



District of Columbia

DC ORA's Annual "Tax Rate and Tax Burdens" Study

Lori Metcalf, Office of Revenue Analysis

DC Office of the Chief Financial Officer

October 1, 2014



District of Columbia

Overview and Context

What is it? A two-part study:

- Comparison of tax burdens in largest city in each state and DC;
- Comparison of select tax rates, 50 states and DC.

Why do we do it, and when?

- Congressional requirement - [Public Law 93-407](#) (9/3/1974)
- Annually

Who is the audience?

- Congress; DC City Council; media; researchers; states; and cities

How do we produce it?

- Data collection:
 - Survey to states w/ follow up calls & emails;
 - Online research of state web sites;
 - Third-party sources (FTA, CCH, Tax Foundation, etc.)
- In-house calculations
 - Various data sources and methodologies for each type of tax



District of Columbia

Sample of Results

ESTIMATED BURDEN OF MAJOR TAXES FOR A HYPOTHETICAL FAMILY OF THREE, 2012
\$25,000

RANK	CITY	ST	TAXES				BURDEN	
			INCOME 2/	PROPERTY 3/	SALES 4/	AUTO	AMOUNT	PERCENT
1	Honolulu	HI	89	2,820	1,052	272	4,232	16.9%
2	Chicago	IL	745	2,021	1,065	297	4,128	16.5%
3	Atlanta	GA	565	2,098	1,228	197	4,087	16.3%
4	Bridgeport	CT	8	2,667	905	422	4,001	16.0%
5	Phoenix	AZ	135	1,918	1,701	224	3,978	15.9%

ESTIMATED BURDEN OF MAJOR TAXES FOR A HYPOTHETICAL FAMILY OF THREE, 2012
\$50,000

RANK	CITY	ST	TAXES				BURDEN	
			INCOME	PROPERTY	SALES 2/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	904	7,003	1,179	554	9,641	19.3%
2	Philadelphia	PA	1,550	5,903	1,045	282	8,781	17.6%
3	Milwaukee	WI	1,607	5,272	1,009	339	8,226	16.5%
4	Baltimore	MD	1,209	4,591	718	519	7,037	14.1%
5	Columbus	OH	1,199	4,562	880	255	6,897	13.8%

ESTIMATED BURDEN OF MAJOR TAXES FOR A HYPOTHETICAL FAMILY OF THREE, 2012
\$75,000

RANK	CITY	ST	TAXES				BURDEN	
			INCOME	PROPERTY	SALES 2/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	3,014	10,504	1,807	1,007	16,333	21.8%
2	Philadelphia	PA	2,347	8,854	1,612	431	13,244	17.7%
3	Milwaukee	WI	3,105	7,907	1,479	546	13,037	17.4%
4	Baltimore	MD	2,672	6,886	1,122	943	11,622	15.5%
5	Columbus	OH	2,248	6,844	1,327	391	10,811	14.4%



District of Columbia

Auto Tax Calculation

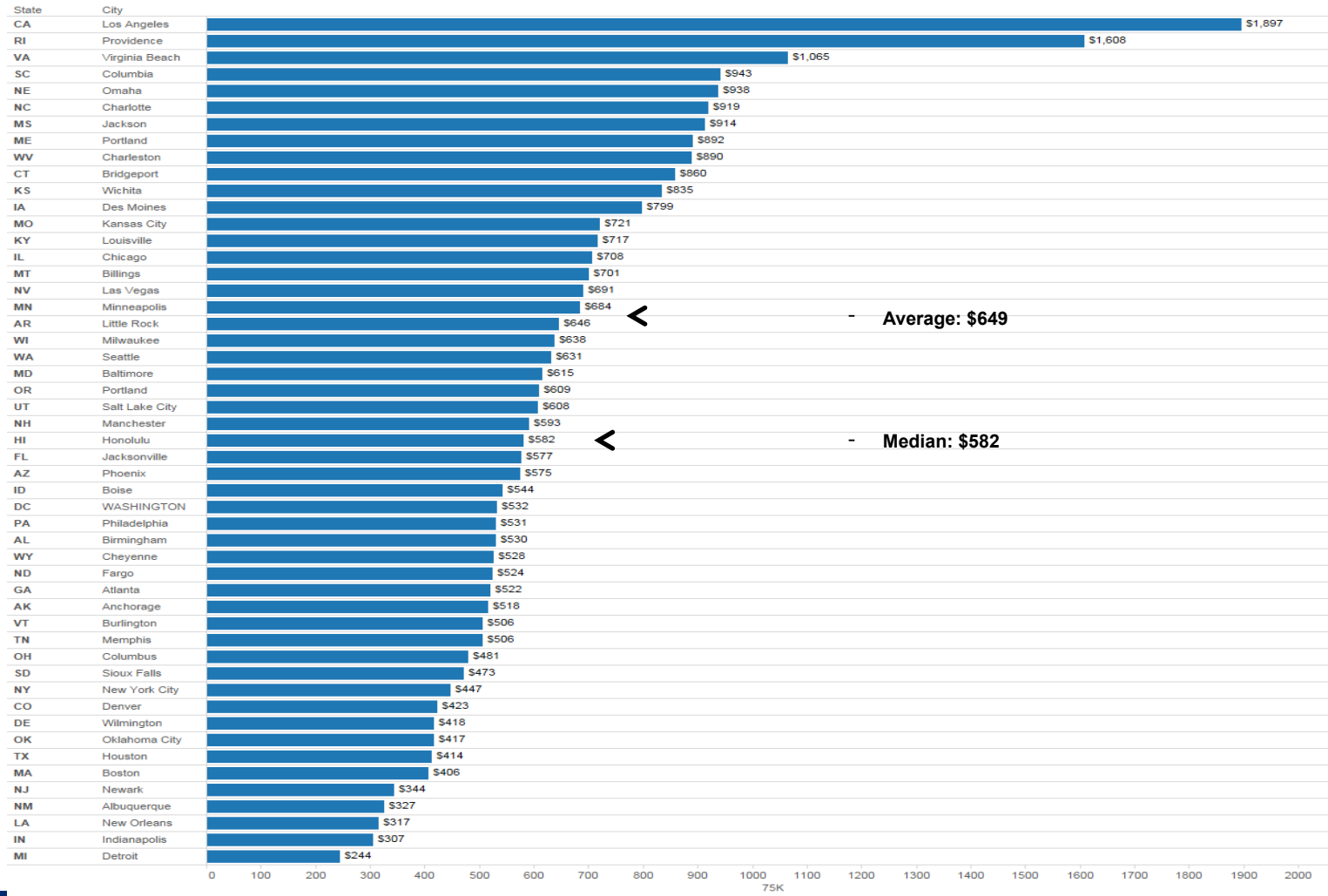
- Applicable personal property taxes, registration and title fees, and auto excises taxes for each city + state;
- Assumptions of gasoline usage and applicable taxes for each jurisdiction
- Assumptions of car ownership at each level of income
 - Type of car(s)
 - Number of cars owned





2013 Auto Tax Burden amounts, \$75,000 / year

District of Columbia

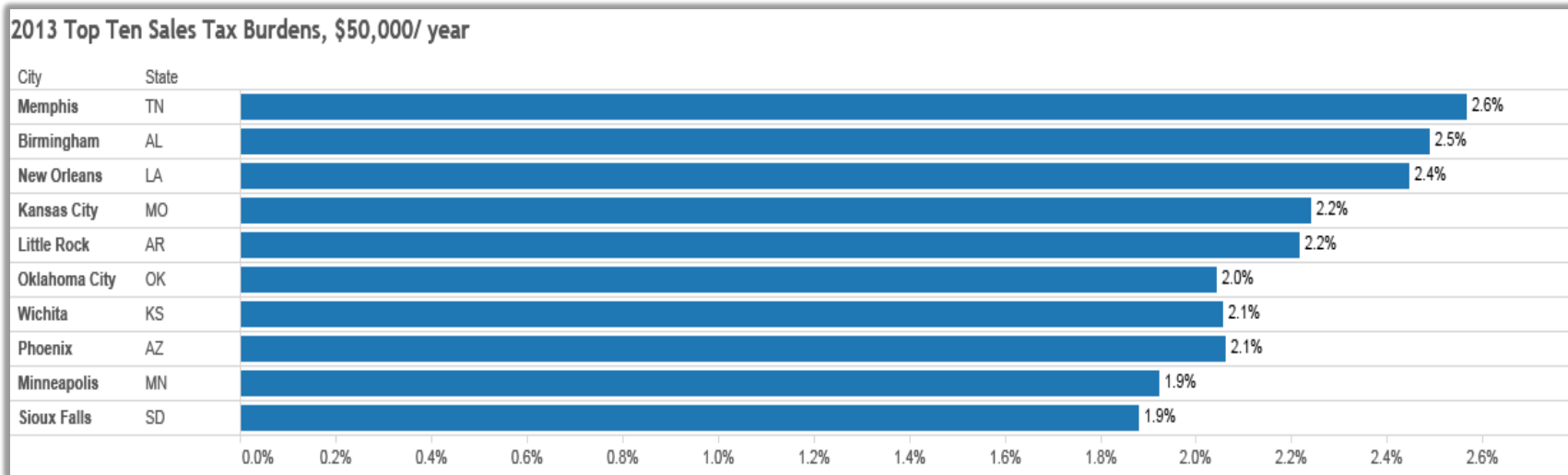




District of Columbia

Sales Tax Calculation

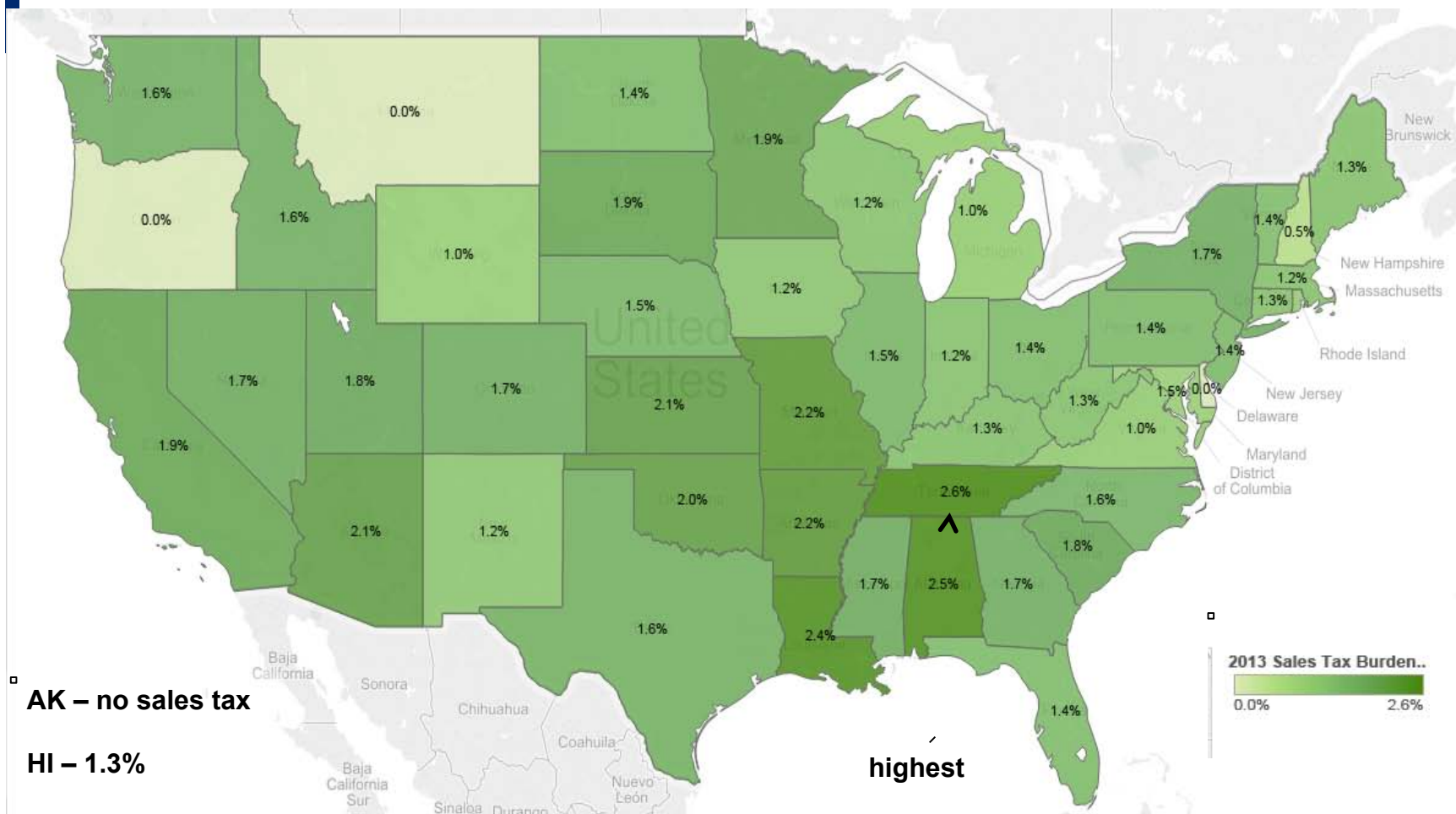
- Compile applicable sales tax rates
- Download Consumer Expenditure Survey data of average amount spent on various consumer goods (by income level).
- Apply all state and local sales taxes to those amounts.
 - All variation w/in an income level comes from sales tax rates and sales tax bases.





District of Columbia

2013 Sales Tax Burden, \$50,000 /year





District of Columbia

Property Tax Calculation

- Compile data on general property tax structure in each location:
 - Nominal property tax rates;
 - Assessment levels;
 - Homestead exemptions available to all homeowners (note: not included in chart below)

2012

CITY	ST	NOMINAL RATE PER \$100	ASSESSMENT LEVEL	EFFECTIVE RATE PER \$100
Columbus	OH	9.99	35.7%	3.57
Providence	RI	3.19	100.0%	3.19
Milwaukee	WI	3.06	100.0%	3.06
Indianapolis	IN	3.05	100.0%	3.05
Philadelphia	PA	9.43	32.0%	3.02

- Collect data from Census (ACS) on median house values and median incomes
 - Calculate house values for each income level in each city, multiplier created by ACS data.
- Calculate property tax on house value at each income in each city.
 - Taking into account assessment level, and homestead exemptions.



District of Columbia

Income Tax Calculation

- Use tax preparation software to calculate income tax burdens for all 50 states and DC.
 - Itemized deduction information is from IRS Statistics of Income data for DC, and is based on average deduction amounts at each income level for joint filers.
 - Separate calculation is made of the mortgage interest deduction, based on 5th year of interest of home purchase, value of which calculated from ACS data just like for property tax.
 - Deductions allowed for sales taxes paid, state income taxes paid, or property taxes paid are taken from actual burdens calculated in prior year.

- After calculating state income tax, add any local income tax that is applicable.

Form	1040	Department of the Treasury—Internal Revenue Service	(99)	2013
		U.S. Individual Income Tax Return		
For the year Jan. 1–Dec. 31, 2013, or other tax year beginning		, 2013, ending		



District of Columbia

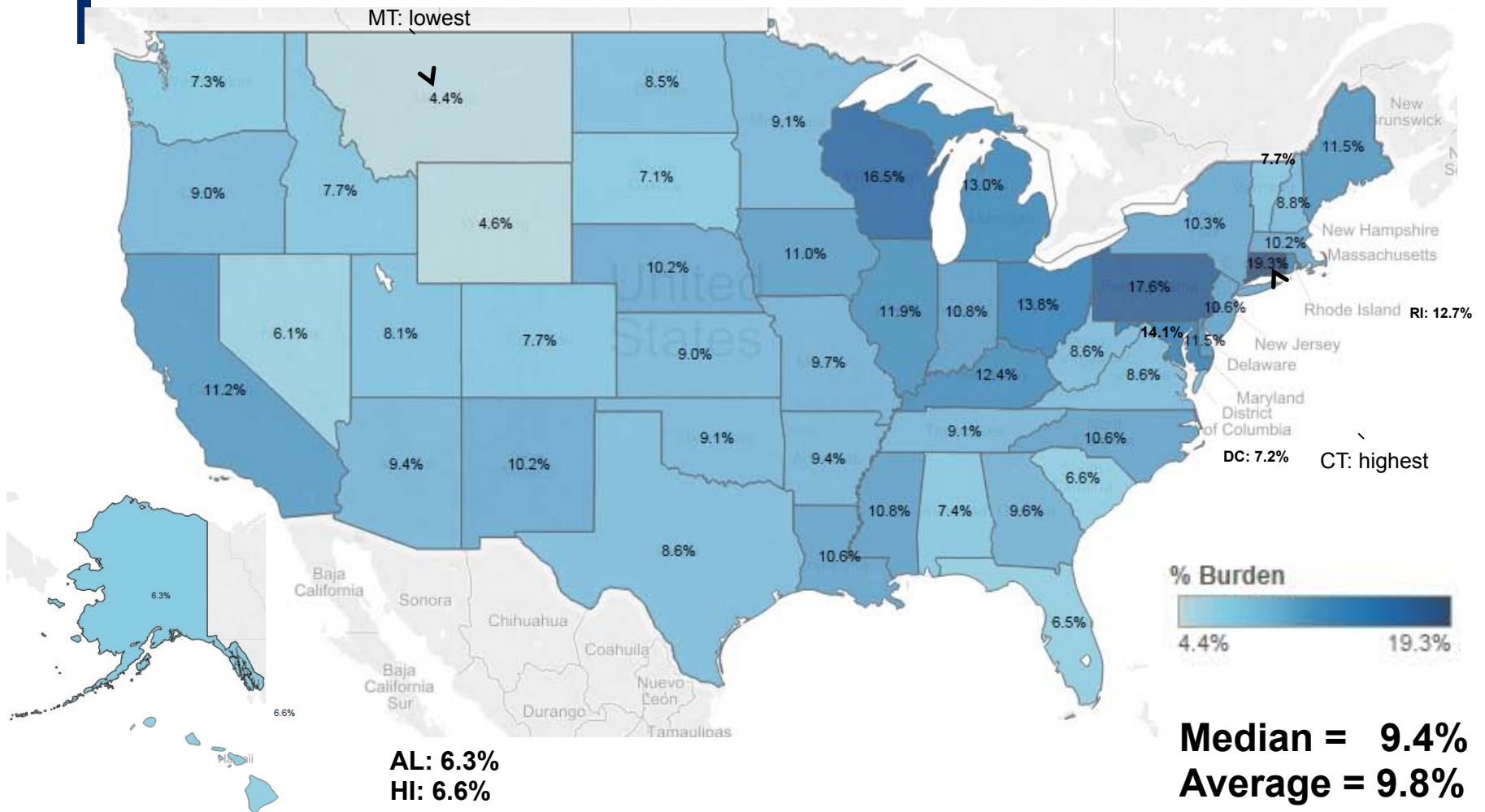
New Features and Future Goals

- New graphics: bar charts, maps, etc.;
- Sensitivity analyses of various assumptions;
- Add case studies of major metro areas or various aspects of major tax types;
- Study what is driving the variability.



2012 Tax Burden %, All Taxes Combined, \$50,000/year

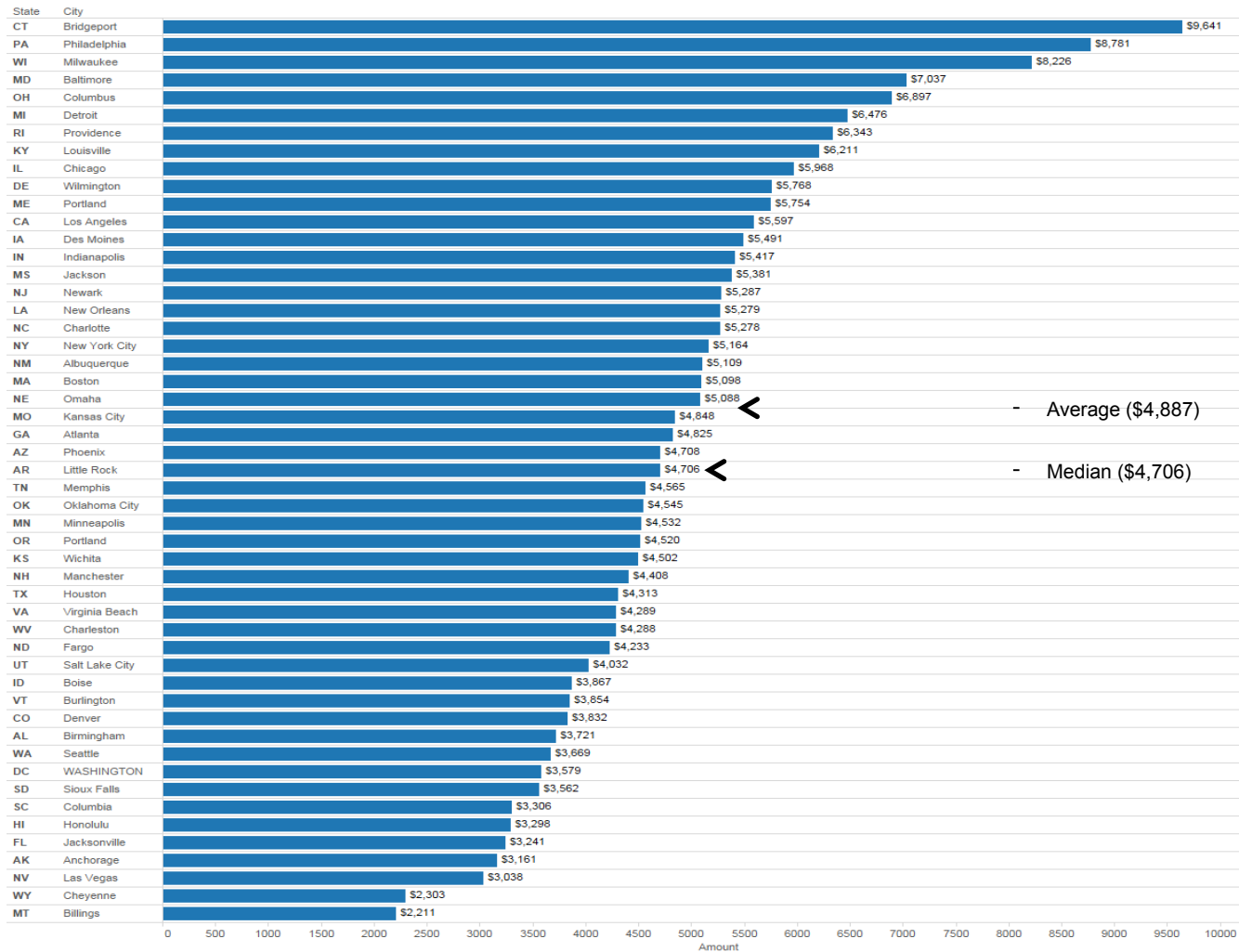
District of Columbia





District of Columbia

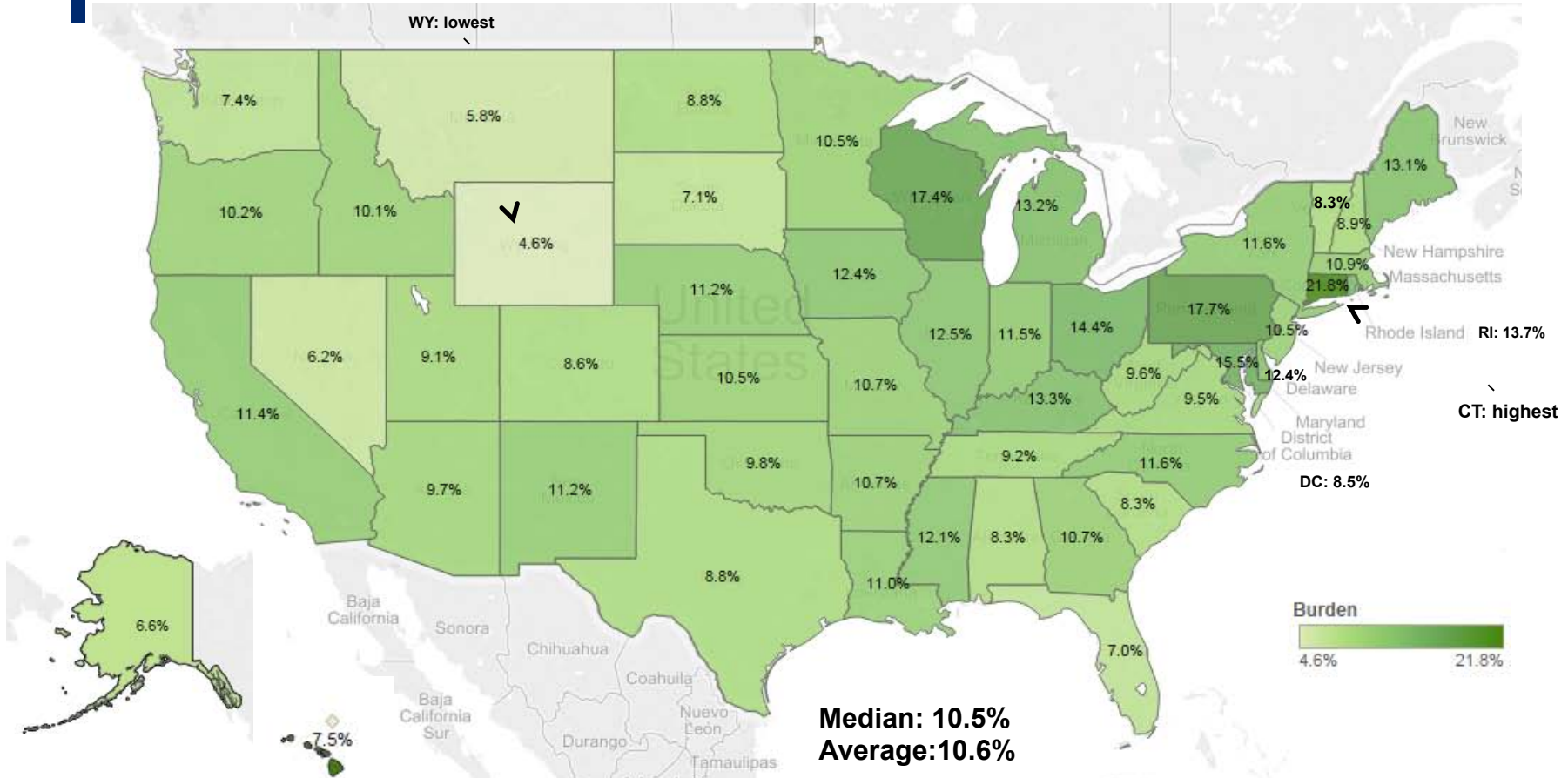
2012 Burden Amount, All Taxes Combined, \$50,000/year





District of Columbia

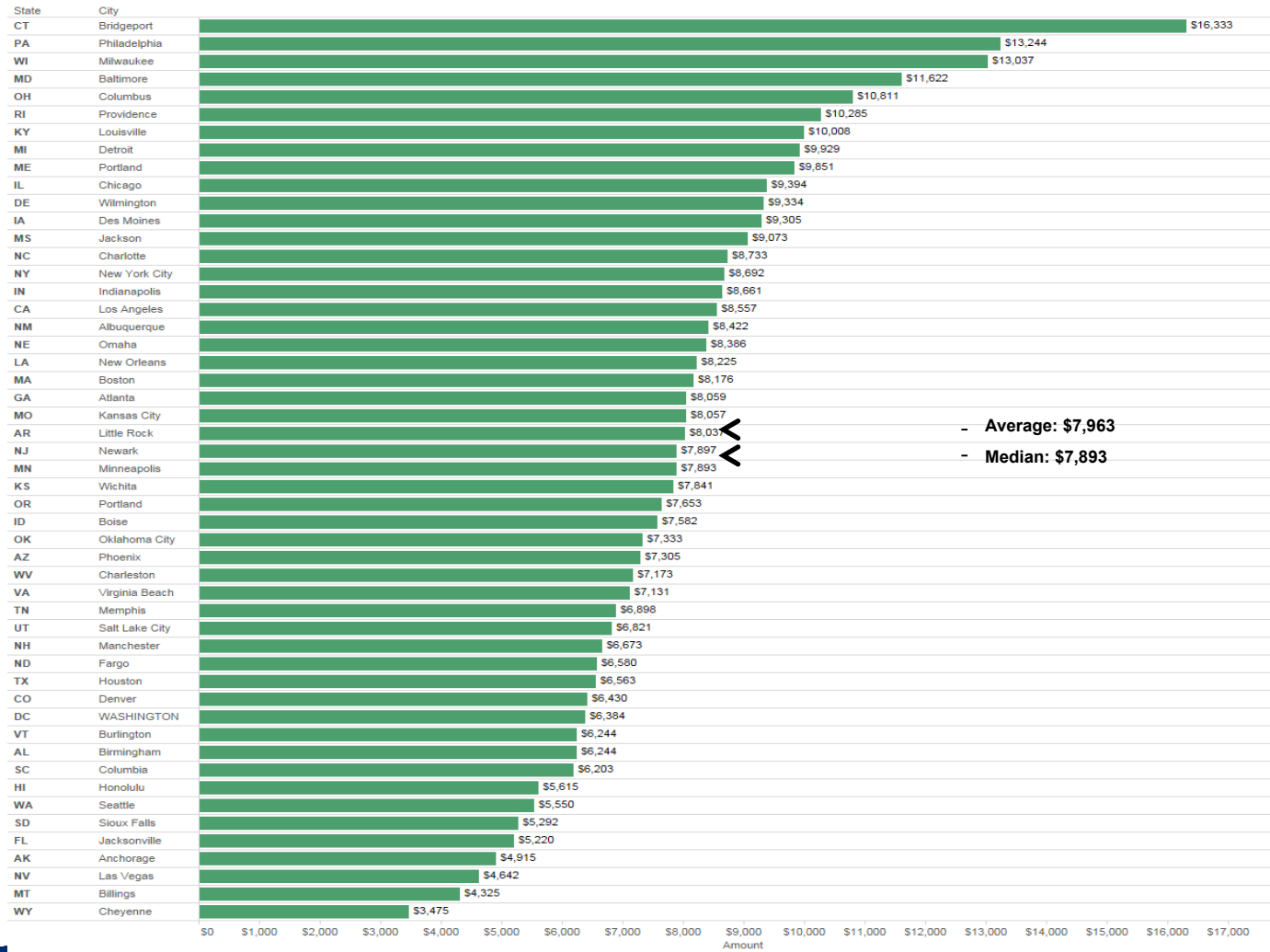
2012 Tax Burden %, All Taxes Combined, \$75,000/year





District of Columbia

2012 Burden Amount, All Taxes Combined, \$75,000/year





District of Columbia

Thank you!

Questions/Comments?



District of Columbia



Extra Slides

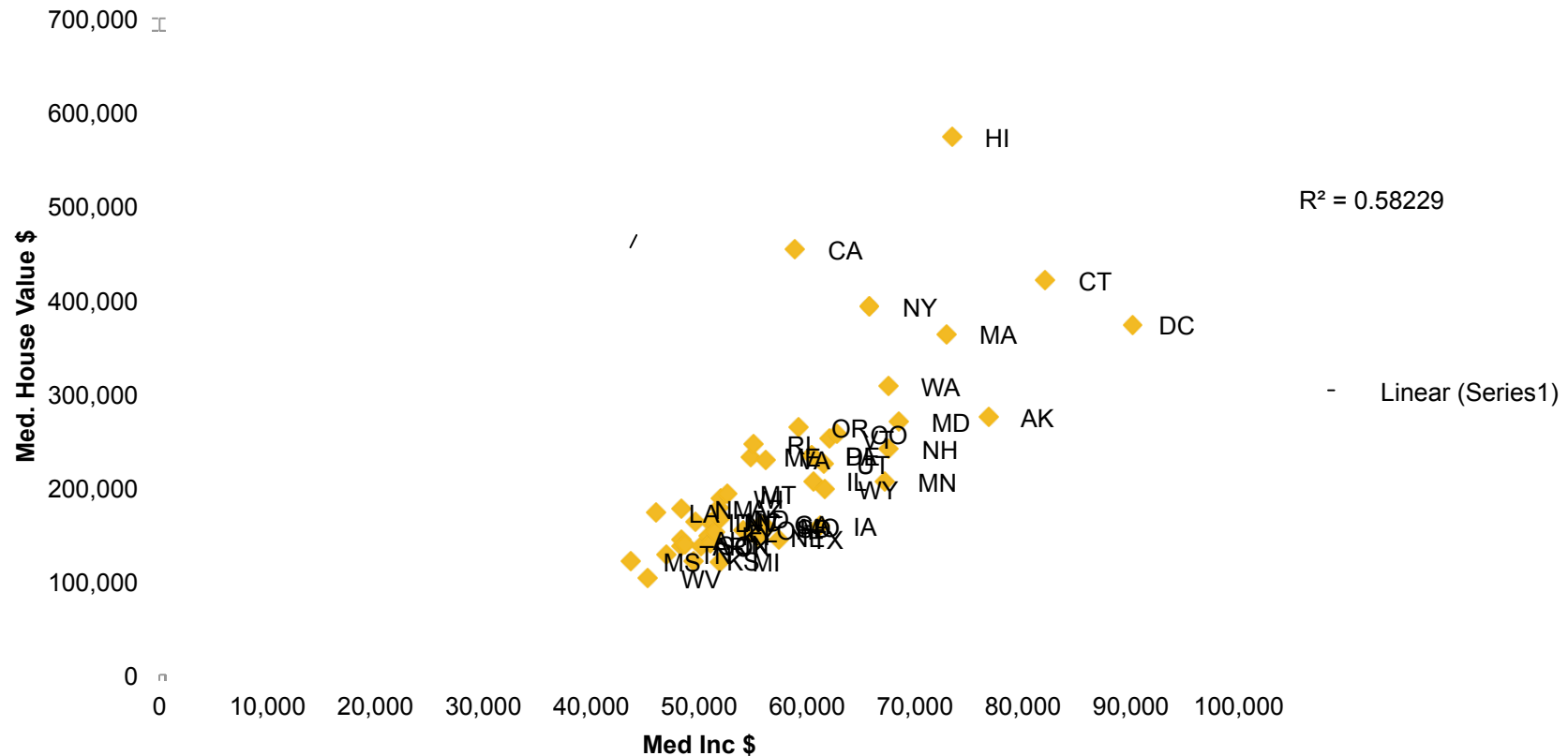




District of Columbia

Property Tax

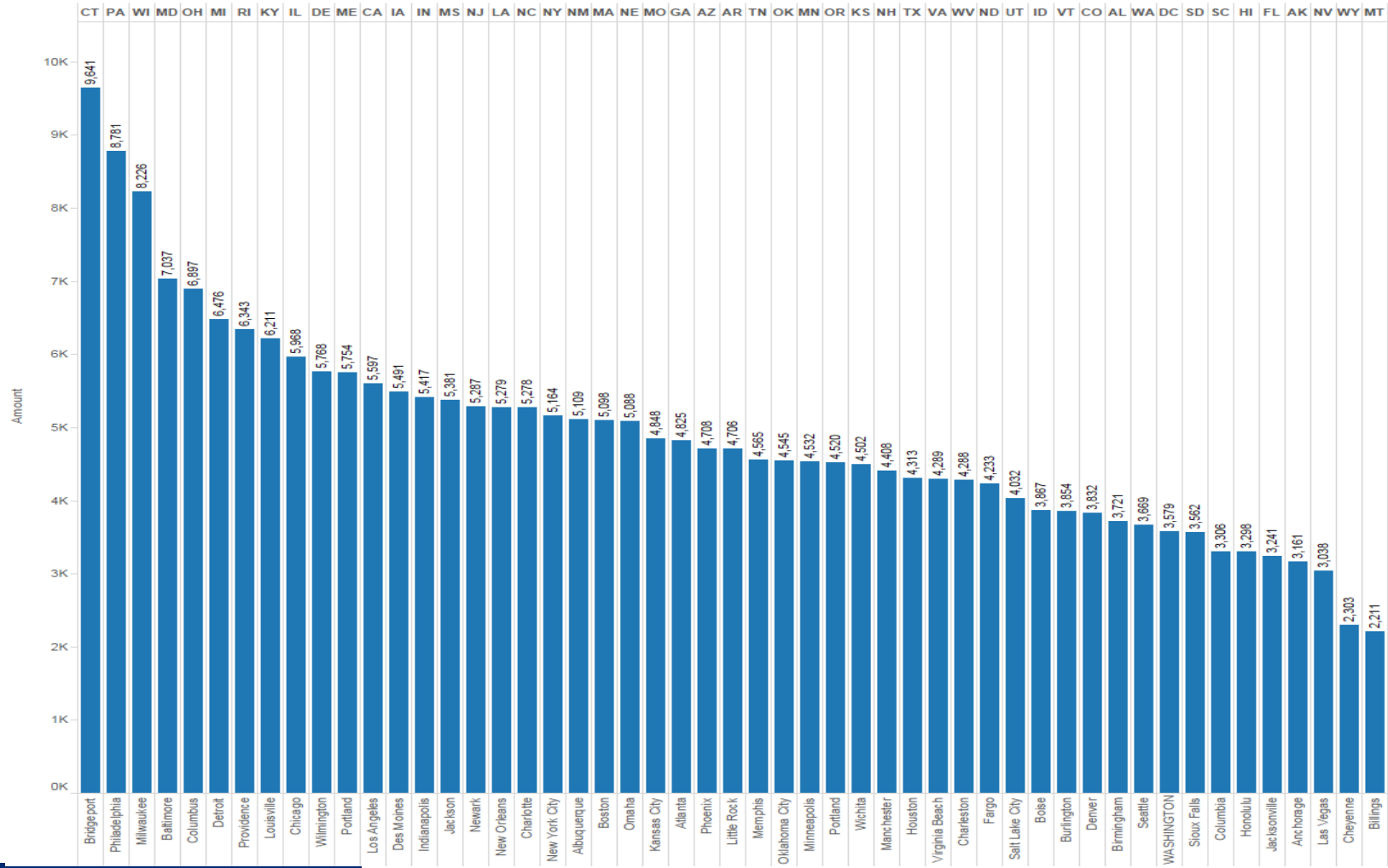
2013 Median Income and Median House Value





2012 Burden Amount, All Taxes Combined, \$50,000/year

District of Columbia





District of Columbia

2012 House value assumptions

CITY	ST	HOUSING VALUE ASSUMPTIONS AT INDICATED INCOME LEVELS:				
		TAX ON RENT \$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Anchorage	AK	2,144	186,519	279,779	373,038	559,557
Birmingham	AL	1,780	152,471	228,706	304,942	457,413
Little Rock	AR	1,743	141,708	212,561	283,415	425,123
Phoenix	AZ	1,918	151,969	227,954	303,939	455,908
Los Angeles	CA	2,327	374,099	561,148	748,197	1,122,296
Denver	CO	1,829	200,885	301,328	401,770	602,656
Bridgeport	CT	2,667	252,627	378,941	505,254	757,881
WASHINGTON	DC	2,095	208,312	312,468	416,624	624,936
Wilmington	DE	2,137	277,261	415,892	554,522	831,784
Jacksonville	FL	2,006	153,165	229,748	306,330	459,495
Atlanta	GA	2,098	147,177	220,766	294,355	441,532
Honolulu	HI	2,820	394,656	591,984	789,312	1,183,967
Des Moines	IA	1,693	134,304	201,455	268,607	402,911
Boise	ID	1,826	156,633	234,949	313,266	469,899
Chicago	IL	2,021	174,735	262,103	349,471	524,206
Indianapolis	IN	1,708	140,615	210,923	281,231	421,846
Wichita	KS	1,496	126,781	190,171	253,561	380,342
Louisville	KY	1,612	150,629	225,943	301,258	451,887
New Orleans	LA	2,107	194,236	291,354	388,472	582,708
Boston	MA	2,544	249,798	374,697	499,596	749,394
Baltimore	MD	2,004	202,404	303,606	404,808	607,212
Portland	ME	1,900	216,011	324,016	432,022	648,033
Detroit	MI	1,881	115,484	173,226	230,968	346,452
Minneapolis	MN	1,826	153,662	230,492	307,323	460,985
Kansas City	MO	1,713	143,069	214,604	286,139	429,208
Jackson	MS	1,831	157,145	235,717	314,290	471,435
Billings	MT	1,792	189,118	283,677	378,236	567,354
Charlotte	NC	1,846	156,947	235,420	313,894	470,840
Fargo	ND	1,432	155,459	233,188	310,917	466,376
Omaha	NE	1,661	133,591	200,386	267,181	400,772
Manchester	NH	2,204	175,354	263,030	350,707	526,061
Newark	NJ	2,290	121,703	182,555	243,407	365,110
Albuquerque	NM	1,681	187,908	281,862	375,816	563,724
Las Vegas	NV	2,221	146,530	219,796	293,061	439,591
New York City	NY	2,334	312,588	468,882	625,176	937,764
Columbus	OH	1,767	146,465	219,697	292,929	439,394
Oklahoma City	OK	1,585	135,202	202,803	270,404	405,606
Portland	OR	2,051	218,769	328,153	437,537	656,306
Philadelphia	PA	1,974	195,574	293,362	391,149	586,723
Providence	RI	2,066	227,218	340,827	454,437	681,655
Columbia	SC	1,802	143,346	215,020	286,693	430,039
Sioux Falls	SD	1,565	149,290	223,935	298,580	447,869
Memphis	TN	1,807	143,476	215,214	286,953	430,429
Houston	TX	1,807	126,453	189,680	252,906	379,360
Salt Lake City	UT	1,895	184,063	276,094	368,126	552,189
Virginia Beach	VA	2,428	208,315	312,472	416,629	624,944
Burlington	VT	2,226	205,045	307,568	410,090	615,136
Seattle	WA	2,048	223,594	335,391	447,189	670,783
Milwaukee	WI	1,804	183,348	275,021	366,695	550,043
Charleston	WV	1,513	108,906	163,359	217,811	326,717
Cheyenne	WY	1,528	167,737	251,605	335,474	503,211
AVERAGE		\$1,942	\$182,399	\$273,599	\$364,798	\$547,197
MEDIAN		\$1,881	\$157,145	\$235,717	\$314,290	\$471,435



District of Columbia

Comparison of selected taxes, 2012

TAX	LEVYING TAX ^{1/}	NUMBER OF JURISDICTIONS		
		LOWER THAN DC	SAME AS DC	HIGHER THAN DC
Individual Income	43 ^{2/}	37 ^{3/}	1	5 ^{3/}
Corporate Income	44	42	0	2
Insurance	49	17	16	16
Sales and Use	45	21	13	11
Beer	50	7	1	42
Light Wine	46	5	3	38
Distilled Spirits	32	0	1	31
Cigarette	50	41	0	9
Motor Fuel	50	27	1	22
Motor Vehicle Excise				
Cars < 3,500 lbs.	46	25	8	13
Cars > 3,500 lbs.	46	41	4	1
Cars < 5,000 lbs.				
Cars > 5,000 lbs.	46	46	0	0
Motor Vehicle Registration ^{4/}	50	48	0	2
Deed Recordation	35	35	0	0



District of Columbia

2012 Income Assumptions

Gross Income		Wages and Salaries	Interest	Long-Term Capital Gains 1/
\$25,000	Spouse 1	\$17,159	\$615	(\$128)
	Spouse 2	7,354		
\$50,000	Spouse 1	\$33,833	\$1,071	\$597
	Spouse 2	14,500		
\$75,000	Spouse 1	\$51,760	\$831	\$226
	Spouse 2	22,183		
\$100,000	Spouse 1	\$69,010	\$792	\$623
	Spouse 2	29,576		
\$150,000	Spouse 1	\$103,417	\$1,102	\$1,161
	Spouse 2	44,321		

1/ Assumes a three-year holding period



District of Columbia

2012 Income Tax Deduction Assumptions

Deduction	Gross Income Level				
	\$ 25,000	\$ 50,000	\$ 75,000	\$100,000	\$150,000
Medical (Gross)	6,073	7,464	9,087	9,703	12,228
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	4,198	3,714	3,462	2,203	978
Deductible Taxes	2/	2/	2/	2/	2/
Mortgage Interest	3/	3/	3/	3/	3/
Contribution Deduction	2,456	3,140	4,033	4,196	4,292
Gross Miscellaneous	2,879	4,619	3,910	3,973	4,576
Nondeductible 4/	<u>-500</u>	<u>-1,000</u>	<u>-1,500</u>	<u>-2,000</u>	<u>-3,000</u>
Net Miscellaneous Deduction	2,379	3,619	2,410	1,973	1,576
Other Miscellaneous Deductions	153	163	206	184	134
Total Deductions-without taxes And mortgage interest	9,186	10,636	10,110	8,555	6,980

- 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 city to city and is based on real and personal property taxes computed in the 2012 study and individual income taxes computed in the 2011 study.
- 3/ Mortgage interest is based on 5th year interest paid on a home purchased in 2007 at an interest rate of 4.0%.
- 4/ Nondeductible miscellaneous deductions equal 2 percent of A.G.I.