate Commission (The Augustine Commission).

A. Background Information for Case Studies

Business Case Studies examines the tax implications for business owners operating different types of business entities. The scenarios examine two types of business structures that are treated differently by the Internal Revenue Service (IRS) for taxing purposes.³ They are:

- **C corporations** – these business entities pay taxes on net business income at the corporate level. When corporate income is distributed to business owners, that income is taxed (again) as personal income.
- **Pass-through entities (e.g., S corporations, LLCs, partnerships)** – these businesses do not pay taxes on income at the corporate level. Business income (or losses) are divided among the business owners, who report the income (or loss) on their individual tax returns.

Most state and local jurisdictions, including Maryland and Virginia, follow the IRS’ approach to taxing pass-through entities – taxing them when business owners pay individual income tax. The District differs in this respect by taxing the income of pass-through entities at the corporate level.

¹ The purpose of the Commission, among other things, was to develop recommendations for the Mayor and Council regarding apportionment of taxes, the tax base, and competitiveness with surrounding jurisdictions.

<http://www.dctaxrevisioncommission.org/>

² Aceituno, R. and Yingst, K., *Case Studies of Business Taxes in the District of Columbia: A Comparison of Neighboring Jurisdictions*, September 2013 [hereinafter “*Business Case Studies*”].

http://media.wix.com/ugd/ddda66_2587ee60d87e9069a51195947320308c.pdf

³ C corporations and S corporations are similar. As indicated above, S corporations are treated differently for taxing purposes and they have certain restrictions and limitations such as a limit on the number shareholders in the corporation (100) and the types of stock they can issue (only one class of stock), for example.

Tax Rates. The jurisdictions in *Business Case Studies* impose a variety of taxes on businesses in the jurisdictions. The next table summarizes the key tax rates that were in effect when this study was completed and whether the taxes are levied at the state or local level. The taxes described in *Business Case Studies* include:

- **Corporate Income Tax:** a state- or District-levied tax on profits of U.S. corporations.
- **Personal Property Tax:** a local- or District-levied tax on the personal property owned by a business.
- **Individual Income Tax:** owners of pass-through entities claim their share of income from the entity on their individual income tax returns.
- **Gross Receipts Tax:** a local- or District-levied tax on the total gross revenue of a company, similar to a sales tax but paid by the seller of goods or services.
- **Tax Credits:** an amount of money that can offset taxes owed to a government.

A primary reason for the different tax amounts owed in each jurisdiction stems from different business taxes and different tax rates among the jurisdictions. For example, the District has a corporate income tax rate of 9.975%, compared to 8.25% in Maryland and 6% in Virginia. The District and Virginia also impose a gross receipts tax on most for-profit businesses – in addition to a corporate income tax – and Maryland does not.⁴

Note: select tax rate changes are summarized in Chapter 3.

⁴ “Maryland’s gross receipts tax is limited to heavy equipment rental companies and certain utilities” – neither of which is relevant to this analysis. *Business Case Studies* at p. 4.

Table 4-1. Tax Rates Used in *Business Case Studies*, as of July 31, 2013

Tax/Credit	Jurisdiction	Rate(s) as of July 31, 2013	
Corporate Income/ Franchise Tax (state/District tax)	DC – regular business		9.975%
	DC – high technology business	Years 1-5	0%
		Years 6+	6.0%
	Maryland Jurisdictions		
Virginia Jurisdictions			6.00%
Personal Property Tax (per \$100 assessed value – local/District tax)	DC		3.400%
	Montgomery County		2.585%
	Prince George’s County		3.181%
	Fairfax County		4.570%
Individual Income Tax	DC		8.95%
	Montgomery and Prince George’s Counties		State – 5.75%
	Fairfax and Arlington Counties, City of Alexandria		State only – 5.75%
Gross Receipts Tax (local/District tax)	DC (Ballpark Fee)	Gross Business Receipts	Tax
		\$5M-\$8M	\$5,500
		\$8,000,001-\$12M	\$10,800
		\$12,000,001-\$16M	\$14,000
	\$16,000,001+	\$16,500	
Fairfax and Arlington Counties, City of Alexandria (BPOL)	Per \$100 in revenues	\$0.03-\$0.58	
Research & Development Tax Credits (local credits)	Montgomery County		Basic Credit – 3.0%
			Growth Credit – 10.0%
	Fairfax and Arlington Counties, City of Alexandria		15% of the first \$167K of qualified R&D expenses

Source: *Business Case Studies*

B. Case Studies

Business Case Studies developed three taxing scenarios with several sub-scenarios.⁵ The scenarios described in this chapter include:

- I. C corporation with (a) a single state of operation and (b) locations in multiple states.
- II. C corporation high technology software development company.
- III. Pass-through entity with owners living in (a) the District, (b) Maryland, or (c) Virginia.

Each scenario presents different tax implications based on the location of the business and/or residence of the business owner(s). The next table summarizes assumptions used throughout the scenarios. These common assumptions allow an apples-to-apples comparison of how a business’ tax burden is affected by the type of business entity, the location of the business, and where relevant, the residence of the business owner.

⁵ This report does not summarize all of the sub-scenarios in *Business Case Studies*.

Table 4-2. Assumptions Used in Business Case Studies

Category	Assumption
Businesses' Gross Revenue	\$30 million
Net Profit before Taxes	8%
Business Personal Property Investment	\$2.4 million over 10 years
Base of Operations	One jurisdiction only
Tax Rates	As of July 31, 2013
Tax Credits Incorporated in Scenarios	Only credits specific to a high technology business (Case Study II)

Source: *Business Case Studies*

The next table summarizes the total annual tax burden for Montgomery and Prince George’s Counties, Fairfax County, and the District in each of the case study scenarios. Among the six scenarios, Montgomery County’s tax burden is the lowest in four (except for the high technology company and the c corporation operating in multiple jurisdictions).

Table 4-3. Summary of Total State/Local Annual Tax Burdens for Case Studies

Case Study	Scenario	Montgomery Tax Burden	Difference from Montgomery Tax Burden		
			Prince George’s	Fairfax	DC
C Corporation	(a) Single jurisdiction operation	\$216,378	+2%	+14%	+22%
	(b) Multiple jurisdiction operation	\$242,497	+2%	-3%	+7%
High-Tech Company	C corporation receiving high-tech-business-related tax credits	\$126,378*	+2%	+2%	Years 1-5: -86% Years 6+: +27%
Pass-Through Entity	(a) Owned by DC Residents	\$233,117	+2%	+35%	+13%
	(b) Owned by MD Residents	\$233,117	+2%	+35%	+46%
	(c) Owned by VA Residents	\$186,487	+2%	+29%	+108%

*In the first five years, the District would have the lowest total tax burden. In years six and beyond, Montgomery County would have the lowest total tax burden.

Source: *Business Case Studies*

Case Study I. C Corporation

Case Study I presents a C corporation. The first scenario has the corporation operating in a single jurisdiction and paying taxes in that jurisdiction and the second has a corporation with a base in one jurisdiction, operations in the other jurisdictions, and the corporation paying some business income tax in more than one jurisdiction.

a. C Corporation – Single Jurisdiction of Operation

In this first scenario, a C corporation operates a single business location that does business only in the jurisdiction where it is located. The data in the next table show the business’ tax burden – including income, personal property, and gross receipts taxes – based on the location of the business. In this scenario:

- Businesses pay between \$216K and \$264K in business taxes based on the jurisdiction.
- A business in Montgomery County has the lowest tax burden – between 2-22% lower than the other three jurisdictions.
- Fairfax’s tax burden is higher than Montgomery’s because of Fairfax’s gross receipts tax.

Table 4-4. C Corporation Tax Burden, Single Jurisdiction of Operation

Location of Business	Tax (\$)			Total State/Local	Difference from MoCo
	Income/ Franchise	Personal Property	Gross Receipts		
Montgomery	\$ 197,281	\$ 19,097	\$ --	\$ 216,378	\$ --
Prince George's	196,918	23,500	--	220,418	4,040
Fairfax	138,125	15,307	93,000	246,432	30,054
DC	237,854	9,384	16,500	263,738	47,360

Source: *Business Case Studies*

b. C Corporation – Operating in Multiple Jurisdictions

The second scenario of this case study presents the same C corporation – with a base of operations in one jurisdiction and sufficient business in the surrounding jurisdictions that it must pay taxes in those jurisdictions. The scenario includes data from Arlington County and the City of Alexandria because extracting the data from the scenario may change the results by shifting income (and taxes) among the jurisdictions.

The data in the table below show the total tax burden in each jurisdiction, depending on its base of operations. The data show:

- A business with a base of operations in Fairfax County has the lowest tax burden – 3% (\$7K) lower than Montgomery County,
- Montgomery County has the second lowest tax burden – between 1-3% (\$2-17K) lower than Alexandria, Arlington, Prince George’s, and the District.

Table 4-5. C Corporation Tax Burden, Operating in Multiple Jurisdictions

Base of Operations	Tax in Jurisdiction (\$)						Total State/Local	Difference From MoCo
	DC	MoCo	Prince George's	Fairfax	Arlington	City of Alexandria		
Montgomery	\$ 49,645	\$ 140,799	\$ --	\$ 16,601	\$ 17,851	\$ 17,601	\$ 242,497	\$ --
Fairfax	49,323	18,122	18,122	149,672	--	--	235,239	(7,258)
Alexandria	49,134	18,044	18,044	--	--	159,402	244,624	2,127
Arlington	49,105	18,032	18,032	--	160,877	--	246,046	3,549
Prince George's	49,562	--	144,975	16,585	17,835	17,585	246,542	4,045
DC	170,609	18,265	18,265	16,606	17,856	17,606	259,207	16,710

Source: *Business Case Studies*

Case Study II. C Corporation – High Technology Software Developer

The second case study presents a high technology software development business operating in a single jurisdiction. Each jurisdiction provides some benefit to this type of company that lowers the company’s annual tax burden:

- The District exempts high technology companies from paying the franchise tax for five years beginning in the first year with taxable income. Beginning in year six, the business is taxed at a lower-than-normal franchise tax rate of 6%.
- Maryland provides a research and development tax credit based on a percentage of eligible research and development expenses. This credit is in effect until January 1, 2020.
- Virginia has a research and development tax credit equal to 15% of the first \$167K of qualified research and development expenses (in 2013, the credit changed to 15% of the first \$234K of qualified expenses).
- Fairfax excludes certain gross receipts from taxation for companies that design, development, or create computer software in the County.
- The District and Maryland exempt high technology companies from personal property tax.

The data in the next table show that under this scenario, a business based in the District would have the lowest tax burden (by far) for its first five profitable years – over 85% lower than Montgomery, Prince George’s, and Fairfax. After the first five years, Montgomery County would have the lowest total tax burden.

Montgomery County’s tax burden is lower than Fairfax County’s – despite significantly lower income/franchise taxes in Fairfax – because Maryland’s tax credit is three times larger than Virginia’s and because a Fairfax business would have to pay personal property tax.

Table 4-6. Tax Burden for High Technology Software Development Business, Single Jurisdiction of Operation

Location of Business	Tax/Credit (\$)					Total State/Local	Difference from MoCo
	Income/ Franchise	Reduction (DC)/Credit	Personal Property	Gross Receipts			
Montgomery	\$ 205,374	\$ (78,996)	\$ --	\$ --		\$ 126,378	\$ --
Prince George's	205,374	(78,996)	--	--		126,378	--
Fairfax	143,705	(25,050)	15,307	--		133,962	7,584
DC	Years 1-5	238,790	(237,790)	--	16,500	17,500	(108,878)
	Years 6+	238,790	(95,157)	--	16,500	160,133	33,755

Source: *Business Case Studies*

Case Study III. Pass-Through Entity

The third case study presents a pass-through entity operating in a single jurisdiction. In this case study, the residence of the business owner, in addition to the location of the business, matters because the business owner pays taxes for the business on his/her individual tax return.

As described above, pass-through entities do not pay federal income tax at the corporate level. Pass-through entities include various types of businesses, including S corporations, limited liability companies (LLCs), and partnerships. Profits and losses from a pass-through entity are reported on the business owner’s individual tax return. Both Maryland and Virginia take the same approach as the federal government to taxing pass-through entities. The District does not.

Pass-through entities in the District pay taxes at the corporate level. S corporations are taxed the same as C corporations. LLCs and partnerships, which are unincorporated businesses, pay the District’s Unincorporated Business Franchise Tax, which generally results in a lower tax liability than an S corporation.⁶ The District’s approach has the consequence of increasing taxes for Virginia residents who own businesses in the District because:

Virginia courts have ruled that the District, due to the Home Rule Charter, is prohibited from taxing Virginia residents and has ruled the Unincorporated Business Franchise tax illegal and therefore not eligible for credit against income taxes owed to the Commonwealth. Thus, Virginians must bear the total weight of two jurisdictions taxing their DC business income.⁷

The next table compares the total tax burden data for an S corporation located in Prince George’s and Fairfax Counties and the District to the total tax burden in Montgomery County. The data show that for each owner of the business, business taxes would be lowest if the business was located in Montgomery County.

Table 4-7. Percent Difference from Montgomery County Total Tax Burden

Location of Business	Residence of Owner		
	DC	Maryland	Virginia
Montgomery	\$ 233,117	\$ 233,117	\$ 186,487
Prince George's	2% higher	2% higher	2% higher
Fairfax	35% higher	35% higher	29% higher
DC	46% higher	13% higher	108% higher

The data in the next three tables break out the entity-level and individual-level tax liabilities in this scenario. The tables differ by the state of residence of the business owner – Table 4-8 is a District resident, Table 4-9 is a Maryland Resident, and Table 4-10 is a Virginia resident. The data show that:

- Regardless of the state of residence of the business owner, the tax burden is lowest for a business located in Montgomery County.
- A Virginia resident with a business located in Maryland or Virginia has a lower tax burden compared to District and Maryland residents with a business in the same location.
- However, a Virginia resident with a business in the District will pay significantly higher taxes because the Commonwealth does not allow Virginia residents a tax credit against taxes owed in Virginia for business taxes paid in the District.

⁶ Businesses with 80% or more of gross income derived from personal services rendered by the business owners and where capital is not a material income-producing factor are not required to file a District tax return. This exception would include most law firms, lobbying firms, and other types of professional service firms, which are prevalent in the District.

⁷ *Business Case Studies* at p. 6.

**Table 4-8. Owner is District Resident
S Corporation Tax Burden, Single Jurisdiction of Operation**

Location of Business	Taxes (\$)		Total Taxes	Difference from MoCo
	Entity-Level	Individual-Level		
Montgomery	\$ 186,487	\$ 46,630	\$ 233,117	\$ --
Prince George's	190,582	46,544	237,126	4,009
DC	263,738	--	263,738	30,621
Fairfax	223,411	90,932	314,343	81,226

Source: *Business Case Studies*

**Table 4-9. Owner is Maryland Resident
S Corporation Tax Burden, Single Jurisdiction of Operation**

Location of Business	Taxes (\$)		Total Taxes	Difference from MoCo
	Entity-Level	Individual-Level		
Montgomery	\$ 19,097	\$ 214,020	\$ 233,117	\$ --
Prince George's	23,500	213,626	237,126	4,009
Fairfax	223,411	90,932	314,343	81,226
DC	263,738	76,304	340,042	106,925

Source: *Business Case Studies*

**Table 4-10. Owner is Virginia Resident
S Corporation Tax Burden, Single Jurisdiction of Operation**

Location of Business	Taxes (\$)		Total Taxes	Difference from MoCo
	Entity-Level	Individual-Level		
Montgomery	\$ 186,487	\$ --	\$ 186,487	\$ --
Prince George's	190,582	--	190,582	4,095
Fairfax	108,307	132,369	240,676	54,189
DC	263,738	123,432	387,170	200,683

Source: *Business Case Studies*

C. Summary of Recent Business Tax Structure Reviews in Maryland and the District

Maryland Economic Development and Business Climate Commission. In March 2014, the President of the Senate and the Speaker of the House of Delegates in the Maryland legislature appointed a private-sector commission to review Maryland’s economic development climate and to develop recommendations for improvement. The Maryland Economic Development and Business Climate Commission (“Augustine

Commission⁸) issued an interim report in February 2015. The report outlined five challenges that impact Maryland's efforts to foster a competitive business community in the State:

- A widely perceived anti-business attitude,
- An intrusive and complex regulatory system,
- A noncompetitive tax structure,
- An underdeveloped physical infrastructure, and
- A shortage of risk capital to support start-up firms, particularly in the high-tech sphere.⁹

In January 2016, the Commission released a Phase II report that specifically examined Maryland's business tax structure. The report included 14 business tax-related recommendations and suggested implementing the first 13, allowing the State to assimilate to the changes, and then implementing the final recommendation – to lower tax rates and brackets to reduce business tax burdens.¹⁰

Of 14 bills introduced in the Maryland House and/or Senate during the 2016 legislative session based on the report's recommendations, one bill addressing the implementation and review of tax credits was enacted into law.¹¹

D.C. Tax Revision Commission. The Council of the District of Columbia created the D.C. Tax Revision Commission ("Tax Revision Commission") in 2011 to develop recommendations for the Mayor and Council regarding apportionment of taxes, the tax base, and competitiveness with surrounding jurisdictions.¹² The Tax Revision Commission examined both individual and business taxes in the District.

Among other findings in its May 2014 Final Report, the Tax Revision Commission found that "[t]he District's business franchise tax and commercial property tax rates at the highest in the region and among the highest in the nation," which could lead to a "perception problem" surrounding the District's business climate.¹³

Recommendations regarding business taxes included lowering the business franchise tax rate from 9.975% to 8.25%, exempting investing funds from the unincorporated business franchise tax, and levying a "local services fee" on non-government employers in the District of \$100 per employee per year. In July 2014, the D.C. Council enacted legislation that established a phased-in timeframe for lowering the business franchise tax and created an exemption for investing funds from the unincorporated business franchise tax, among other things.¹⁴

⁸ The Commission commonly is called the Augustine Commission, referring to the Commission's Chair, Norman Augustine, the retired Chair and CEO of Lockheed Martin Corp. and a former Under Secretary of the Army. See <http://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/020000/020859/unrestricted/20150235e.pdf> (interim report) and <http://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/021000/021861/unrestricted/20160111e.pdf> (final report).

⁹ *Report of the Maryland Economic Development and Business Climate Commission, Phase II: Taxes*, January 2016, at p. xi.

¹⁰ *Ibid.* at p. xiii.

¹¹ See

<http://www.mgaleg.maryland.gov/webmga/frmMain.aspx?pid=sponpage&tab=subject3&id=ecdevbusclcom&stab=02&ys=2016RS>.

¹² <http://www.dctaxrevisioncommission.org/>

¹³ Final Report, D.C. Tax Revision Commission, May 2014, at p. 4-5. See <http://www.dctaxrevisioncommission.org/#!/final-report/c4cu>.

¹⁴ See <https://www.pwc.com/us/en/state-local-tax/newsletters/salt-insights/assets/pwc-district-columbia-emergency-legislation-brings-tax-changes.pdf>.

CHAPTER 5. Findings

The cost of living or doing business varies across jurisdictions based on the amount of taxes imposed by the federal, state, and local governments. Tax revenue is one source of government revenue to fund programs and services. Residents living in a jurisdiction pay taxes such as state and local income taxes, property taxes, and sales taxes. Businesses that operate in a jurisdiction may pay corporate income taxes and/or gross receipt taxes.

This Office of Legislative Oversight (OLO) report analyzes the tax burden for individuals living in and businesses based in Montgomery County compared to: Prince George’s, Howard, and Frederick Counties in Maryland; Fairfax County in Virginia; and the District of Columbia. The following presents a summary of OLO’s findings.

Background Findings

Finding #1. The demographics of the six local jurisdictions compared in this report vary considerably by population, employment rates, household income, and poverty levels.

In order to provide context for the tax burden analysis discussed later, the following table provides data on population, housing, employment/income, and businesses in each jurisdiction. As shown, the demographics vary throughout the region. Among the selected jurisdictions, Montgomery County has the second highest population and school enrollment, along with the third highest median housing value and median household income.

	Montgomery	Prince George's	Howard	Frederick	Fairfax	DC
Population						
Total population	1,030,447	904,430	309,284	243,675	1,137,538	658,893
School System Enrollment	153,852	128,937	53,637	40,668	186,785	47,548
Housing						
Median Housing Value	\$460,900	\$254,000	\$443,300	\$309,900	\$519,300	\$486,900
Employment and Business						
Unemployment Rate	3.3%	4.5%	3.3%	3.9%	3.0%	6.6%
Median Household Income	\$97,765	\$72,290	\$107,490	\$84,203	\$110,674	\$71,648
Poverty Rate - All families	4.6%	7.0%	4.8%	4.2%	4.3%	14.2%
Total Business Establishments	26,739	14,281	8,946	5,955	29,556	21,919

Source: All Data Came from US Census ACS 2014 1-Year Estimates except Unemployment Rate (Bureau of Labor Statistics) and School Enrollment (school system websites)

Finding #2. Among the six jurisdictions, Montgomery County has the fourth highest per capita total revenue and the third highest per capita tax revenue. The District is a significant outlier with almost \$21,000 in total revenue per capita, over three times more than any of the other jurisdictions.

The sources of operating revenue among the six jurisdictions vary significantly with a mixture of tax revenue, non-tax revenue such as fees and fines, and revenue from the state and/or federal governments, as shown in the table below. For example, the District and Fairfax County each project collecting around \$2.8 billion in non-tax revenue in FY16 – making up 20% of the District’s operating budget and 37% of Fairfax’s. And, while Montgomery and Fairfax Counties have similarly-sized populations (1.0 million and 1.1 million, respectively), Fairfax’s FY16 total projected revenue is 47% higher than Montgomery’s (\$5.1 billion vs. \$7.5 billion).

FY16 Total Revenue, by Revenue Type (\$ in millions)

Source of Revenue	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick*
Total Revenue	\$5,125.5	\$13,829.5	\$7,536.9	\$3,537.0	\$1,794.4	\$997.4
Tax Revenue	\$3,461.8	\$6,950.2	\$3,782.8	\$1,611.1	\$1,077.4	\$490.7
Non-Tax Revenue	\$622.0	\$2,783.8	\$2,759.9	\$436.5	\$378.4	\$185.2
Intergovernmental Revenue	\$1,041.7	\$3,724.0	\$994.3	\$1,489.4	\$338.6	\$327.7
Other Revenue	--	\$809.2	--	--	--	--
% of Total Revenue						
Tax Revenue	68%	50%	50%	46%	60%	49%
Non-Tax Revenue	12%	20%	37%	12%	21%	19%
Intergovernmental Revenue	20%	24%	13%	42%	19%	33%
Other Revenue	--	6%	--	--	--	--
Total Per Capita Revenue	\$4,974	\$20,970	\$6,626	\$3,911	\$5,802	\$4,093
Tax Revenue	\$3,359	\$10,548	\$2,014	\$1,781	\$3,484	\$2,014
Non-Tax Revenue	\$604	\$4,225	\$2,426	\$483	\$1,223	\$760
Intergovernmental Revenue	\$1,011	\$4,969	\$874	\$1,647	\$1,095	\$1,345

*Frederick's budget subtracts \$6.2 million in "interfund transfers" for a final revenue total of \$997.4 million.

Source: FY16 Approved Operating Budgets

Finding #3. Property tax and income tax combined account for the majority of tax revenue in five of the six jurisdictions. Fairfax County does not have an income tax and derives 85% of its tax revenue from property tax alone.

The breakdown of the individual sources of tax revenue varies among the jurisdictions. Approximately 85-95% of tax revenue in the four Maryland jurisdictions and 62% in the District comes from property tax and local income tax combined. Fairfax County, which has 25,000 more owner-occupied houses than Montgomery County and has the highest median house value among the jurisdictions, collects 85% of its tax revenue from property tax alone.

The jurisdictions also differ in the types of taxes imposed. The District and Fairfax County, for example, collect a sales tax while the other four jurisdictions do not. The District and Fairfax County are also the only jurisdictions that impose a gross receipts tax on business (a tax on the total gross revenue of a company), making up 6% (\$443 million) and 4% (\$150 million) of their respective annual tax revenues.

Individual and Business Tax Burdens in Local Jurisdictions

FY16 Total Tax Revenue, by Revenue Source (\$ in millions)

Source of Revenue	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick
Total Tax Revenue	\$3,461.8	\$6,950.2	\$3,782.8	\$1,611.1	\$1,077.4	\$490.7
% of Total Budget	68%	50%	50%	46%	60%	49%
Property Tax	\$1,582.6	\$2,410.2	\$3,197.6	\$812.8	\$633.8	\$276.7
Income Tax	\$1,433.4	\$1,862.0	--	\$550.9	\$407.4	\$192.9
Local Sales Tax	--	\$1,304.7	\$175.8	--	--	--
Business Franchise/Licensing Tax	--	\$443.1	\$150.4	--	--	--
Transfer/Recordation Tax	\$163.0	\$390.1	\$24.9	\$123.0	\$21.0	\$19.6
Energy/Consumption Tax	\$206.2	\$154.2	\$49.9	\$63.4	--	--
Telecommunications Tax	\$50.4	\$52.5	--	\$34.7	--	--
Other Local Tax Revenue	\$26.1	\$333.3	\$184.2	\$26.3	\$15.3	\$1.5
% of Tax Revenue						
Property Tax	46%	35%	85%	50%	59%	56%
Income Tax	41%	27%	--	34%	38%	39%
Local Sales Tax	--	19%	5%	--	--	--
Business Franchise/Licensing Tax	--	6%	4%	--	--	--
Transfer/Recordation Tax	5%	6%	1%	8%	2%	4%
Energy/Consumption Tax	6%	2%	1%	4%	--	--
Telecommunications Tax	1%	1%	--	2%	--	--
Other Local Tax Revenue	1%	5%	5%	2%	1%	<1%

Source: FY16 Approved Operating Budgets

Individual Tax Burden Findings

The District of Columbia’s Office of Revenue Analysis (ORA) annually completes an extensive analysis of individual tax burdens for local jurisdictions entitled *Tax Rates and Tax Burdens: Washington Metropolitan Area* [hereinafter “the DC report”]. OLO determined that the Office uses a sound methodology to produce the report, with Executive Branch staff concurring with this assessment. For this OLO report, OLO summarized the analysis of the DC Office and supplemented with analysis of Howard and Frederick Counties (with the assistance of the ORA).

The DC report compares the tax burden for a hypothetical family in each jurisdiction at five different income levels, including both state and local taxes. The analysis focuses on four primary taxes – property, income, sales and use, and automobile taxes and does not include all tax breaks available to individuals. *Note that the DC report compares the tax burden for a hypothetical family in each jurisdiction but does not compare the level of services/programs in each jurisdiction.*

In order to analyze tax burdens across the region, the DC report includes critical assumptions, including household characteristics, sources of income, and consumption patterns, summarized in the next table.

Select Assumptions from DC December 2015 Tax Burden Report

Category	Assumption
# of Adults in Family	2 (married, both wage-earning, filing joint tax returns, earnings split 70/30)
# of Children in Family	1 (school-age)
Gross Income	Either \$25K, \$50K, \$75K, \$100K, or \$150K
Income Sources	Wages, interest income, capital gains
Deductions	Medical, deductible taxes, mortgage interest, contributions, and miscellaneous
Home Ownership	\$25K Family – renters All others – own a single-family home
Car Ownership	\$25K, \$50K Families – 1 car \$75K, \$100K, and \$150K Families – 2 cars

The latest DC Report was issued in December 2015, using tax rates from 2014-2015. Note that since that time, some of the jurisdictions in this report have amended tax rates and laws. For a more detailed review of the methodology used, see Chapter Three of this report or the DC Report at <http://cfo.dc.gov/node/1137801>.

Finding #4. Among the six jurisdictions, a family of three in Montgomery County had the third highest tax burden for all income levels except \$50K, where the County had the fifth highest tax burden.

The next table summarizes the tax burdens for a hypothetical family of three in selected jurisdictions with various income levels:

- In all jurisdictions, the tax burden as a percent of income for the lowest income family (\$25K) was higher than the tax burden as a percent of income for the highest income family (\$150K).
- Frederick County has the highest tax burden for four of the five income levels analyzed in the report (incomes of \$50K - \$150K).
- Montgomery County ranks third in tax burden in income levels and \$75K and above, with Howard and Frederick Counties having the two highest burdens in those in levels.

Individual and Business Tax Burdens in Local Jurisdictions

Major 2014 State and Local Tax Burdens for a Family of Three in
Select Washington Metro Area Jurisdictions (rank in parentheses)

Income Level	Tax	Montgomery	DC	Fairfax	Prince George's	Howard	Frederick	Average
\$25,000	Income	-419	-732	0	-419	0	0	-393
	Real Estate	3,053	3,053	3,053	3,053	2,033	3,053	2,883
	Sales and Use	497	749	560	497	497	497	550
	Automobile	214	219	313	214	214	214	231
	Total	\$3,345	\$3,289	\$3,926	\$3,345	\$2,744	\$3,764	\$3,330
	% of Income	13.4% (3)	13.2% (4)	15.7% (1)	13.4% (3)	11.0% (5)	15.1% (2)	13.3%
\$50,000	Income	2,135	1,557	1,489	2,119	2,115	1,978	1,899
	Real Estate	1,033	759	1,819	1,230	1,994	2,205	1,507
	Sales and Use	603	946	669	603	603	603	671
	Automobile	214	219	322	214	214	214	233
	Total	\$3,985	\$3,481	\$4,299	\$4,166	\$4,926	\$5,000	\$4,310
	% of Income	8.0% (5)	7.0% (6)	8.6% (3)	8.3% (4)	9.9% (2)	10.0% (1)	8.6%
\$75,000	Income	3,348	2,577	2,357	3,392	3,365	3,195	3,039
	Real Estate	2,630	1,437	2,728	2,085	2,991	3,307	2,530
	Sales and Use	707	1,115	767	707	707	707	785
	Automobile	374	426	714	374	374	374	439
	Total	\$7,059	\$5,555	\$6,566	\$6,558	\$7,437	\$7,583	\$6,793
	% of Income	9.4% (3)	7.4% (6)	8.8% (4)	8.7% (5)	9.9% (2)	10.1% (1)	9.1%
\$100,000	Income	5,255	4,148	3,597	5,275	5,229	5,023	4,755
	Real Estate	3,507	2,116	3,638	2,941	3,988	4,409	3,433
	Sales and Use	846	1,291	911	846	846	846	931
	Automobile	512	555	803	512	512	512	568
	Total	\$10,120	\$8,110	\$8,949	\$9,574	\$10,575	\$10,790	\$9,686
	% of Income	10.1% (3)	8.1% (6)	8.9% (5)	9.6% (4)	10.6% (2)	10.8% (1)	9.7%
\$150,000	Income	8,301	7,158	5,862	8,349	8,265	7,944	7,647
	Real Estate	5,260	3,472	5,456	4,651	5,982	6,613	5,239
	Sales and Use	1,056	1,588	1,097	1,056	1,056	1,056	1,152
	Automobile	486	529	1,984	486	486	486	743
	Total	\$15,103	\$12,747	\$14,399	\$14,542	\$15,789	\$16,099	\$14,780
	% of Income	10.1% (3)	8.5% (6)	9.6% (5)	9.7% (4)	10.5% (2)	10.7% (1)	9.9%

Finding #5. When including public utility and water/sewer charges, Montgomery County rises from third highest *tax burden* to highest *total burden* at income levels of \$75K and \$100K – with a difference of less than \$250 separating Montgomery County from the third ranked jurisdiction.

OLO completed additional analysis on the impact of public utility taxes and water/sewer charges to get a more comprehensive look at the overall burden for a family in the selected jurisdictions. To create a hypothetical public utility tax burden, OLO determined the average use for electricity and natural gas in the region. For water/sewer charges, OLO used data on average daily water consumption.¹

The next table summarizes the overall burden for the hypothetical family of three, including the previous tax burden, public utility taxes and water/sewer charges:

- The average burden for water/sewer and public utility taxes for the six jurisdictions was \$821 for families owning houses (income of \$50K and above), with Frederick and Howard Counties having significantly lower burdens for public utility and water/sewer.
- At income levels of \$50K and above, the total burden is 10-11% of income in all jurisdictions except for families living in Washington, D.C., who have a slightly lower burden at about 9% of income.
- At income levels of \$75K and above the total burden for families in Montgomery, Howard, and Frederick Counties are within \$250 of each other, while families in Fairfax and Prince George's Counties have slightly lower burdens.

¹ According to the US Energy Information Administration, the monthly average consumption of electricity was 1,117 kWh for the South Atlantic Region. According to Washington Gas, average monthly consumption of natural gas was 66.0 therms. According to Washington Suburban Sanitary Commission, people use, on average, 70 gallons of water per person per day and a family of three would use an estimated 210 gallons per day.

Individual and Business Tax Burdens in Local Jurisdictions

Major 2014 State and Local Tax Burdens for a Family of Three in Selected Washington Metro Area Jurisdictions, Including Public Utility and Water/Sewer Charges (rank in parentheses)*

Income Level		Montgomery	DC	Fairfax	Prince George's	Howard	Frederick	Average
\$25,000	Tax Burden	3,345	3,289	3,926	3,345	2,744	3,764	3,402
	Public Utility Only ⁺	234	151	233	128	0	0	124
	Total Burden	\$3,579	\$3,440	\$4,159	\$3,473	\$2,744	\$3,764	\$3,527
	% of Income	14.3% (3)	13.8% (5)	16.6% (1)	13.9% (4)	11.0% (6)	15.1% (2)	14.1%
\$50,000	Tax Burden	3,985	3,481	4,299	4,166	4,926	5,000	4,310
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$5,115	\$4,453	\$5,200	\$5,190	\$5,453	\$5,371	\$5,130
	% of Income	10.2% (5)	8.9% (6)	10.4% (3)	10.4% (4)	10.9% (1)	10.7% (2)	10.30%
\$75,000	Tax Burden	7,059	5,555	6,566	6,558	7,437	7,583	6,793
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$8,189	\$6,527	\$7,467	\$7,582	\$7,964	\$7,954	\$7,614
	% of Income	10.9% (1)	8.7% (6)	10.0% (5)	10.1% (4)	10.6% (2)	10.6% (3)	10.20%
\$100,000	Tax Burden	10,120	8,110	8,949	9,574	10,575	10,790	9,686
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$11,250	\$9,082	\$9,850	\$10,598	\$11,102	\$11,161	\$10,507
	% of Income	11.3% (1)	9.1% (6)	9.8% (5)	10.6% (4)	11.1% (3)	11.2% (2)	10.50%
\$150,000	Tax Burden	15,103	12,747	14,399	14,542	15,789	16,099	14,780
	Water/Public Utility	1,130	972	901	1,024	527	371	821
	Total Burden	\$16,233	\$13,719	\$15,300	\$15,566	\$16,316	\$16,470	\$15,601
	% of Income	10.8% (3)	9.1% (6)	10.2% (5)	10.4% (4)	10.9% (2)	11.0% (1)	10.40%

* These scenarios only calculate public utility and water/sewer charges and do not include other charges associated with public utilities or water/sewer use. Further, the consumption numbers were not adjusted for house size.

+ OLO assumed that water and sewer charges would be included in rent for an apartment and would not be paid directly by the family at the \$25K income level.

Business Tax Burden Findings

In September 2013, the DC Tax Revision Commission² received a report from the accounting firm of Councilor Buchanan & Mitchell comparing the tax burden of running a business in the District with the tax burden for running a business in surrounding jurisdictions. *Case Studies of Business Taxes in the District of Columbia: A Comparison of Neighboring Jurisdictions*³ examines the tax burden of different types of businesses entities in six jurisdictions. OLO summarized the report's findings for four of the jurisdictions – Montgomery, Prince George's, and Fairfax Counties and the District – and did not include findings for the City of Alexandria and Arlington County, Virginia. The report did not include Howard or Frederick Counties in the analysis.

Business Case Studies examines the tax implications for business owners operating different types of business entities. The scenarios examine two types of business structures that are treated differently by the Internal Revenue Service (IRS) for taxing purposes.⁴ They are:

- **C Corporations** – these business entities pay taxes on net business income at the corporate level. When corporate income is distributed to business owners, that income is taxed (again) as personal income.
- **Pass-Through Entities (e.g., S corporations, LLCs, partnerships)** – these businesses do not pay taxes on income at the corporate level. Business income (or losses) are divided among the business owners, who report the income (or loss) on their individual tax returns.

The jurisdictions in *Business Case Studies* impose a variety of taxes on businesses in the jurisdictions, including:

- **Corporate Income Tax:** a state- or District-levied tax on profits of U.S. corporations.
- **Personal Property Tax:** a local- or District-levied tax on the personal property owned by a business.
- **Individual Income Tax:** owners of pass-through entities claim their share of income from the business entity on their individual income tax returns.
- **Gross Receipts Tax:** a local- or District-levied tax on the total gross revenue of a company, similar to a sales tax but paid by the seller of goods or services.
- **Tax Credits:** an amount of money that can offset taxes owed to a government.

As with the individual tax burden analysis, some of the tax rates used in *Business Case Studies* have changed since the publication of the report.

² The purpose of the Commission, among other things, was to develop recommendations for the Mayor and Council regarding apportionment of taxes, the tax base, and competitiveness with surrounding jurisdictions.

<http://www.dctaxrevisioncommission.org/>

³ Aceituno, R. and Yingst, K., *Case Studies of Business Taxes in the District of Columbia: A Comparison of Neighboring Jurisdictions*, September 2013 [hereinafter "*Business Case Studies*"].

http://media.wix.com/ugd/ddda66_2587ee60d87e9069a51195947320308c.pdf

⁴ C corporations and S corporations are similar. S corporations (which are pass-through entities) are treated differently for taxing purposes and they have certain restrictions and limitations such as a limit on the number shareholders in the corporation (100) and the types of stock they can issue (only one class of stock), for example.

Finding #6. In the *Business Case Studies* scenarios, with only two exceptions, taxes are lowest for businesses located in Montgomery County.

Business Case Studies examines how different corporate structures affect the tax burden of a hypothetical business in different jurisdictions. Two of the case studies summarized in this OLO report include a C corporation and one case study includes a pass-through entity. Each case study uses the same assumptions for variables such things as gross revenue, net profits before taxes, and business personal property investments.

Among the six scenarios that OLO summarized from *Business Case Studies*, the tax burden is the lowest in Montgomery County in four of the scenarios. The next table summarizes the annual business tax burden for each business based on the location of the businesses’ base of operations.

Summary of Total State/Local Annual Tax Burdens for Case Studies

Case Study	Scenario	Montgomery Tax Burden	Difference from Montgomery Tax Burden		
			Base of Operations		
			Prince George’s	Fairfax	DC
C Corporation	(a) Single jurisdiction operation	\$216,378	+2%	+14%	+22%
	(b) Multiple jurisdiction operation	\$242,497	+2%	-3%	+7%
High-Tech Company	C corporation receiving high-tech-business-related tax credits	\$126,378*	+2%	+2%	Years 1-5: -86% Years 6+: +27%
Pass-Through Entity	(a) Owned by DC Residents	\$233,117	+2%	+35%	+13%
	(b) Owned by MD Residents	\$233,117	+2%	+35%	+46%
	(c) Owned by VA Residents	\$186,487	+2%	+29%	+108%

*In the first five years, the District would have the lowest total annual tax burden. In years six and beyond, Montgomery County would have the lowest total annual tax burden.

Source: *Business Case Studies*

The differences in tax burdens among the four jurisdictions stem primarily from:

- Different business tax rates in the jurisdictions.
- Different applicable taxes – both the District and Fairfax County impose a gross receipts tax on businesses, which is a tax on the total gross annual revenue of a company. Maryland jurisdictions do not.
- Different approaches to taxation – most states, including Maryland and Virginia, treat pass-through entities in the same way as the federal government – allowing business owners to report profits on and pay business taxes via their individual tax returns (not imposing the state-level business income tax typically levied against C corporations). The District differs and imposes an Unincorporated Business Franchise Tax on pass-through entities operating in the District.
- Different tax law – the Commonwealth of Virginia does not allow Virginia residents who own a pass-through entity in the District to take a credit against their Virginia income tax for the Unincorporated Business Franchise Tax paid in the District. Maryland allows Maryland residents to take a credit.

CHAPTER 6. Agency Comments

The Office of Legislative Oversight circulated a final draft of this report to the Chief Administrative Officer for Montgomery County review. OLO appreciates the time taken by County Government representatives to review the draft report and provide comments. OLO's final report incorporates technical corrections provided by County staff. The written comments received from the Chief Administrative Officer are attached in their entirety beginning on the next page.



OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

MEMORANDUM

June 16, 2016

Isiah Leggett
County Executive

TO: Chris Cihlar, Director, Office of Legislative Oversight
FROM: Timothy L. Firestine, Chief Administrative Officer *Timothy L. Firestine*
SUBJECT: OLO Draft Report 2016-17: Review of Individual and Business Tax Burdens in Local Jurisdictions

Thank you for providing a copy of the OLO Draft Report 2016-17: Review of Individual and Business Tax Burdens in Local Jurisdictions.

The report provides detailed and comparative analyses of the tax burden for individuals and businesses in each of the six jurisdictions in the greater Washington area. This report contributes to a better understanding of what our residents and businesses pay, not only in terms of the total tax burden but also in terms of the various taxes levied in each of the jurisdictions. For example, the report demonstrates that the tax burden for a family of three in Montgomery County ranks third of the six jurisdictions while for a family of three with an income level of at least \$50k the County ranks fifth of the six jurisdictions, confirming the progressive nature of the County's tax burden. Moreover, businesses in Montgomery County (excluding high-technology) face the lowest tax burden in the region.

The report confirms that the County has achieved much in terms of controlling its tax burden, creating a progressive tax burden for its residents most in need of support, and creating a strong environment where business can thrive. If you have questions or need additional information, please contact Robert Hagedoorn, Chief, Division of Fiscal Management.

TLF:rh

c: Fariba Kassiri, Assistant Chief Administrative Officer
Bonnie Kirkland, Assistant Chief Administrative Officer
Joe Beach, Director, Department of Finance
Jennifer Hughes, Director, Office of Management and Budget
Robert Hagedoorn, Chief, Division of Fiscal Management



Appendix

Government of the
District of Columbia



Muriel Bowser
Mayor

Jeffrey DeWitt
Chief Financial Officer

Tax Rates and Tax Burdens

Washington Metropolitan Area

Including: Washington, D.C.

Maryland

Charles Co.
Montgomery Co.
Prince George's Co.

Virginia

Alexandria
Arlington Co.
Fairfax City
Fairfax Co.
Falls Church
Loudoun Co.
Prince William Co.

2014

Issued December 2015

Part I

A Comparison of Tax Burdens in Selected Washington Metropolitan Area Jurisdictions

2014

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 utilized 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 taking into account 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 imposes various taxes to raise funds 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. All other income is assumed to be split evenly.

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 for four major tax categories: individual income

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.

tax, real property tax, sales tax, and automobile-related taxes.

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 2014 in the District of Columbia, Maryland, and Virginia are shown in Table 1, on page 6. Table 5, page 15, 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 6, page 16.

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 9.

The assumptions used to derive the automobile tax burdens are contained in Table 4, page 14. Finally, selected state and local tax rates in the Washington metropolitan area for fiscal year 2014 - 2015 are outlined in Table 7, page 20.

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, D.C. Metropolitan Area are presented in Table 1 (page 6).

The five income levels used in this study are divided between wage and salary income and other types of income. The table below shows the wages and salaries, interest income and capital gains for Washington, D.C. married filers who itemize deductions. The following data have been updated from the previous year for all of the income categories using 2013 tax year data from the IRS.

Gross Income		Wages and Salaries	Interest	Long-Term Capital Gains 1/
\$25,000	Spouse 1	\$16,215	\$411	\$1,424
	Spouse 2	6,946		
\$50,000	Spouse 1	\$34,282	\$416	\$610
	Spouse 2	14,692		
\$75,000	Spouse 1	\$49,317	\$568	\$3,979
	Spouse 2	21,136		
\$100,000	Spouse 1	\$68,649	\$551	\$1,378
	Spouse 2	29,421		
\$150,000	Spouse 1	\$101,175	\$714	\$4,750
	Spouse 2	43,361		

1/ Assumes a three-year holding period

Because the Federal Earned Income Tax credit (EITC) at the \$25,000 income level in some states will determine the state's EITC, and because several states allow the deduction of all or part of an individual's federal income tax liability in computing the state income tax, it is necessary to compute the 2014 federal individual income tax at each income level using the above assumptions. Many states in 2014 allowed taxpayers to begin their state income tax computations with federal adjusted gross income (AGI) or federal taxable income. Other states do not use either of these two measures of federal income as a starting point.

Total itemized deductions, which were also used in the federal tax computation, were assumed to be equal to the following, where the deductions have been adjusted to reflect Washington, D.C. Statistics of Income (SOI) income levels for tax year 2013.

Gross Income Level					
Deduction	\$ 25,000	\$ 50,000	\$ 75,000	\$100,000	\$150,000
Medical (Gross)	7,154	7,584	8,619	9,574	12,258
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	5,279	3,834	2,994	2,074	1,008
Deductible Taxes	2/	2/	2/	2/	2/
Mortgage Interest	3/	3/	3/	3/	3/
Contribution Deduction	2,462	3,359	4,726	4,441	4,048
Gross Miscellaneous	3,140	4,503	4,120	3,707	4,491
Nondeductible 4/	<u>-500</u>	<u>-1,000</u>	<u>-1,500</u>	<u>-2,000</u>	<u>-3,000</u>
Net Miscellaneous Deduction	2,640	3,503	2,620	1,707	1,491
Other Miscellaneous Deductions	287	164	325	225	123
Total Deductions-without taxes And mortgage interest	10,670	10,862	10,667	8,448	6,671

- 1/ Nondeductible medical equal 7.5 percent of federal A.G.I. All or part of medical deductions may be allowed in some states.
- 2/ The tax deduction varies from state to state and is based on real and personal property taxes computed in the 2014 study and individual income taxes computed in the 2013 study.
- 3/ Mortgage interest is based on 5th year interest paid on a home purchased in 2009 at an interest rate of 4.17%.
- 4/ Nondeductible miscellaneous deductions equal 2 percent of A.G.I.

The itemized deductions shown above are used in the calculation of the 2014 tax burdens. The 2014 deductible real and personal property taxes computed in the current study are used for the 2014 property tax deduction. For the 2014 state and local individual income tax deduction, 2013 data were used as a proxy. These figures were used in computing the 2014 federal income tax burden.

Except at the \$25,000 income level, the Maryland individual income tax tends to be less progressive because the local tax rates are added to the state tax liability. The highest rate in Maryland is 5.75 percent and is not reached until taxable income exceeds \$250,000 for single filers (\$300,000 for joint 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 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 is not reached until the \$350,000 taxable income level is exceeded. At the \$25,000 income level, 40 percent of the federal earned income credit is deducted from the District's tax liability.

**Table 1: Individual Income Tax
Washington Metropolitan Area
January 1, 2014**

PERSONAL EXEMPTIONS	EXEMPTIONS	TAXABLE INCOME 5/	RATES
DISTRICT OF COLUMBIA			
Single	\$1,725	\$0 - \$10,000 \$10,001-\$40,000 \$40,001-\$350,000 Over \$350,000	4.0% \$ 400 + 6.00% of excess > \$ 10,000 \$ 2,200 + 8.50% of excess > \$ 40,000 \$28,550 + 8.95% of excess > \$350,000
Married Filing Separately	\$1,725		
Married Filing Jointly	\$3,450		
Head of Household	\$3,450		
Dependent (additional)	\$1,725		
Blind (additional)	\$1,725		
Age 65 and over (additional)	\$1,725		
Standard Deduction	1/		
MARYLAND 2/			
Single	\$3,200	\$0 - \$1,000 \$1,001-\$2,000 \$2,001-\$3,000 \$3,001-\$150,000 \$150,001-\$175,000 \$175,001-\$225,000 \$225,001-\$300,000 Over \$300,001	2.0% \$ 20 + 3.00% of excess > \$1,000 \$ 50 + 4.00% of excess > \$2,000 \$ 90 + 4.75% of excess > \$3,000 \$7,072.50 + 5% of excess > \$150,000 \$8,322.50 + 5.25% of excess > \$175,000 \$10,947.50 + 5.5% of excess > \$225,000 \$15,072.50 + 5.75% of excess > \$300,000
Married Filing Separately	\$3,200		
Married Filing Jointly	\$6,400		
Head of Household	\$3,200		
Dependent (additional)	\$3,200		
Blind (additional)	\$1,000		
Age 65 and over (additional)	\$1,000		
Standard Deduction	3/		
VIRGINIA			
Single	\$ 930	\$0 - \$3,000 \$3,001-\$5,000 \$5,001-\$17,000 Over \$17,000	2.0% \$ 60 + 3.00% of excess > \$ 3,000 \$ 120 + 5.00% of excess > \$ 5,000 \$ 720 + 5.75% of excess > \$17,000
Married Filing Separately	\$ 930		
Married Filing Jointly	\$1,860		
Head of Household	\$ 930		
Dependent (additional)	\$ 930		
Blind (additional)	\$ 800		
Age 65 and over (additional)	\$ 800		
Standard Deduction	4/		

Source: Survey of State Revenue Department Officials; State Web Sites.

1/ Married persons filing separately - \$2,075; all others - \$4,150.

2/ Maryland rates do not include local rates that may be as low as 1.25% in Worcester County and as much as 3.2% in Howard, Montgomery and Prince George's Counties.

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

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

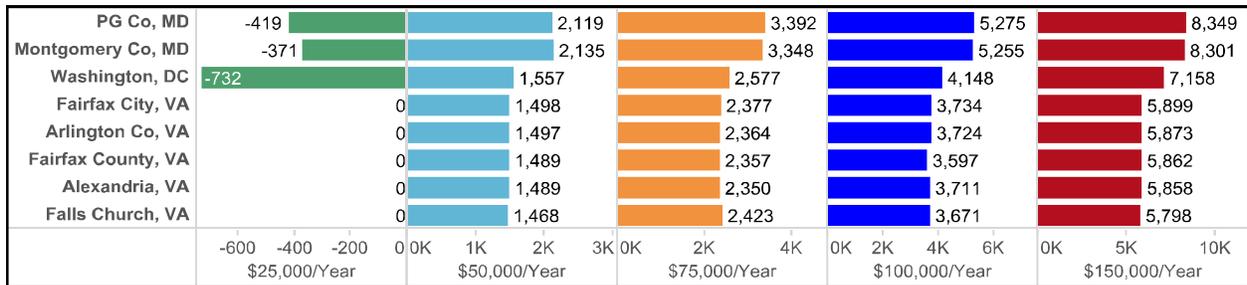
5/ Brackets and rates are for married filing jointly.

Income Tax Burdens

At the \$25,000 income level, the metropolitan area average individual income tax burden represents a negative 0.76 percent of family income (meaning the average family under these assumptions will receive a refund due to the EITC); the percentage burden is 3.31 percent at \$50,000; and increases to 3.53 percent at \$75,000; 4.14 percent at \$100,000; and 4.42 percent at \$150,000 (see Table 6, page 16).

The District’s individual income tax burden is lower than the metropolitan average at every level except at the \$100,000 and \$150,000 income levels. The District’s individual income tax burden ranges from a negative \$732, or negative 2.93 percent at the \$25,000 income level to \$7,158, or 4.77 percent at \$150,000. The Maryland counties of Montgomery and Prince George’s have individual income tax burdens that exceed the metropolitan average at every income level except at \$25,000. In those two Maryland counties, the average burden is a negative 1.58 percent at the \$25,000 income level, and 5.55 percent at the \$150,000 income level. For the Virginia area jurisdictions (Arlington Co., Alexandria, Fairfax City, Fairfax County, and Falls Church), the individual income tax burden is 0 percent at the \$25,000 level, and 3.91 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: 2014 Metro Area Individual Income Tax Burdens, \$



Source: ORA Analysis.

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, 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, while the Maryland and Virginia jurisdictions do not allow any deductions for the typical homeowner.

The property tax rates for each of the metropolitan jurisdictions, presented in Chart 2, page 10, indicate a variety of ranges in these rates. This information is based upon data received from the various local government research agencies and/or local assessors. In addition to tax rate differences, data presented in Table 2, page 9, 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, D.C. 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 Census Bureau's American Community Survey 2014. 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 (by 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 was also used in the 2012 and 2013 studies, makes the assumption that house values increase in a linear fashion with income.

A modification for this 2014 study is the use of median household income of *mortgage holders*, rather than the median income of all households, in order to calculate the linear multiplier. This change results in a lower multiplier, in general, which moderates the increase in house values as incomes rise. This change generally leads to lower property tax burdens overall than in the two previous years. However, any analysis should focus on the relative rankings within a given year. Table 2 on the following page 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 2014 study is derived by calculating an amortization schedule for the estimated value of a house purchased in 2009 for each income level in each city.

Table 2: Housing Value Assumptions For Major Washington Metropolitan Area Jurisdictions Calendar Year 2014 ^{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	\$159,544
\$ 75,000	\$239,317
\$100,000	\$319,089
\$150,000	\$478,633

Source: ORA Analysis.

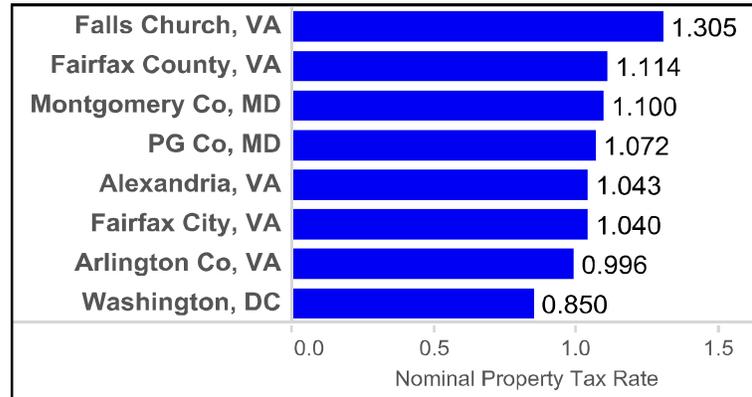
^{1/} For the \$50,000 income levels and above, data on 2014 median household incomes for mortgage holders and median house values for the Washington D.C., MSA were retrieved from the Census Bureau's ACS 2014. A multiplier was then applied to each income based on the relationship of median income to median home value.

As stated previously, the hypothetical family at the \$25,000 income level in this year's study is assumed to rent, rather than own a home. Given the 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 pay property tax indirectly through their rent, it was necessary to compute a percentage of said rent constituting property taxes. States with property tax circuit breaker programs estimate a "property tax rent equivalent" in order to calculate the amount that renters are paying in property taxes. On average, states assume that about 20 percent of rent goes toward paying property taxes. The property tax equivalent of rent in each city was first calculated by obtaining data on median rents for the Washington, D.C., MSA from the U.S. Department of Housing and Urban Development.²

² U.S. Department of Housing and Urban Development, "2014 50th Percentile Rent Estimates." Data for studio apartments used.

Chart 2: Nominal Property Tax Rates (Per \$100 of Assessed Value) For Select Jurisdictions in the Metro Area



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

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 (tax burdens at this level are assumed to be the same across the region). The real property tax burdens reflect differences among the metropolitan area jurisdictions in both real property tax rates and property tax relief provisions. The metropolitan area average burden for the real property tax is 2.96 percent of income at the \$50,000 income level; 3.23 percent at the \$75,000 level; 3.27 percent at the \$100,000 level; and 3.32 percent at the \$150,000 level (Table 6, page 16). Chart 3 on the following page presents property tax burdens in dollars, by income level, for each jurisdiction.

Multiplying the nominal real estate tax rate for each jurisdiction by its announced or statutorily prescribed assessment level derived the effective property tax rates (these effective tax rates do not include homestead, or other deductions or exemptions). The effective property tax rate is then multiplied by the housing values to determine the real property tax due at each income level for each jurisdiction.

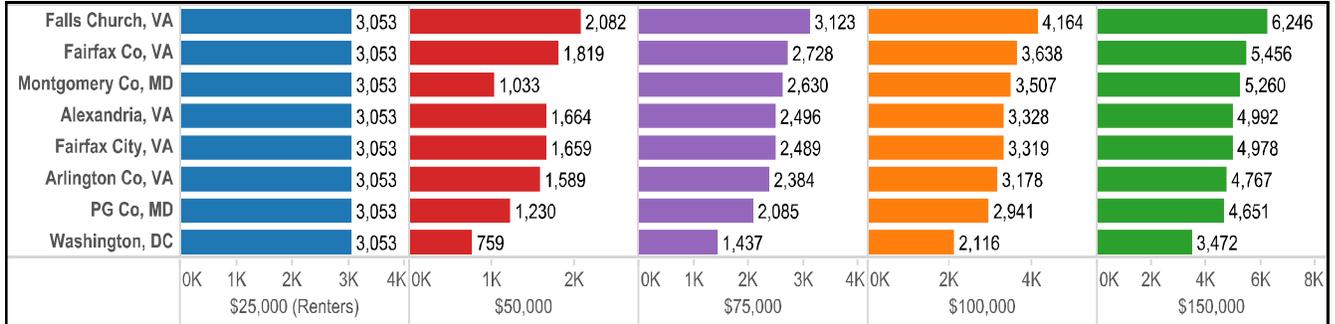
For the District of Columbia, the effective tax rate of \$0.85 per \$100 of assessed value is applied to the assessed market value of the home, less \$70,200 for the 2014 homestead exemption. Therefore, the owner/occupant, with \$50,000 in income would pay tax on \$89,344 of value; on \$169,117 at the \$75,000 income level; on \$248,889 of value at the \$100,000 income level; and on \$408,433 at the \$150,000 income level (each of these amounts represents the median house value at that income level, minus \$70,200 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, \$1.10 per \$100 of value in Montgomery County and \$1.072 per \$100 of value in Prince George’s County were used. These rates include the countywide rate, plus the state rate (\$0.112 per \$100 of value), but do not include all special taxing district rates that are presented in Table 12 (page 40).

Chart 3: 2014 Metro Area Real Property Tax Burdens, \$



Source: ORA Analysis.

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 for the metropolitan area for calendar year 2014 are presented below.

Table 3: Selected Sales Tax Rates

JURISDICTION	GENERAL RATE	GROCERIES	RESTAURANT MEALS	ALCOHOLIC BEVERAGES
DISTRICT OF COLUMBIA	5.75%	Exempt	10.0%	10.0%
MARYLAND	6.0%	Exempt	6.0%	9.0%
VIRGINIA	6.0% ^{1/}	2.5% ^{1/}	6.0%-9.0%	6.0%-7.5%

^{1/} Combined local and state rate.

The estimated sales tax burdens for hypothetical households at each of the five income levels are reported in Table 5, page 15. These burdens are derived from data supplied by the District of Columbia, Maryland, and Virginia. Tax officials in each area completed a survey

detailing the taxable status and the applicable sales tax rate of a listing of expenditure items. These items represent average consumption expenditures as determined by the U.S. Department of Labor.

Maryland has the highest general sales tax rate in the area, with a 6.0 percent general rate. However, factoring in local rates for the jurisdictions in this study, Virginia ties with Maryland as its combined state and local general sales tax rate is 6.0 percent. The District lowered its general sales tax rate from 6.0 to 5.75 percent at the end of 2013, but has higher rates for alcoholic beverages, restaurant meals, parking, and hotel rooms, than do Maryland and Virginia. 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.

Sales Tax Burdens

The District's sales tax burden is higher than the metropolitan area average at all income levels. As noted above, the general sales tax rate in the District of Columbia is 5.75 percent (lower than Maryland and Northern Virginia's 6 percent general rates). However, because of a multiple rate system in D.C. in which the District's sales tax rates on restaurant meals, alcohol, transient accommodations, and commercial parking services are higher than the general rate, the total tax burden is more than 5.75 percent of total taxable sales.

Sales tax burdens at each income level are the same in Alexandria, Arlington, Fairfax City, and Falls Church, and also represent the second highest burdens behind the District. Fairfax County, Virginia, has sales tax burdens that are slightly lower than its Virginia neighbors at each income level, though still higher than those in Maryland. Montgomery and Prince George's County in Maryland have the same sales tax burdens at each income level and are the lowest in this study.

Automobile Tax

Auto Tax Calculations

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 automobile tax burdens are shown in Table 4, page 14.

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 \$5.00 per \$100 of value and are presented in Table 7 (page 20). 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 (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 2014, the reimbursement to Alexandria covered 61 percent of the tax bill. 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. In Fairfax County, the resident's tax bill is reduced by 62 percent of the first \$20,000 of assessed value in calendar year 2014.

The basis for assessing the tax also differs among the Virginia area jurisdictions. Alexandria, Fairfax County, and Prince William County use the trade-in value; the clean loan value is used in Arlington and Loudoun Counties. For both methods, however, values are obtained from the January 2014 National Automobile Dealers Association Used Car Pricing Guide, Eastern Division.

The District of Columbia's registration fee is the highest in the metropolitan area. In the District, the fee for a vehicle weighing less than 3,500 pounds (Class I) is \$72; for vehicles weighing 3,501 pounds to 4,999 pounds (Class II), the District imposes a fee of \$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 11, page 36). For tax year 2014, Maryland's fees are slightly lower than the District's; the fee for vehicles less than 3,700 pounds is \$135.00 for two years (\$67.50 for one year), and for vehicles over 3,700 pounds it is \$187.00 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 2014 is the same rate as in Maryland and is higher than Virginia. 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 July 2014, this equated to 11.1 cents per gallon. There is also a special 2.1 percent sales tax levied by all the Northern Virginia jurisdictions.

Table 4: Automobile Tax Assumptions, 2014

Income Level	Description Of Auto	Engine Size Liters 1/	Weight 2/	Year	Market Values			Estimated Mileage Per Gallon 1/	Estimated Annual Gasoline Usage 3/
					Retail Price 2/	Trade-In Value 2/	Loan Value 2/		
\$ 25,000	Sedan, 4 Door 4 cylinder, Manual	2.0	2,875 lbs	2011	\$11,350	\$9,050	\$10,215	24	625 gallons
\$ 50,000	Sedan, 4 Door 4 Cylinder, Manual	2.0	2,804 lbs	2011	\$11,800	\$9,600	\$10,620	24	625 gallons
\$ 75,000	Sedan, 4 Door 4 Cylinder, Automatic	2.5	3,190 lbs	2012	\$17,475	\$14,825	\$15,728	25	600 gallons
	4WD Utility, 4 Door 6 Cylinder, Automatic	3.3	3,935 lbs	2006	\$12,875	\$10,125	\$11,588	18	417 gallons*
\$100,000	Sedan, 4 Door 6 Cylinder, Automatic	3.6	4,026 lbs	2012	\$20,175	\$17,300	\$18,158	17	882 gallons
	4WD Utility, 4 Door 6 Cylinder, Automatic	4.0	4,615 lbs	2007	\$12,775	\$8,875	\$11,497	15	500 gallons*
\$150,000	Sedan, 4 Door 6 Cylinder, Automatic	6.2	4,220 lbs	2013	\$46,925	\$42,800	\$42,233	14	1,071 gallons
	AWD Utility, 4 Door 6 Cylinder, Automatic	3.5	4,288 lbs	2010	\$17,675	\$15,000	\$15,908	15	441 gallons*

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

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

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

Auto Tax Burdens

Virginia localities had the highest auto tax burdens at all income levels, with Alexandria ranking highest. At the \$25,000 and \$50,000 income levels, Montgomery and Prince George’s Counties in Maryland had the lowest auto tax burden (at \$214), only \$5.00 lower than the District (at \$219). At \$75,000, the District’s auto tax burden was of \$426 was \$52 higher than the Maryland counties’ burden of \$374. The District and Maryland jurisdictions do not levy a personal property tax on automobiles, as in Virginia localities.

**Table 5: Major 2014 State & Local Tax Burdens for a Family of Three
In Selected Washington Metro 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/	(732)	(371)	(419)	0	0	0	0	0
Real Estate	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053
Sales and Use	749	497	497	645	645	645	645	645
Automobile	219	214	214	432	370	313	298	383
TOTAL	3,289	3,393	3,345	4,130	4,068	3,926	3,996	4,081
RANK	8	6	7	1	3	5	4	2
\$50,000 INCOME LEVEL								
Income	1,557	2,135	2,119	1,489	1,497	1,489	1,498	1,468
Real Estate	759	1,033	1,230	1,664	1,589	1,819	1,659	2,082
Sales and Use	946	603	603	777	777	669	777	777
Automobile	219	214	214	448	390	322	306	397
TOTAL	3,481	3,985	4,166	4,378	4,253	4,299	4,240	4,724
RANK	8	7	6	2	4	3	5	1
\$75,000 INCOME LEVEL								
Income	2,577	3,348	3,392	2,350	2,364	2,357	2,377	2,423
Real Estate	1,437	2,630	2,085	2,496	2,384	2,728	2,489	3,123
Sales and Use	1,115	707	707	909	909	767	909	909
Automobile	426	374	374	1,042	953	714	672	909
TOTAL	5,555	7,059	6,558	6,797	6,610	6,566	6,447	7,364
RANK	8	2	6	3	4	5	7	1
\$100,000 INCOME LEVEL								
Income	4,148	5,255	5,275	3,711	3,724	3,597	3,734	3,671
Real Estate	2,116	3,507	2,941	3,328	3,178	3,638	3,319	4,164
Sales and Use	1,291	846	846	1,066	1,066	911	1,066	1,066
Automobile	555	512	512	1,137	1,055	803	749	997
TOTAL	8,110	10,120	9,574	9,242	9,023	8,949	8,868	9,898
RANK	8	1	3	4	5	6	7	2
\$150,000 INCOME LEVEL								
Income	7,158	8,301	8,349	5,858	5,873	5,862	5,899	5,798
Real Estate	3,472	5,260	4,651	4,992	4,767	5,456	4,978	6,246
Sales and Use	1,588	1,056	1,056	1,272	1,272	1,097	1,272	1,272
Automobile	529	486	486	2,532	2,494	1,984	1,815	2,309
TOTAL	12,747	15,103	14,542	14,654	14,406	14,399	13,964	15,625
RANK	8	2	4	3	5	6	7	1

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

1/ Negative numbers result from a refundable Earned Income Tax Credit.

Table 6: Summary of Average Major Tax Burdens for Selected Washington Metropolitan Area Jurisdictions and D.C., Calendar Year 2014

INCOME	TAX BURDENS		PERCENT OF INCOME	
	AREA AVERAGE 1/ \$	DISTRICT OF COLUMBIA \$	AREA AVERAGE 1/ %	DISTRICT OF COLUMBIA %
OVERALL BURDEN				
\$ 25,000	\$3,778	\$3,289	15.11%	13.16%
\$ 50,000	4,191	3,481	8.38%	6.96%
\$ 75,000	6,620	5,555	8.83%	7.41%
\$100,000	9,223	8,110	9.22%	8.11%
\$150,000	14,430	12,747	9.62%	8.50%
INDIVIDUAL INCOME				
\$ 25,000	(190)	(732)	(0.76)	(2.93)
\$ 50,000	1,657	1,557	3.31	3.11
\$ 75,000	2,649	2,577	3.53	3.44
\$100,000	4,139	4,148	4.14	4.15
\$150,000	6,637	7,158	4.42	4.77
PROPERTY				
\$ 25,000	3,053	3,053	12.21	12.21
\$ 50,000	1,480	759	2.96	1.52
\$ 75,000	2,422	1,437	3.23	1.92
\$100,000	3,274	2,116	3.27	2.12
\$150,000	4,978	3,472	3.32	2.31
SALES AND USE				
\$ 25,000	610	749	2.44	2.99
\$ 50,000	741	946	1.48	1.89
\$ 75,000	866	1,115	1.16	1.49
\$100,000	1,020	1,291	1.02	1.29
\$150,000	1,235	1,588	0.82	1.06
AUTOMOBILE				
\$ 25,000	305	219	1.22	0.88
\$ 50,000	314	219	0.63	0.44
\$ 75,000	683	426	0.91	0.57
\$100,000	790	555	0.79	0.55
\$150,000	1,580	529	1.05	0.35

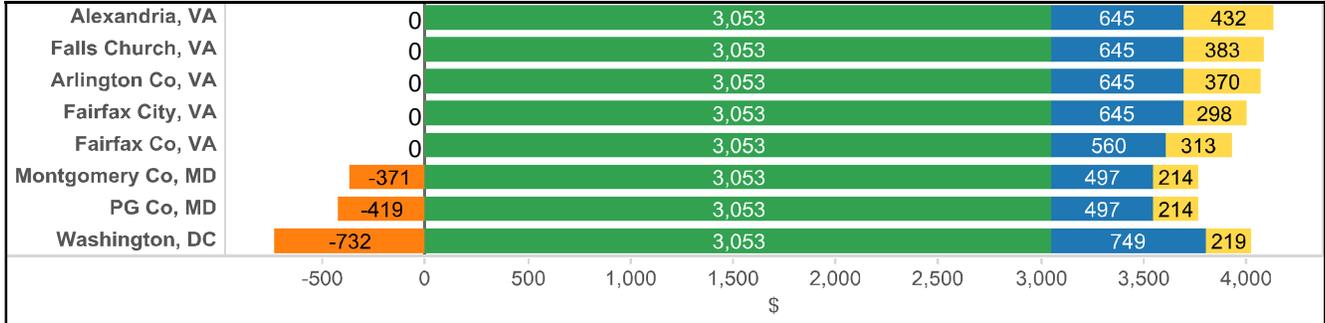
Source: ORA Analysis.

Note: Numbers may not add to totals due to rounding.

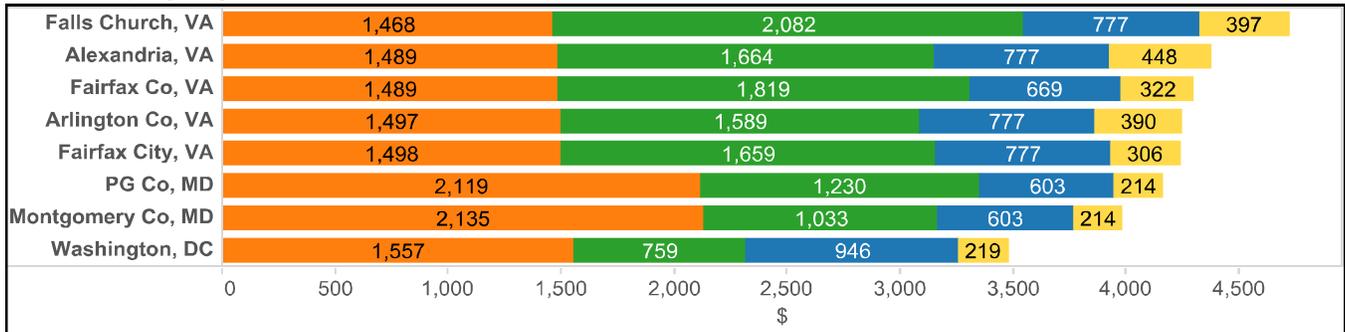
1/ Negative numbers result from a refundable Earned Income Tax Credit.

Chart 4: 2014 Estimated Burdens of Major Taxes For Five Hypothetical Families

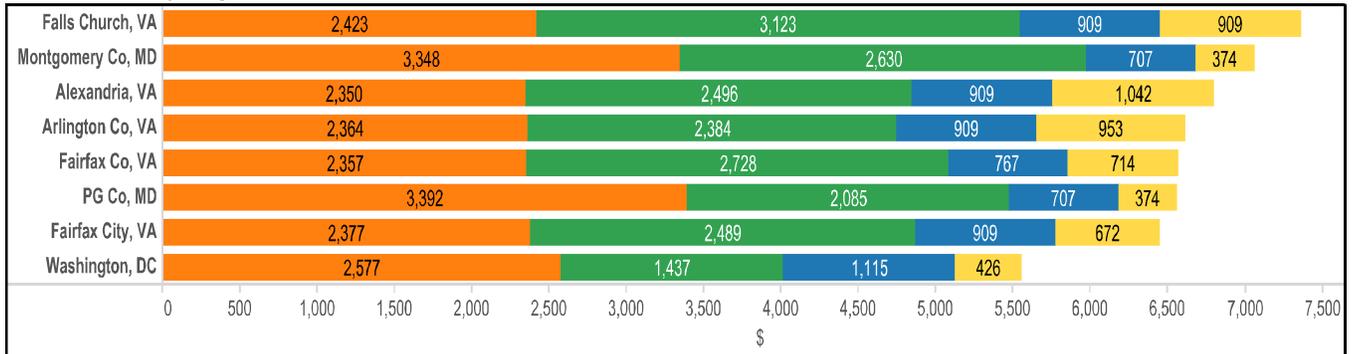
Income = \$25,000/Year



Income = \$50,000/Year



Income = \$75,000/Year



Legend:

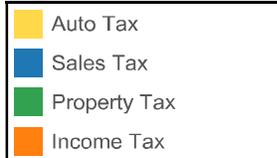
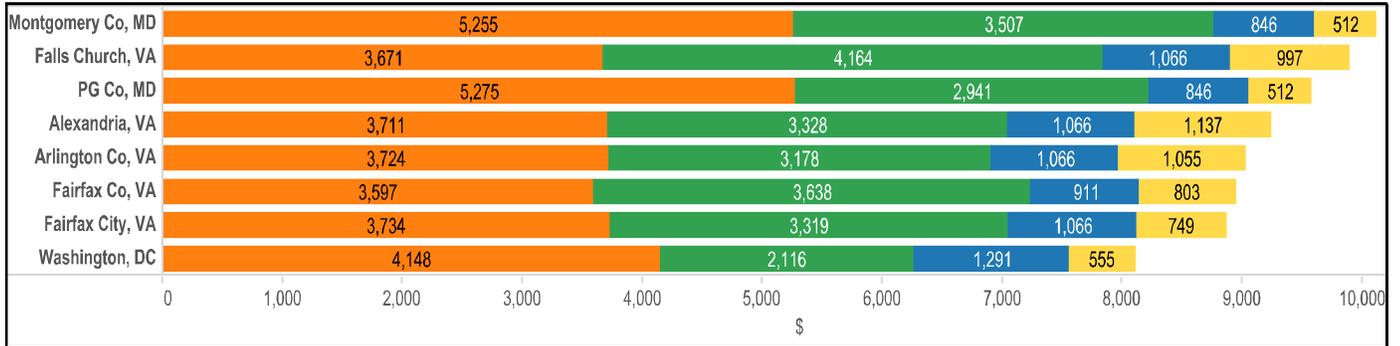
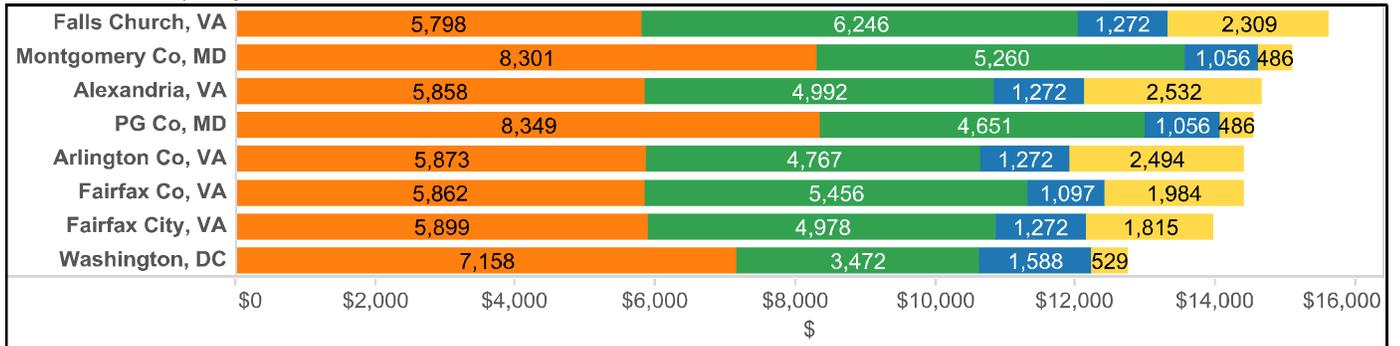


Chart 4: 2014 Estimated Burdens of Major Taxes For Five Hypothetical Families, Continued

Income = \$100,000/Year

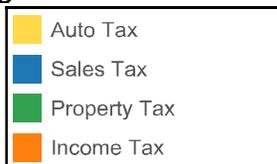


Income = \$150,000/Year

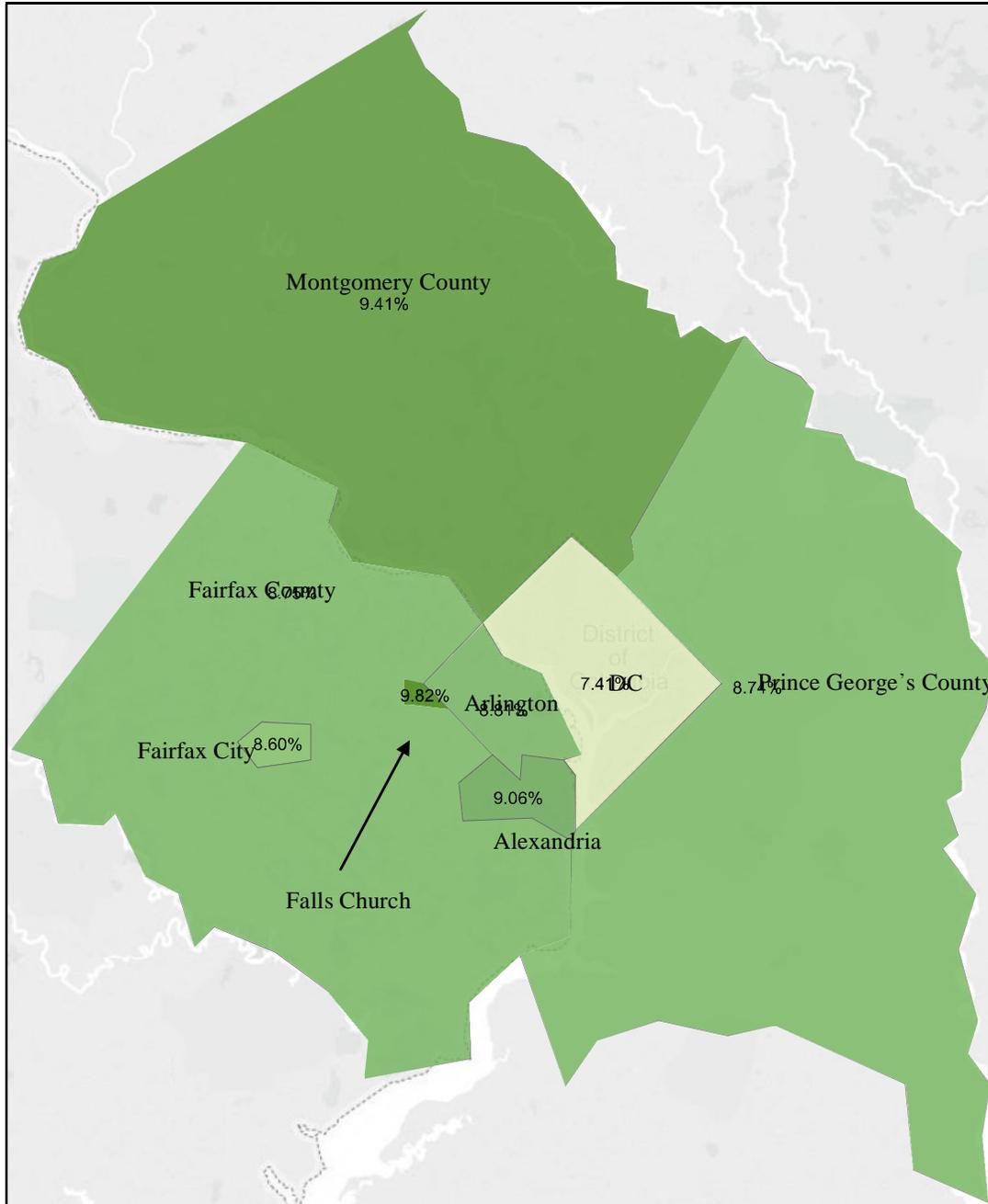


Source: ORA Analysis.

Legend:



Map 1: Total 2014 Metro Area Combined Tax Burden as a % of Income (Income, Property, Sales, & Auto Taxes) (Family Earning \$75,000/Year)



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



TABLE 7: SELECTED STATE AND LOCAL TAX RATES IN THE D.C. METRO AREA, FY 2014 - 2015

TAX	DISTRICT OF COLUMBIA	CHARLES COUNTY	MONTGOMERY COUNTY	PRINCE GEORGE'S COUNTY	ALEXANDRIA	ARLINGTON COUNTY	FAIRFAX CO.	FALLS CHURCH	LOUDDOWN CO.	PRINCE WILLIAM CO.	FAIRFAX CITY
PROPERTY											
Nominal Rate (\$100 of value)	\$0.850	\$1.317	\$1.10	\$1.072	\$1.043	\$0.996	\$1.114	\$1.305	\$1.155	\$1.2212	\$1.04
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 Rate (per \$100 of value) 2/	\$0.850 3/	\$1.317	\$1.10	\$1.072	\$1.043	\$0.996	\$1.114	\$1.305	\$1.155	\$1.2212	\$1.04
SALES AND USE											
General Rate	5.75%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
INDIVIDUAL INCOME (State Rates)	4.0% - 8.95% (Total)	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/	\$3.0125	\$2.468	\$2.40	\$5.00 7/	\$5.00 7/	\$4.57 7/	\$4.84 7/	\$4.20 7/	\$3.70 7/	\$4.13
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/	\$73.00 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/	\$73.00 9/
4,001 - 4,999 lbs.	\$115.00	\$93.50	\$93.50	\$93.50	\$78.75 9/	\$78.75 9/	\$83.75 9/	\$90.75 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/	\$90.75 9/	\$70.75 9/	\$69.75 9/	\$78.75 9/
GASOLINE TAX											
(Cents/Gallon)	23.5	23.5	23.5	23.5	10/	10/	10/	10/	10/	10/	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 year auto registration is \$135 up to 3,700 lbs. and \$187 over 3,700 lbs.
 2/ Effective tax rates listed here are net of assessment value and do not reflect any exemptions or credits.
 3/ There is a \$70,200 homestead exemption for property that is owner-occupied. The exemption amount increased to \$71,400 on October, 1, 2014 (effective for DC's Real Property Tax Year 2015).
 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/ NADA Used Car Guide trade-in value used as basis for assessing the tax. Fairfax City, and Arlington, Fairfax, and Loudoun Counties use the NADA Used Car Guide clean trade-in value as basis for assessing tax.
 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; and \$28.75 for cycles.
 10/ 3.5% of the statewide average wholesale price/gallon. In July 2014, the price in VA was 11.1 cents/gallon. There is also a 2.1 percent sales tax on the total sales price.

This document was created with Win2PDF available at <http://www.win2pdf.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.
This page will not be added after purchasing Win2PDF.

APPENDIX 2

Summary of Tax Rates Related to the Individual Tax Burden Analysis in Chapter 3

This section summarizes the tax rates and other tax-related information for the District and Montgomery, Prince George's, Howard, Frederick, and Fairfax Counties used in the individual tax burden analysis. The District released its latest tax burden report in December 2015 using tax rates from 2014-2015, summarized in this Appendix. Some jurisdictions have amended tax rates and laws since then.

1. Property Taxes

Jurisdictions assess property tax on real estate based on the value of the property (land + improvements).

Washington, D.C. All real property is subject to taxation (unless exempt by statute) with rates based on property classification:

- Class One Property - improved residential real property with five or fewer dwelling units or a single dwelling unit owned as a condominium and used exclusively for non-transient residential dwelling purposes;
- Class Two Property - improved commercial property such as hotels and motels;
- Class Three Property - vacant real property; or
- Class Four Property – improved blighted property.

Property is assessed annually at a statutory level of 100 percent of its estimated market value, with an Assessment Cap Credit, limiting tax bill increases to no more than 10% of the previous year's bill. The District also provides numerous property tax relief programs:

- Homestead deduction – eliminates property taxes on the first \$70,200 of assessed value for homeowners (indexed annually by the CPI since October 2012).
- Senior citizen relief program – senior citizens age 65 or older with total household adjusted gross income below \$100,000 may have their real property tax payments reduced by half.
- Tax credit – claimed against individual income tax liability for a portion of the property taxes paid or rent paid constituting property taxes that exceeds a stated percentage of household income.
- Tax deferral – owner-occupied residential property taxpayers may apply to defer real property taxes that exceed 110 percent of the previous year's liability.
- Tax relief – for qualified historic properties approved by the Joint Committee on Landmarks of the National Capital.

Maryland. The State of Maryland levies a property tax of \$0.112 per \$100 of assessed market value (each property is assessed by the state once every three years). Assessment increases are phased in over three years; decreases are not phased in. Residential property owners are entitled to an assessment limitation tax credit. In addition to state property tax, Maryland counties impose a local property tax. There are two property tax relief programs in Maryland:

- Maryland homeowner's property tax credit – provides relief for property taxes in excess of a certain percentage of income. Montgomery and Prince George's Counties each provide a county supplemental to the State credit.
- Renter's tax credit – provides a refundable renter's tax credit of up to \$750 a year for renters age 60 or over, or income-qualified renters who are permanently and totally disabled.

Virginia. Virginia does not levy a property tax but local jurisdictions are required to tax real property at 100 percent of estimated market value. Some jurisdictions, including Fairfax County, provide property tax exemptions for dwellings owned and occupied by people age 65 or older or income-qualified people (not more than \$72,000 in Fairfax County) who are permanently and totally disabled.

Real Property Tax Rates, Property Tax Year 2014-2015* (per \$100 of assessed value)

Jurisdiction	Nominal and Effective** Rate
DC	Class I (residential) \$ 0.85 Class II (commercial) \$ 1.85^ Class III (vacant) \$ 5.00 Class IV (blighted) \$10.00
Maryland^^	\$.112
Montgomery	\$1.10 (\$0.003 - \$0.732)#
Prince George's	\$1.072 (\$0.895-\$1.069)#
Frederick	\$1.060#
Howard	\$1.014
Virginia	none
Fairfax	\$1.114#

*Real property tax year in the Virginia area jurisdictions is the calendar year. In the District, the 2014-2015 real property tax year is Oct. 1, 2014 – Sept. 30, 2015. For the Maryland jurisdictions, the 2014-2015 real property tax year is July 1, 2014 – June 30, 2015. Special area rates in effect are shown in parentheses.

**Effective tax rates are net of assessment value and do not reflect any exemptions or credits.

^ First \$3 million rate is \$1.65 per \$100 of assessed value.

^^County rates shown include the state rate of \$0.112 per \$100 of assessed value.

Rates exclude municipal and special taxing district taxes.

2. Income Tax

Governments impose an income tax on financial income generated by entities in a jurisdiction.

Washington, D.C. Individuals who maintain a permanent home (at any time) or maintain a place of residence (for more than 183 days) are subject to the District's income tax. DC has numerous income tax credits available, including:

- Qualified homeowners and renters can 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 (the maximum real property tax credit is \$1,000);
- Individual income taxes required to be paid to another state on income derived from sources outside the District;
- Costs of child and dependent care; and
- An earned income tax credit.

Maryland. Individuals 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 income tax. Several Maryland counties (including Montgomery, Prince George’s, Howard, and Frederick) also impose a local income tax. In 1998, Montgomery County passed legislation making it the first local jurisdiction in the country with a local earned income credit.

Virginia. All Virginia residents are subject to the individual income tax and nonresidents are taxed on income earned in Virginia with a credit allowed for taxes paid to in nonresidents’ home states. Virginia generally allows the same itemized deductions as the federal government on a tax return. However, Virginia does not allow deductions 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, Virginia provides for a deduction equal to the amount allowed under federal law in computing the child and dependent care credit.

Summary of Income Tax Rates as of January 1, 2015

Jurisdiction	State Rate	Local Rate
DC	---	4.0%-8.95%
Fairfax	2.5%-5.75%	0%
Montgomery		3.2%
Prince George’s	2.5%-5.75%	3.2%
Howard		3.2%
Frederick		2.96%

3. Sales and Use Taxes

A sales tax is a consumption tax imposed by the government on the sale of goods and services. A use tax is a sales tax on purchases (1) made outside one's state of residence, (2) on taxable items, (3) used in the state of residence, and (4) on which no tax was collected in the state of purchase.

Washington D.C. The District has five tax categories under sales and use tax. The most common sale and use tax is a 5.75% retail sales tax, charged for purchased of most tangible person property and selected services consumed in the District (e.g., cleaning services, fitness centers, and billiard parlors). Exemptions include grocery foods, prescription and non-prescription drugs, and professional services such as legal, engineering and physician services. Business purchases of public utilities are included in the sales and use tax.

Other District sales and use taxes include:

Items	Tax Rate
Tangible personal property, selected services, and food sold in vending machines	5.75%
Medical marijuana	6.0%
Restaurant meals, liquor sold for consumption, rental vehicles, prepaid telephone cards, tickets/merchandise at baseball games and Verizon Center	10.0%
Transient accommodations	14.5%
Parking motor vehicles in commercial lots	18.0%

Maryland. Maryland has a 6% sales and use tax on all retail sales including clothing/jewelry, lodging/accommodations, non-grocery food purchases over \$1.00, and furniture, and on select services such as producing personal property, cleaning services, certain telecommunication services, and security services. Maryland has a 9% sales tax on alcoholic beverages. Residential public utilities are exempt from the sales tax. In addition to the state rate of 6%, Maryland localities impose a tax ranging from 0.5%- 10% on admissions to movie theaters, concerts, amusement parks, and various other events.

Virginia. Virginia has a 5% state sales tax and a state-administered 1% local sales tax on retail sales (with an additional 0.7% state sales tax imposed in localities in Northern Virginia), proceeds from leases and rentals, and proceeds from transient accommodations. There is also a 2.5% sales tax rate on groceries. Virginia exempts gas, electricity, home heating fuel, water, alcoholic beverages sold by the state, certain medical supplies, and charitable purchases from the sales tax.

Summary of Sales and Use Tax Rates, 2014

Jurisdiction	General		Admissions		Transient Accommodations		Restaurant Meals	
	State	Local	State	Local	State	Local	State	Local
DC		5.75%		10.0%		14.5%		10.0%
Maryland	6.0%		10.0%		6.0%		6.0%	
Montgomery County				7%*		+7.0%**		
Prince George's				0.5%-10%		+5.0%		
Howard				7.5%***		7.0%		
Frederick				0%		3.0%		
Virginia	5.0%		10.0%		4.0%			
Fairfax		+1.7%				+6.0%		

*Rates are 7%, but limited to 5% when applying state sales tax because the combination of the two cannot exceed 10%.

**Rates range from 5 to 10% with 3.5% allocated to the County Conference and Visitors Bureau, and Convention Center

*** 7.5% on gross receipts from admission charges or a 5% tax for live performances, golf course fees, and concerts

4. Motor Vehicle Taxes

Washington, D.C., Maryland and Virginia all tax motor vehicles in three ways: excise tax, motor vehicle registration, and motor vehicle fuel tax.

Excise Tax. All three jurisdictions impose an excise tax on vehicles. The District’s titling tax ranges from 6% - 8% of fair market value based on vehicle weight. Maryland and Virginia impose a titling tax of 6% and 4.05%, respectively, of the fair market value of each vehicle sold.

Vehicle Registration. Businesses and individuals must pay an annual vehicle registration fee, as summarized below. Businesses and individuals in Virginia must pay a state and local registration fee.

Summary of Annual Registration Fees for Passenger Cars, 2014

	Weight	Fees	
		State	Local
	Vehicles		
DC	0 to 3,499 pounds		\$72
	3,500 to 4,999 pounds		\$115
	5,000 pounds or more		\$155
	Motorcycles		\$52
	Vehicles		
Maryland	3,700 pounds or less	\$67.50	--
	Over 3,700 pounds	\$93.50	--
	Vehicles		Fairfax*
Virginia	4,000 pounds or less	\$40.75	\$33
	Over 4,000 pounds	\$45.75	\$38
	Motorcycles	\$28.75	\$18

*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.

Motor Vehicle Fuel Tax.

- Washington D.C. – \$0.235 per gallon on every importer or user of motor vehicle fuels.
- Maryland – \$0.235 per gallon on all motor vehicle fuel sold or used in the state and \$0.2425 per gallon on special fuels (diesel/kerosene).
- Virginia – 3.5% of statewide average wholesale price/gallon on motor fuel on dealers and other persons selling motor fuel in the Commonwealth (\$0.111 per gallon from July 2013 – Dec. 2014; \$0.162 per gallon from Jan 2015 – Dec. 2015). Additionally, 2.1% sales tax on retail sales of fuels sold in a city or county that is a member of a transportation district in which a commuter mass transportation system is operated, including Fairfax County.

5. Public Utilities Tax

Washington, D.C. The public utility tax is based on the gross receipt on utilities operating in the District including 10% of gross receipts from sales to residential customers and 11% of gross receipts from sales to nonresidential customers. Similar taxes are assessed on heating oil companies, natural and artificial gas marketers, along with long distance telephone companies, and subscription television, video, and radio service providers.

Maryland. Maryland’s public utility tax applies to any company engaged in a telegraph, telephone, oil pipeline, electric, or gas business and is based on gross receipts for the preceding calendar year. In addition, retail sales of natural or artificial gas, oil, and electricity are taxed by several local jurisdictions. Frederick and Howard Counties do not have local public utilities taxes.

Virginia. Virginia taxes electric and gas, water or heat, and light and power companies at different rates. 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.

Public Utility Tax Rates, FY14

	Electricity	Natural Gas
DC	\$.007/therm	\$.0707/therm
Maryland	--	--
Montgomery	\$.01146/kwh	\$.10019/therm
Prince George’s	\$.005908/kwh	\$.061328/therm
Frederick	--	--
Howard	--	--
Virginia	\$.00152/kwh	\$0.0195/ccf up to 500 ccf
Fairfax (max of \$4 monthly)	\$0.56 plus \$0.00605/kwh	\$0.56 plus \$0.05259/ccf

6. Water and Sewer User Charges

Charges for water and sanitary sewerage and basic rates for each jurisdiction are presented in Table 18, 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 18. 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.

Summary of Water and Sewer Charges, FY14

Jurisdiction	Water		Sewerage	
	Rate	Usage	Rate	Usage
DC*		\$3.61/1K gal.		\$4.41/1K gal.
Montgomery	Low	\$2.82/1K gal.	49 gal. or less/day	\$3.27/1K gal. 49 gal. or less/day
	High	\$6.48/1K gal.	9K + gal./day	\$8.30/1K gal. 9K+ gal./day
Prince George's	Low	\$3.17/1K gal.	49 gal. or less/day	\$4.22/1K gal. 49 gal. or less/day
	High	\$7.29/1K gal.	9K+ gal./day	\$10.70/1K gal. 9K+ gal./day
Howard	Summer	\$2.15/748 gal.		\$3.10/748 gal.
	Winter	\$1.93/748 gal.		
Frederick	Low	\$2.86/1K gal.	8,000 gal. or less/day	\$21 + \$22 1K gal. or less/day
	High	\$6.3/1K gal.	100K+ gallons	\$21 + \$85 Over 32,001 gallons
Fairfax ⁺		\$2.16/1,000 gal.		\$6.55/1,000 gal.

*Plus \$0.58/month for residential storm water fee. These rates cover FY2014, beginning on Oct. 1, 2014.

⁺Customers are subject to a peak usage rate of \$3.45/1,000 gallons during the summer quarters on water consumption that exceeds winter quarter usage by 6K gallons or 30%, whichever is higher.

7. Municipality Taxes

Individuals residing in an incorporated area in Virginia or Maryland may be subject to additional taxes beyond the county-level taxes. The jurisdictions include the following municipalities:

- **Fairfax County** (3) – Clifton, Herndon, Vienna
- **Frederick County** (12) - Brunswick, Burkittsville, Emmitsburg, Frederick, Middletown, Mount Airy, Myersville, New Market, Rosemont, Thurmont, Walkersville, and Woodsboro.
- **Montgomery County** (19) - Barnesville; Brookeville; Chevy Chase, Town of ;Chevy Chase View; Chevy Chase Village; Chevy Chase, Village of, Section 3; Chevy Chase, Village of, Section 5; Gaithersburg; Garrett Park; Glen Echo; Kensington; Laytonsville; Martin's Additions; North Chevy Chase; Poolesville; Rockville; Somerset; Takoma Park; and Washington Grove.
- **Prince George's County** (27) - Berwyn Heights, Bladensburg, Bowie, Brentwood, Capitol Heights, Cheverly, College Park, Colmar Manor, Cottage City, District Heights, Eagle Harbor, Edmonston, Fairmount Heights, Forest Heights, Glenarden, Greenbelt, Hyattsville, Landover Hills, Laurel, Morningside, Mount Rainier, New Carrollton, North Brentwood, Riverdale Park, Seat Pleasant, University Park, and Upper Marlboro.

Howard County, Maryland has no municipalities.