



Metropolitan Area Disposable  
Personal Income –  
**Methodology and Results for  
2001-2007**

Ann E. Dunbar

Bureau of Economic Analysis  
U.S. Department of Commerce  
Washington, D.C. 20230  
Phone: (202) 606-9215  
Fax: (202) 606-5322  
E-mail: [Ann.Dunbar@bea.gov](mailto:Ann.Dunbar@bea.gov)

WP2009-05  
July 2009

*The views expressed in this paper are solely those of the author and not necessarily those of the U.S. Bureau of Economic Analysis or the U.S. Department of Commerce*

Metropolitan Area Disposable Personal Income -  
Methodology and Results for 2001-2007

**Abstract**

The Bureau of Economic Analysis (BEA) publishes annual statistics of state disposable personal income, the difference between state personal income and state personal current taxes. BEA also publishes annual statistics of personal income for sub-state areas, but BEA does not publish corresponding statistics of disposable personal income (DPI) due to the absence of sub-state statistics of personal current taxes. This paper expands on earlier work to present new statistics of disposable personal income for 2005-2007 for the current 366 metropolitan areas.<sup>1</sup>

---

<sup>1</sup> See BEA Working Paper, *Metropolitan Area Disposable Personal Income: Methodology and Results for 2001-2004 (WP2008-02)*, by Ann E. Dunbar | June 2008 [http://www.bea.gov/papers/working\\_papers.htm](http://www.bea.gov/papers/working_papers.htm)

# Metropolitan Area Disposable Personal Income - Methodology and Results for 2001-2007

## Introduction

In the Bureau of Economic Analysis's (BEA) working paper *Metropolitan Area Disposable Personal Income - Methodology and Results for 2001-2002 (WP2006-04)*, BEA proposed a methodology to derive statistics of disposable personal income for sub-state areas. This paper presents updated and revised statistics for the current 366 metropolitan areas for 2001-2007 using this methodology and evaluates the resulting statistics.<sup>2</sup> Currently, the BEA produces annual statistics of both state personal income (SPI) and state disposable personal income (SDPI). SPI is defined as the income received by, or on behalf of, all the residents of the state from all sources.

Personal income is the sum of:

- Wage and salary disbursements
- Supplements to wages and salaries,
- Proprietors' income with inventory valuation and capital consumption adjustments
- Rental income of persons with capital consumption adjustment (including an imputation of the net rental income from owner occupied housing)
- Personal dividend income
- Personal interest income
- Personal current transfer receipts
- Less contributions for government social insurance.<sup>3</sup>

---

<sup>2</sup> The metropolitan area definitions used by BEA for its personal income statistics are the county-based definitions issued by the Office of Management and Budget (OMB) for Federal statistical purposes, last updated November 2008. There are now 366 metropolitan areas compared to 361 in my original paper. OMB's general concept of a metropolitan area is that of a geographic area consisting of at least one large population nucleus together with adjacent communities having a high degree of economic and social integration with the nucleus. In the November 2008, the OMB updated statistical areas to include changes in principal cities and in area titles.

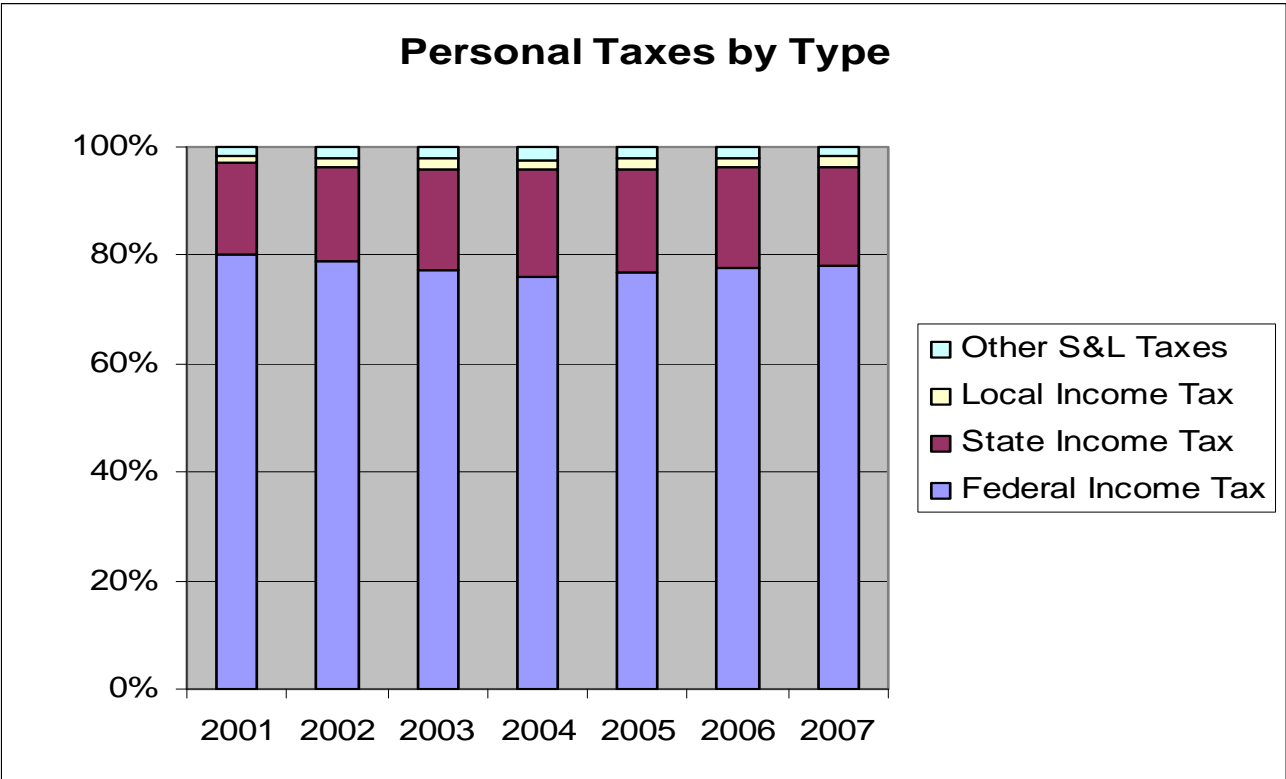
<sup>3</sup> Contributions for government social insurance consist of employer contributions for government social insurance and employee and self-employed contributions for government social insurance. It is deducted in the calculation of personal income. In 2006, contributions for government social insurance account for 8.4 percent of personal income. Contributions for social insurance consist of the payments made by employers, employees, by the self-employed, and by other individuals who participate in the following programs: Old-age, survivors, and disability insurance (OASDI, or social security); hospital insurance (HI) and supplementary medical insurance (Medicare); railroad retirement; state unemployment insurance; temporary disability insurance; and veterans' life insurance.

SDPI is state personal income less personal current taxes. BEA provides personal income statistics for local areas and metropolitan areas, but does not measure disposable personal income (DPI) for any sub-state area. Personal tax receipts consist primarily of the federal income tax, state and local income taxes, motor vehicle taxes paid by persons, motor vehicle operator licenses and other miscellaneous taxes. Personal taxes *do not* include the real property taxes paid on owner occupied homes. Personal income includes an imputation for the net rental income of owner occupied housing that is equal to the value of the housing services of owner occupied homes less the costs of providing those services. Real property taxes are subtracted in this imputation as an expense. Often, DPI is defined as “the income available for spending.”<sup>4</sup> The motivation for this work comes from data users’ requests for DPI for metropolitan areas.

---

4 This simplified definition is less appropriate as “in-kind” transfer programs like Medicaid, Medicare, and food stamps etc., become larger. In 2006, Medicare and Medicaid accounted for about 6.4 percent of personal income. Also, the Federal Insurance Contribution Act (FICA) and HI contributions are excluded from personal income as contributions to government social insurance. In some contexts, these contributions are treated as payroll taxes.

<b>State Personal Current</b> (millions of dollars)							
	2001	2002	2003	2004	2005	2006	2007
<b>Total Personal Taxes</b>	1,236,021	1,050,735	999,987	1,045,199	1,206,536	1,351,856	1,491,362
Federal Income Taxes	993,277	829,427	773,352	796,237	929,420	1,048,539	1,165,937
<b>State and Local Taxes</b>	242,744	221,308	226,635	248,962	277,116	303,317	325,425
Income Taxes							
State	205,519	183,677	186,195	204,602	229,508	253,149	272,624
Local	17,577	17,139	18,279	20,413	22,548	23,864	25,695
Other Taxes	19,648	20,492	22,161	23,947	25,060	26,304	27,106



In 2007, personal taxes were about \$1,491.4 billion or 12.3 percent of personal income. Of the \$1,491.4 billion in personal taxes in 2007, income taxes comprised about 98 percent of the total with the federal income tax accounting for about 78 percent, state income tax another 18 percent, and local income taxes of personal taxes less than 2 percent. The proposed methodology relies on the availability of source data for these income taxes at the sub-state level.

There are currently 366 metropolitan areas in the nation. A metropolitan area consists of an urban center (or centers) and adjacent communities that have a high degree of economic and social integration. Over 83 percent of the United States population lives in a metropolitan area. The basic geographic unit used to identify a metropolitan area is a county, but metropolitan areas can and do cross state lines. The metropolitan areas are a diverse set of areas. As the table below shows, nine metropolitan areas have a 2006 population greater than 5 million, accounting for almost 25 percent of the U.S. total population and almost 30 percent of total personal income in 2006. The most populous metropolitan area, New York-Northern New Jersey-Long Island, has a 2006 population of 18.8 million. It has a population slightly less than New York State's population of 19.4 million, but its 2006 total personal income was about 10.5 percent higher than that of New York State. At the other end of the spectrum there are 317 metropolitan areas that have populations of less than one million. Carson City, NV, the smallest metropolitan area in terms of population, had a population in 2006 of only 54,983. The 25 most populous metropolitan areas in 2006 accounted for 41.5 percent of the U.S. population and 48.4 percent of total SPI. Over 70 percent of the metropolitan areas had a population of less than 500,000 in 2006.

<b>Distribution of 2006 Population By Metropolitan Area</b>	
Less than 100,000	27
100,00 to 500,000	240
500,000 to 999,999	50
1,000,000 to 2,499,999	29
2,500,000 to 4,999,999	11
5,000,000 or more	9

## **Methodology**

Counties are the basic units of metropolitan areas. The county level taxes by type of tax are estimated, allocated to state personal tax controls and summed to metropolitan areas. To get a metro/nonmetro breakout for each state the statistics are summed on both state and metropolitan area code. Each major personal tax category source data is described below:

### *Federal Personal Income Tax*

The Internal Revenue Service (IRS) compiles and publishes selected income tax line items by zip code. The item, *Total Tax*, is available on the IRS zip code file and used as a proxy for income tax.<sup>5</sup> Using a BEA zip-to-county crosswalk, it is possible to construct estimates of total income tax by county.<sup>6</sup> However, a metropolitan area can be comprised of counties from more than one state. For each county in a state, BEA codes the county with a metropolitan code or a blank if the county is not in a metropolitan area. The federal income tax control for that state is allocated to the counties based on the IRS county-based estimates. The resulting county statistics are then combined and summed on the metropolitan area code to yield metropolitan area statistics that are consistent with BEA's state statistics. This also yields metro/nonmetro statistics for each state.<sup>7</sup>

IRS zip code data were unavailable for tax year 2003. As a first approximation for 2003 the distribution of the average 2002 and 2004 county tax liability was used to allocate the 2003 federal income tax state control.

The IRS zip file is available with a two year lag. Estimates for 2007 were approximated by moving the 2006 distribution by the growth in county level wages and salaries.

### *State Income Tax*

State income tax data by county are available for 26 states for all years except 2007. Seven states (Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming) have no state

---

<sup>5</sup> *Total Tax* corresponds to line 61 in the Tax Year 2006 Form 1040. *Total Tax* is before the earned income tax credit (EITC) and includes "other taxes." The line item used in the state estimates, line 56 in the Tax Year 2006 Form 1040, *Income Tax*, excludes these "other taxes," but it was not available.

<sup>6</sup> BEA uses annual United Postal Service Delivery statistics to construct the crosswalk.

<sup>7</sup> The resulting metro/nonmetro split assumes any local income tax is paid by state residents. This is not always the case (e.g. Jefferson County, KY levies a local income tax on both residents and non-residents who work in the county).

income taxes. County data are coded for metropolitan areas, allocated to state income tax controls, and summed to the metropolitan area. For states with an income tax but no sub-state data, the federal tax information on adjusted gross income by income class and zip code and the rate structure of the state income tax is used to impute sub-state estimates. Estimates for 2007 were extrapolated at the county level using the growth in wages and salaries. Appendix A details the sub-state source availability. About 83 percent of total state income taxes have actual source data.

### *Local Income Tax*

The distribution of local income taxes used actual county or school district data for five states (District of Columbia, New York, Maryland, Ohio, Oregon, and Pennsylvania) for 2001-2007. For the remaining 8 states, the 2002 *Census of Governments and Census' State and Local Finance* individual unit file was used to obtain statistics of local income taxes. These distributions were used to allocate the BEA state-level local income tax controls to counties. This methodology assumes that the local income tax attributed to a metropolitan area was only paid by that area's residents.<sup>8</sup>

### *Other State and Local Taxes*

Other state and local government personal taxes totaled less than \$27 billion in any year and were about 2 percent of total personal taxes for all years. These taxes consist mainly of personal property taxes (mainly property taxes on motor vehicles), motor vehicle registration taxes, motor vehicle operator licenses, and hunting and fishing licenses. The national controls for these taxes are weak and the business/personal splits used are suspect. Because the amount is relatively small, the state aggregate was distributed using the latest Census estimate of county population between 16 years and 85 years. Again, the county estimates were coded for metropolitan areas and allocated to the state controls. The results were then summed by metropolitan area.

### **Assumptions**

---

<sup>8</sup> New York City commuter earnings tax ended for New York state residents by state law and for residents of other states by decision of the New York State Supreme Court Appellate Division on April 4, 2000. Certain Ohio and Pennsylvania school district income taxes are levied on residents only.



The above methodology has several assumptions:

- The state and local county distribution data on income taxes, which is usually on a liability basis, approximates the distribution on a “cash” basis.<sup>9</sup>
- The source data is valid and the data suppressions in the source do not distort the metropolitan area results.
- It assumes that the mailing address on the IRS Form 1040 is the filer’s resident address. (Complications of part-year residence and addresses that are not the taxpayer’s residence are ignored.)
- The zip-to-county crosswalk is reasonably accurate and the method for distributing multi-county zip codes is valid.
- State and local personal taxes are assumed to be paid only by residents.
- State control statistics are valid.

## **Results**

Per capita personal taxes for the United States averaged \$4,531 in 2006 compared to a revised \$4,336 in 2001. The average per capita personal taxes for all metropolitan areas was \$4,920 compared to the average of only \$2,557 for all nonmetropolitan areas in 2006. The table below summarizes the overall results:

---

<sup>9</sup> Current Personal Taxes in BEA’s National Income and Product Accounts (NIPA) are on a receipts basis. However, the only source of a reliable state distribution is a tabulation of Form 1040 line items from the IRS Individual Income Tax Master. The assumption is made that the state “liability” distribution approximates the “receipts” distribution. For tax year 2001, this was not the case. For that year, a “receipts” based distribution was used by adjusting the “Income Tax” item by “Taxes Due” and “Overpayments adjusted for refundable credits.” In the following years, the distribution using both series yielded similar distributions. Because the “quality” of the adjustment items is suspect, the simpler “liability” distribution is used unless there is a large discrepancy such as that in 2001 and the resulting state distribution differs materially from the simpler method. More information on the methodology for personal current taxes is available at <http://www.bea.gov/regional/docs/spi2007/>.

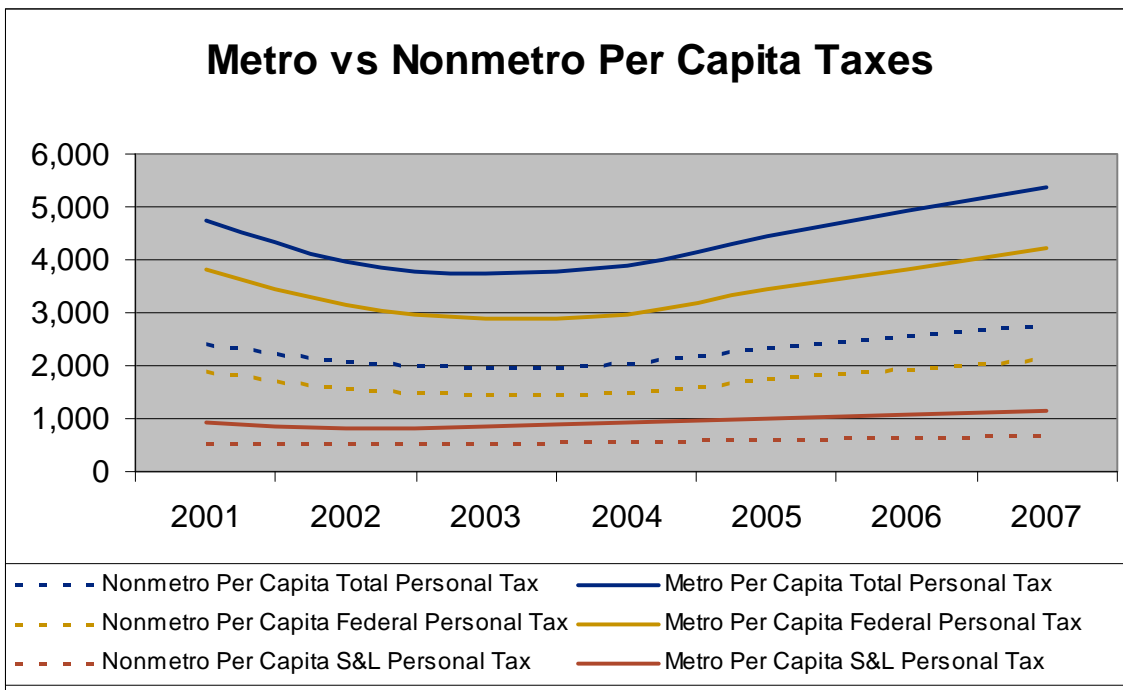
### Metro/Nonmetro Results 2006

*(Thousands of Dollars – Per Capita Dollars)*

	US	Metro	Nonmetro	Shares		Range	
				Metro	Non metro	High	Low
Personal Income (PI)	10,978,053,000	9,639,015,579	1,339,037,421	0.88	0.12	75,796	17,390
Per Capita PI	36,794	38,679	27,239				
Disposable PI	9,626,197,000	8,412,849,683	1,213,347,317	0.87	0.13	57,822	16,160
Per Capita DPI	32,263	33,759	24,682				
Personal Taxes	1,351,856,000	1,226,165,896	125,690,104	0.91	0.09		
Federal	1,048,539,000	953,915,941	94,623,059	0.91	0.09		
State and Local	303,317,000	272,249,955	31,067,045	0.90	0.10		
Per Capita Personal Taxes	4,531	4,920	2,557			17,914	1,218
Per Capita Federal	3,514	3,828	1,925			14,862	940
Per Capita State & Local	1,017	1,092	632			3,052	62
Effective Tax Rate with respect to Personal Income							
Total Personal Taxes	12.31%	12.72%	9.39%				
Federal	9.55%	9.90%	7.07%				
State and Local	2.76%	2.82%	2.32%				

Throughout the 2001-2007 period, per capita personal taxes for the metropolitan areas are over 90 percent higher than per capita personal taxes in nonmetropolitan areas.<sup>10</sup> The chart below illustrates the relationship between metropolitan and nonmetropolitan per capita personal taxes:

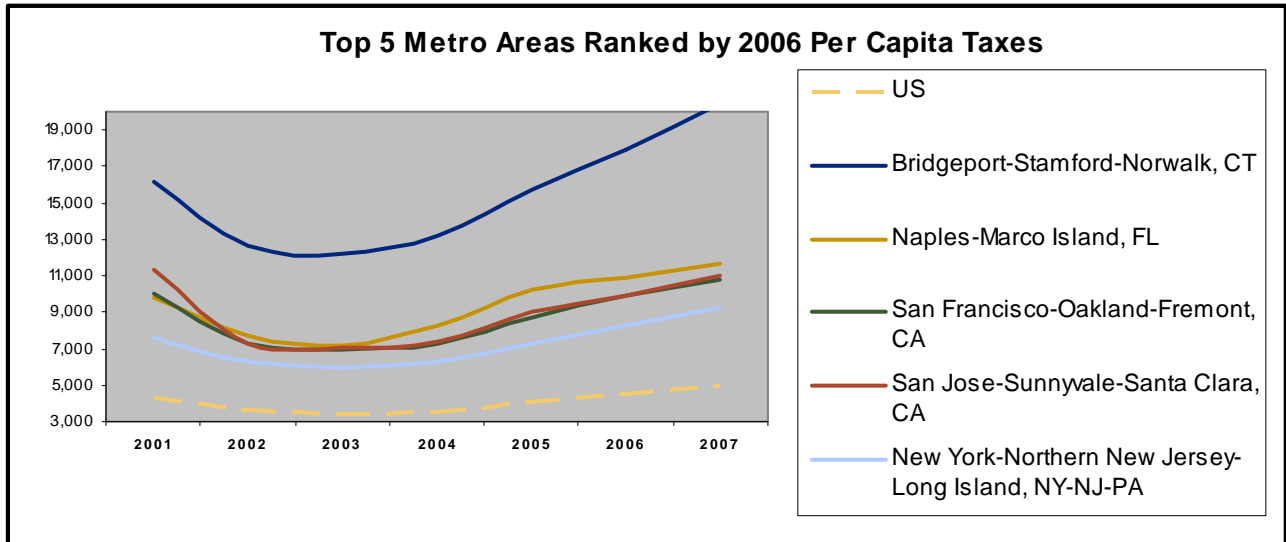
<sup>10</sup> Not all nonMSAs have low per capita taxes. Teton County, WY, a non-metropolitan county, has the highest effective federal income tax rate using income tax/adjusted gross income as a measure.



The per capita tax results are driven by the federal income tax, which is a progressive tax. Thus, the primary determinants of per capita personal taxes are not only the taxable income in the area but the income distribution in the area interacting with complex tax laws, including the alternative minimum tax (AMT). According to a Congressional Budget Office (CBO) report released in April 2009, the top quintile of the income distribution paid 86.3 percent of 2006 federal income tax liabilities, with the top 5 percent paying 60.9 percent and the top 1 percent paying 39.1 percent. The lowest two quintiles pay no federal income tax.<sup>11</sup> Looking at the detailed results for the time period 2001-2007, it is metropolitan areas such as Bridgeport-Stamford-Norwalk, CT; Naples-Marcos Island, FL; San Francisco-Oakland-Fremont, CA; San Jose-Sunnyvale-Santa Clara, CA; Washington-Arlington-Alexandria, DC-VA-MD-WV, Sebastian-Vero Beach, FL; New York-Northern New Jersey-Long Island, NY-NJ-PA; and Boston-Cambridge-Quincy, MA-NH that consistently appear in the top ranks. As the graph below shows, Bridgeport-Stamford-Norwalk, CT is a definite outlier. It ranks number one in per

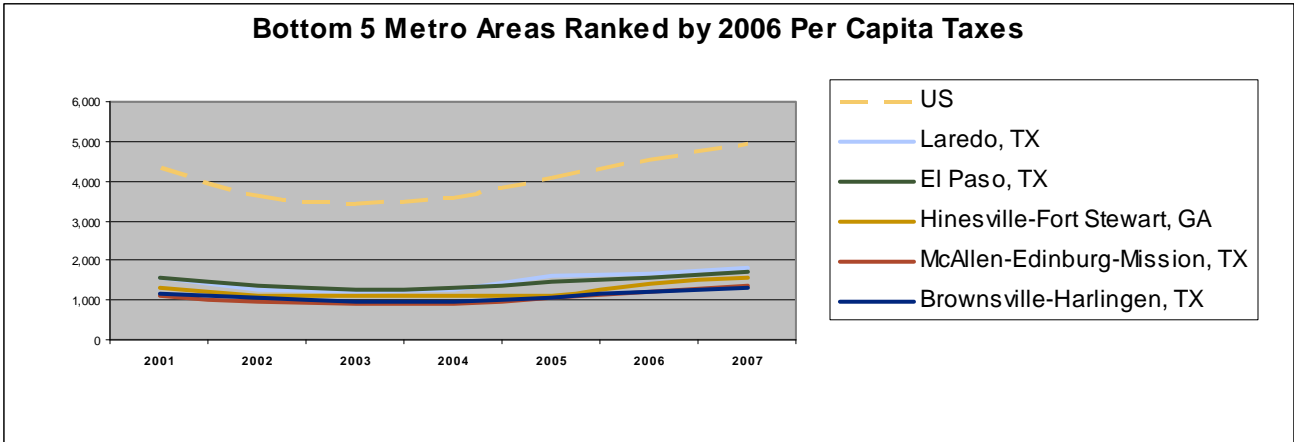
<sup>11</sup> Appendix B summarizes the CBO results for the federal income tax.

capita personal taxes, per capita personal income, and per capita disposable personal income for all years. Its effective tax rate using personal income as a measure of income is 23.6 percent compared to the national average of 12.3 percent in 2006.<sup>12</sup> The following charts show the top five and bottom five metropolitan areas ranked by 2006 per capita personal taxes over time. Bridgeport-Stamford-Norwalk, CT area is a definite outlier. The border/military metropolitan areas of McAllen, TX; Brownsville, TX; Laredo, TX; and El Paso, TX have the lowest per capita personal taxes.<sup>13</sup>



12 NIPA personal income excludes realized capital gains and retirement income distributions but the income taxes paid on those gains and retirement distributions are included in NIPA personal taxes. NIPA personal income also includes untaxed income such as Medicare, Medicaid, employers' contribution to health insurance, nontaxable military pay, and tax deferred income such as employer and employee pretax contributions to retirement accounts. Also, the NIPA federal personal income tax treats the refundable EITC and the additional child credit as transfer payments, not as reductions in the federal income tax liability.

13 Large portions of military compensation are nontaxable such as employer contributions to retirement, housing and quarter allowances and certain combat pay. Also, some states do not tax military wages. "Legal Residency," or "domicile" for military members, refers to the place where a military member intends to return to and live after discharge or retirement, and which they consider their "permanent home." Legal residency determines what local (state) tax laws a military member is subject to, and in which local (city, county, state) elections they may vote in. This residence may not necessarily be where the military member is stationed.



The tables below detail my results for the top 25 and bottom 25 metropolitan areas ranked by 2006 per capita personal income.

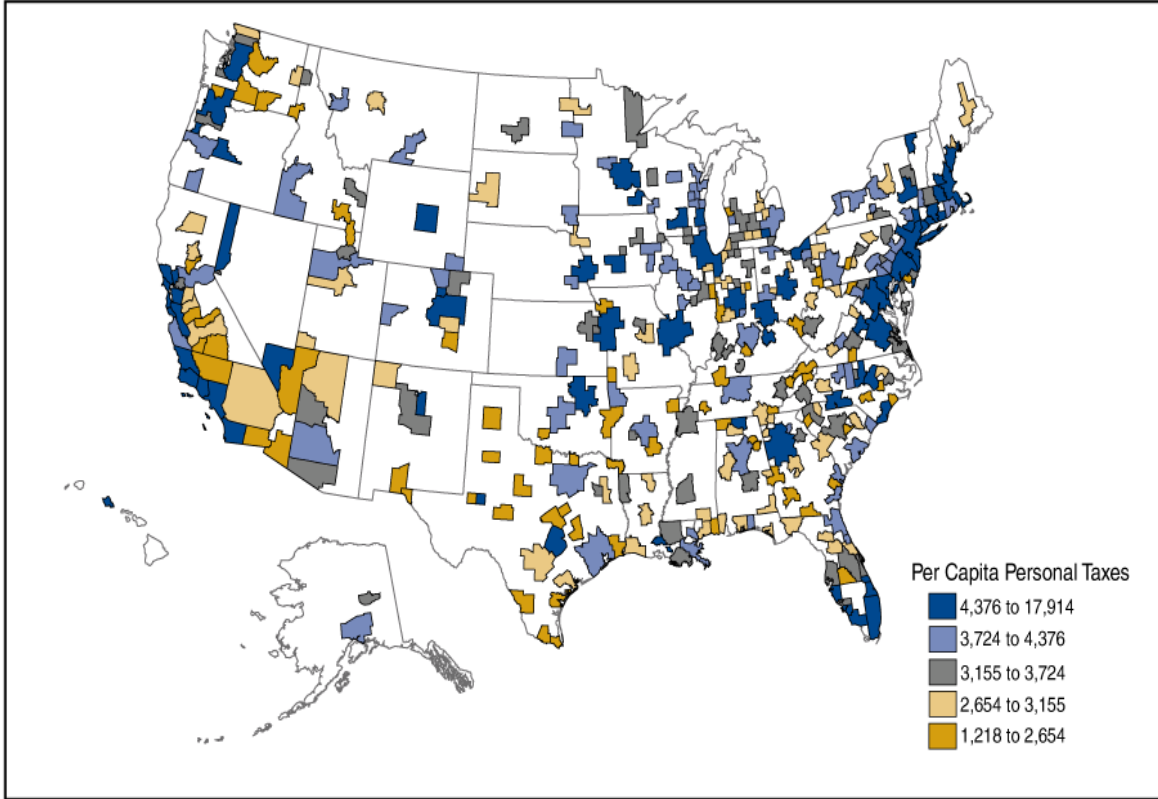
## Rankings of Top Metropolitan Areas in 2006 Per Capita Income

Metropolitan Area	Rank Per Capita Personal Income 2006	Per Capita Personal Income 2006	Rank Per Capita Personal Taxes 2006	Per Capita Personal Taxes 2006	Rank Per Capita Disposable Personal Income 2006	Per Capita Disposable Personal Income 2006
Bridgeport-Stamford-Norwalk, CT	1	75,796	1	17,914	1	57,882
Naples-Marco Island, FL	2	59,895	2	10,853	2	49,043
San Francisco-Oakland-Fremont, CA	3	57,848	3	9,933	3	47,914
Sebastian-Vero Beach, FL	4	55,817	6	8,167	4	47,650
San Jose-Sunnyvale-Santa Clara, CA	5	55,754	4	9,893	5	45,860
Washington-Arlington-Alexandria, DC-VA-MD-WV	6	52,485	8	7,980	6	44,505
Boston-Cambridge-Quincy, MA-NH	7	50,515	7	7,982	8	42,532
New York-Northern New Jersey-Long Island, NY-NJ-PA	8	49,642	5	8,211	12	41,429
Trenton-Ewing, NJ	9	49,195	10	7,270	10	41,925
Boulder, CO	10	49,038	9	7,592	11	41,447
Midland, TX	11	48,992	11	6,825	9	42,167
Casper, WY	12	48,605	29	5,529	7	43,076
Napa, CA	13	47,866	12	6,777	13	41,089
Bradenton-Sarasota-Venice, FL	14	46,385	30	5,499	14	40,886
Seattle-Tacoma-Bellevue, WA	15	46,054	38	5,192	15	40,862
Santa Cruz-Watsonville, CA	16	45,925	21	5,775	16	40,150
Hartford-West Hartford-East Hartford, CT	17	45,543	17	5,918	17	39,625
Barnstable Town, MA	18	45,079	23	5,744	18	39,335
Denver-Aurora-Broomfield, CO	19	45,072	20	5,795	19	39,276
Santa Barbara-Santa Maria-Goleta, CA	20	44,480	13	6,511	25	37,970
Minneapolis-St. Paul-Bloomington, MN-WI	21	44,295	15	6,209	23	38,086
Santa Rosa-Petaluma, CA	22	44,219	28	5,556	21	38,662
Reno-Sparks, NV	23	44,031	22	5,770	22	38,261
Oxnard-Thousand Oaks-Ventura, CA	24	43,609	18	5,875	26	37,734
Houston-Sugar Land-Baytown, TX	25	43,497	73	4,376	20	39,122

## Rankings of Bottom Metropolitan Areas in 2006 Per Capita Income

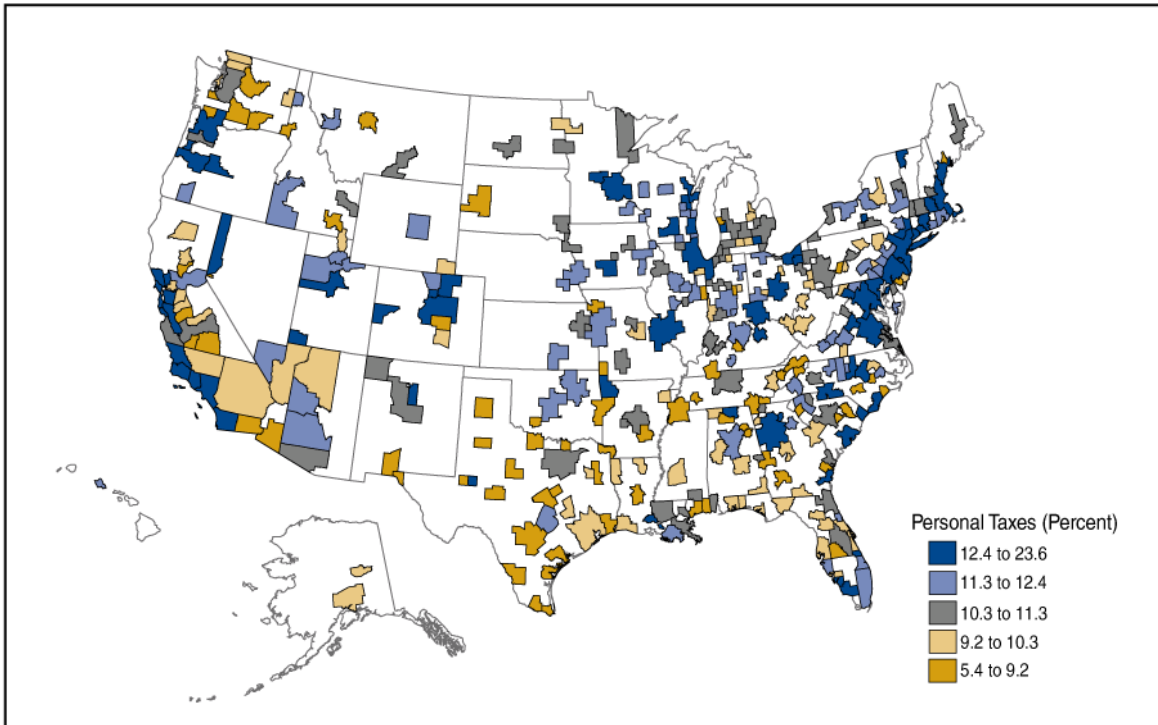
<b>Metropolitan Area</b>	<b>Rank Per Capita Personal Income 2006</b>	<b>Per Capita Personal Income 2006</b>	<b>Rank Per Capita Personal Taxes 2006</b>	<b>Per Capita Personal Taxes 2006</b>	<b>Rank Per Capita Disposable Personal Income 2006</b>	<b>Per Capita Disposable Personal Income 2006</b>
Greeley, CO	342	25,668	206	3,240	352	22,428
Auburn-Opelika, AL	343	25,604	268	2,807	348	22,797
Blacksburg-Christiansburg-Radford, VA	344	25,479	258	2,899	350	22,580
Danville, IL	345	25,449	345	2,166	342	23,283
College Station-Bryan, TX	346	25,435	328	2,382	345	23,053
Valdosta, GA	347	25,421	329	2,370	346	23,052
El Paso, TX	348	25,182	363	1,541	336	23,641
Morristown, TN	349	25,073	358	1,760	340	23,314
Albany, GA	350	25,067	340	2,232	347	22,834
Pine Bluff, AR	351	24,740	352	1,960	349	22,780
Visalia-Porterville, CA	352	24,456	351	1,970	351	22,486
St. George, UT	353	24,178	239	3,034	358	21,144
Las Cruces, NM	354	23,925	346	2,157	354	21,768
Lake Havasu City-Kingman, AZ	355	23,494	339	2,241	356	21,253
Merced, CA	356	23,267	354	1,885	355	21,381
Hinesville-Fort Stewart, GA	357	23,266	364	1,403	353	21,864
Madera-Chowchilla, CA	358	22,892	343	2,199	360	20,693
El Centro, CA	359	22,871	361	1,720	357	21,151
Hanford-Corcoran, CA	360	22,536	360	1,723	359	20,814
Logan, UT-ID	361	22,177	344	2,193	362	19,984
Yuma, AZ	362	22,071	356	1,828	361	20,243
Provo-Orem, UT	363	21,664	263	2,848	363	18,816
Laredo, TX	364	20,262	362	1,653	364	18,610
Brownsville-Harlingen, TX	365	18,624	366	1,218	365	17,406
McAllen-Edinburg-Mission, TX	366	17,390	365	1,230	366	16,160

### Metropolitan Per Capita Personal Taxes, 2006



U.S. Bureau of Economic Analysis

### Metropolitan Effective Tax Rates with respect to Personal Income, 2006



U.S. Bureau of Economic Analysis



Complete 2001-2007 prototype results with a breakout of Federal personal taxes and S&L personal taxes are now available on the file, "Results.xls," accompanying this working paper.

**Appendix A. States with Sub-state Details by Tax Year**

	2001	2002	2003	2004	2005	2006
Alabama	x	x	n.a.	n.a.	n.a.	n.a.
Arizona	x	x	x	n.a.	n.a.	n.a.
Arkansas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
California	x	x	x	x	x	x
Colorado	x	x	x	x	n.a.	n.a.
Connecticut	x	x	x	x	x	x
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Georgia	x	x	x	x	x	n.a.
Hawaii	x	x	x	x	x	x
Idaho	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Illinois	x	x	x	x	x	x
Indiana	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Iowa	x	x	x	x	x	x
Kansas	x	x	x	x	x	x
Kentucky	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Louisiana	n.a.	n.a.	n.a.	n.a.	x	x
Maine	x	n.a.	n.a.	n.a.	n.a.	n.a.
Maryland	x	x	x	x	x	x
Massachusetts	x	x	x	x	x	x
Michigan	x	x	x	x	x	x
Minnesota	x	x	x	x	x	x
Mississippi	x	x	x	x	x	x
Missouri	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Montana	x	x	x	x	x	x
Nebraska	x	x	x	x	x	x
New Hampshire	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	x	x	x	x	x	x
New Mexico	n.a.	n.a.	n.a.	n.a.	x	n.a.
New York	x	x	x	x	x	x
North Carolina	x	x	x	x	x	x
North Dakota	x	x	n.a.	n.a.	n.a.	n.a.
Ohio	x	x	x	x	x	x
Oklahoma	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oregon	x	x	x	x	x	x
Pennsylvania	x	x	x	x	x	x
Rhode Island	Entire state in MSA					
South Carolina	x	x	x	x	x	x
Tennessee	x	x	x	x	x	x
Utah	x	x	x	x	x	x
Vermont	x	x	x	x	x	x
Virginia	x	x	x	x	x	x
Washington	No state income tax					
West Virginia	x	x	x	x	x	x
Wisconsin	x	x	x	x	x	x

Alaska, Florida, Nevada, South Dakota, Texas, Washington do not have a state income tax

x : State income tax by county, zip code, city or town available

n.a. : not available

## Appendix B

Progressivity of Federal Income Tax 2006						
	Average Pretax Income (CBO)	Average After-tax Income (CBO)	Share of Pretax Income	Share of After-tax Income	Effective Federal Income Tax Rates	Share Federal Income Tax Liabilities
Lowest Quintile	17,200	16,500	3.9	4.7	-6.8	-2.8
Second Quintile	39,400	35,400	8.4	9.5	-0.8	-0.8
Middle Quintile	60,700	52,100	13.2	14.3	3.0	4.4
Fourth Quintile	89,500	73,800	19.5	20.3	6.0	12.9
Highest Quintile	248,400	184,400	55.7	52.1	14.1	86.3
Top 10%	366,400	265,500	41.6	38.1	16.0	72.8
Top 5%	564,200	400,400	31.9	28.5	17.5	60.9
Top 1%	1,743,700	1,200,300	18.8	16.3	19.0	39.1

[http://www.cbo.gov/publications/collections/tax/2009/summary\\_table\\_2006.xls](http://www.cbo.gov/publications/collections/tax/2009/summary_table_2006.xls)

Effective tax rates are calculated by dividing taxes by comprehensive household income.

Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance).

Income categories are defined by ranking all people by their comprehensive household income adjusted for household size—that is, divided by the square root of the household's size. (A household consists of the people who share a housing unit, regardless of their relationships.) Quintiles, or fifths, contain equal numbers of people. Households with negative income (business or investment losses larger than other income) are excluded from the lowest income category but are included in totals.

Individual income taxes are attributed directly to households paying those taxes.

## References

Ruser, John and Adrienne Pilot and Charles Nelson, “Alternative Measures of Household Income: BEA Personal Income, CPS Money Income, and Beyond,” presented at the Federal Economic Statistics Advisory Committee, 2004.

<http://www.bea.gov/bea/about/fesac/AlternativemeasuresHHincomeFESAC121404.pdf>

Rodriguez, Orlando, Wayne Villemez, and Medora Barnes. 2006. How Census Income Estimates Provide Misleading Statistics on Personal Income for Connecticut Towns. Storrs, Connecticut:

[http://popcenter.uconn.edu/CT\\_TownIncome\\_OP2006-01.pdf](http://popcenter.uconn.edu/CT_TownIncome_OP2006-01.pdf)

Statistics of Income, Internal Revenue Service, “ZIP Code Data Documentation Guide, Tax Year 2004,” <http://www.irs.gov/pub/irs-soi/01zptxt.txt>