# Metropolitan Area Disposable Personal Income: Methodology and Results for 2001-2004 

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#### Abstract

The Bureau of Economic Analysis (BEA) publishes annual estimates of state disposable personal income, the difference between state personal income and state personal current taxes. BEA also publishes annual estimates of personal income for sub-state areas, but BEA does not publish corresponding estimates of disposable personal income (DPI) due to the absence of estimates of taxes. This paper uses the methodology presented in an earlier working paper to revise and update the estimates of disposable personal income for the current 363 metropolitan statistical areas for 2001-2004.


# Disposable Personal Income for Metropolitan Areas: Methodology and Results for 2001-2004 

## Introduction

In BEA's Working Paper Metropolitan Area Disposable Personal Income - Methodology and Results for 2001-2002 (WP2006-04), BEA proposed a methodology to derive estimates of disposable personal income for sub-state areas. This paper presents updated and revised estimates for the current 363 metropolitan statistical areas (MSAs) for 2001-2004 using this methodology and evaluates the resulting estimates. ${ }^{1}$ Currently, the Bureau of Economic Analysis (BEA) produces annual estimates of both state personal income (SPI) and state disposable personal income (SDPI). State personal income (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,

1 The metropolitan statistical area (MSA) statistical area definitions used by BEA for its personal income estimates are the county-based definitions issued by the Office of Management and Budget (OMB) for Federal statistical purposes, updated December 2006. There are now 363 MSA's compared to 361 in the 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 December 2006, the Office of Management and Budget (OMB) updated statistical areas to include changes in principal cities and in area titles. The listing of changes are provided below:

- Two new MSAs:
o Lake Havasu City-Kingman, Arizona (MSA 29420, consisting of Mohave County, code 015);
o Palm Coast, Florida (MSA 37380, consisting of Flagler County, code 035).
- personal current transfer receipts,
- less contributions for government social insurance. ${ }^{2}$

SDPI is state personal income less personal current taxes. BEA estimates personal income for local areas and MSA's but does not estimate disposable personal income (DPI) for any sub-state area on a regular basis. Personal tax receipts consist primarily of the federal individual income tax, state and local personal 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. In personal income, there is 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." ${ }^{3}$ The motivation for this work comes from users' requests for DPI for metropolitan areas.

|  | STATE PERSONAL CURRENT TAXES (millions of dollars) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Share | of Per | sonal T | axes |  |
|  | 2001 | 2002 | 2003 | 2004 | 2001 | 2002 | 2003 | 2004 |
| TOTAL PERSONAL TAXES | 1,236,021 | 1,050,735 | 999,987 | 1,045,199 |  |  |  |  |
| FEDERAL INCOME TAXES | 993,277 | 829,427 | 773,352 | 796,237 | 0.80 | 0.79 | 0.77 | 0.76 |
| STATE AND LOCAL TAXES | 242,744 | 221,308 | 226,635 | 248,962 | 0.20 | 0.21 | 0.23 | 0.24 |
| INCOME TAXES |  |  |  |  |  |  |  |  |
| STATE | 205,519 | 183,677 | 186,195 | 204,602 | 0.17 | 0.17 | 0.19 | 0.20 |
| LOCAL | 17,577 | 17,139 | 18,279 | 20,413 | 0.01 | 0.02 | 0.02 | 0.02 |
| OTHER TAXES | 19,648 | 20,492 | 22,161 | 23,947 | 0.02 | 0.02 | 0.02 | 0.02 |

[^0]DPI is about 8.3 percent lower than personal income or equivalently, personal taxes comprise 11 percent of personal income. The federal individual income tax accounts for 76 percent of total personal taxes in 2004, followed by state personal income taxes which account for 20 percent and local personal income taxes which account for another 2 percent. Together, income taxes paid by individuals account for about 98 percent of personal taxes. The proposed methodology relies on the availability of source data for these income taxes at the sub-state level.

There are currently 363 metropolitan statistical areas (MSAs). An MSA consists of an urban center (or centers) and adjacent communities that have a high degree of economic and social integration. Over 92 percent of the US population lives in an MSA. The basic geographic unit is a county but MSAs can and do cross state lines. The MSAs are a diverse set of areas. As the table below shows, eight MSAs have a 2004 population greater than 5 million, accounting for almost 23.3 percent of the US total population and over 27.5 percent of total personal income in 2004. The most populous MSA, NY, NJ, Long Island with a 2004 population of 18.8 million has a population slightly less than New York State but its 2004 total personal income was about 10 percent higher than that of New York state. This contrasts with 313 MSAs that have populations of less than one million. Carson City, NV, the smallest MSA in terms of population had a population in 2004 of only 55,939. The 25 most populous MSAs in 2004 accounted for 41.5 percent of the U.S. population and 47.9 percent of total state personal income. Two hundred sixty-seven MSAs have a 2004 population of less than 500,000.

## Distribution of 2004 Population by MSA

| Less than 500,000 | 267 |
| :--- | :---: |
| 500,000 to 999,999 | 46 |
| $1,000,000$ to $2,499,999$ | 30 |
| $2,500,000$ to $4,999,999$ | 12 |
| $5,000,000$ or more | 8 |

## Methodology

Because the basic units of the MSAs are counties, county level taxes by type of tax are estimated, allocated to state personal tax controls and summed to MSA. To get a state level metro/nonmetro breakout for each state the estimates are summed on both state and MSA code. Each major personal tax category source data is described below:

## Federal Individual Income Tax

The Internal Revenue Service compiles and publishes selected income tax line items by zip code. The item, Total Tax, is available on the IRS zip file and used as a proxy for income tax. ${ }^{4}$ Using a zip-to-county crosswalk it is possible to construct estimates of total income tax by county. However, a MSA can be comprised of counties from more than one state. For each county in a state, the county is coded with a MSA code or a blank if the county is not in an MSA. The county estimates for each state are allocated to federal income tax control for that state. The state estimates are then combined and summed on the MSA code to yield MSA estimates that are consistent with BEA's state estimates. This also yields an approximate metro/nonmetro estimate for each state. ${ }^{5}$ IRS Zip code data were unavailable for tax year 2003. As a first approximation for 2003 I used the distribution of the average 2002 and 2004 county tax liability to allocate the 2003 federal income tax state control.

## State Personal Income Tax

State personal income tax data by county are available for 23 states for all years. Seven states (Alaska, Florida, Nevada, South Dakota, Texas, Washington and Wyoming) have no state income taxes. County estimates are coded for MSA, allocated to state income tax controls, and summed to the MSA. For states with an income tax but no sub-state data, the federal tax

4 Total Tax corresponds to line 62 of the Form 1040. Total Tax is before the earned income tax credit (EITC) and includes other taxes. The line item used in the state estimates, Income Tax, excludes these "other taxes" but it was not available. Unlike the IRS, the national income accounts treat the refundable EITC as a transfer payment, not a negative income tax. Almost all the EITC is refunded or applied to other taxes
5 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 nonresidents who work in the county).
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 for 2001 and 2002. Because 2003 federal tax data were unavailable, the 2002 estimates were given by the growth in personal income less transfers for the states with imputation. For states with data for 2001 or 2002 but missing data for 2003 or 2004 the same imputation method was used. Appendix A details the sub state source availability. About 82 percent of total state income taxes have actual source data, so only about 18 percent was imputed

## Local Personal Income Tax

The distribution of local income taxes was improved by using actual county or school district data for five states (District of Columbia, New York, Maryland, Ohio, Oregon and Pennsylvania) for 2001-2004. For the remaining 8 states, the 2002 Census of Governments and Census' State and Local Finance individual unit file was used to obtain estimates of local income taxes. These distributions were allocated to BEA local income state tax controls. This methodology assumes that the local income tax attributed to a MSA was only paid by that MSA's residents. ${ }^{6}$

## Other State and Local Taxes

Other state and local government personal taxes totaled less than $\$ 25$ billion in any year and were about two 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 16 years and over for 2001-2004. Again, the county estimates were coded for MSAs and allocated to the state controls. The results were then summed by MSA.

[^1]
## Assumptions

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 "receipts" basis."
- The source data are valid and the impact of suppressions in the source data does not distort the MSA results.
- The IRS assumes that the mailing address on the 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/county crosswalk is reasonably accurate and the method for allocating shared zips is valid.
- State and local personal taxes are assumed to be paid only by residents.
- State control estimates are valid.


## Results

The average per capita personal taxes for the United States were $\$ 3,559$ in 2004. Table 1 summarizes the overall results:

[^2]

Looking at the detailed results for MSA's, per capita taxes ranged from a high of \$13,104 in Bridgeport, Stamford, Norwalk CT MSA (Fairfield County) to a low of \$897 in the McAllen, Edinburg, Mission TX MSA in 2004, The results are dominated by the federal individual income tax which accounts for about 76 percent of total personal taxes. The federal individual income tax is a progressive tax with the top 1 percent paying about 36.7 percent of the total tax and the highest quintile paying about 85.3 percent according to a Congressional Budget Office study. ${ }^{8}$ The lower half of the income distribution pays less than 5 percent of the federal income tax. This progressive property of the federal individual income tax is revealed in the results. ${ }^{9}$ The 363 MSA's are a diverse set of areas. 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). The FIT acts to make the distribution of per capita disposable personal income more equal than the distribution of per capita personal income as the diagram below shows.

[^3]
he Bridgeport MSA (Fairfield County, CT) has a per capita personal income of $\$ 64,244$ but its per capita disposable personal income is $\$ 51,119$. Its effective tax rate using personal income as a measure of income is 20.4 percent compared to the national average of 10.7 percent in 2004. San Jose, San Francisco, Naples and Washington complete the top five MSA in personal taxes per capita in 2004. The border/military MSAs of McAllen TX, Brownsville, TX; Hinesville- Ft Stewart, GA; Laredo, TX ; El Paso, TX have the lowest per capita personal taxes. ${ }^{10}$ The tables below detail my results for the top 25 and bottom 25 MSAs ranked by personal taxes per capita

9 Not only are federal individual income tax rates progressive but those subject to these rates have high incomes.
10 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 member 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.
in 2004.

Detailed results for all MSAs for the 2001-2004 period are available in a separate excel worksheet.

| Rankings of Top 25 MSAs in 2004 Per Capita Income |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Metropolitan Statistical Area | Rank Per Capita Personal Income 2004 | Per Capita Personal Income 2004 | $\begin{gathered} \text { Rank } \\ \text { Per } \\ \text { Capita } \\ \text { Personal } \\ \text { Taxes } \\ 2004 \end{gathered}$ | Per Capita Personal Taxes 2004 | Rank Per Capita Disposable Personal Income 2004 | Per Capita Disposable Personal Income 2004 |
| Bridgeport-Stamford-Norwalk, CT (MSA) | 1 | 64,224 | 1 | 13,104 | 1 | 51,119 |
| San Francisco-Oakland-Fremont, CA (MSA) | 2 | 49,989 | 3 | 7,327 | 2 | 42,661 |
| Naples-Marco Island, FL (MSA) | 3 | 49,043 | 2 | 8,246 | 4 | 40,798 |
| San Jose-Sunnyvale-Santa Clara, CA (MSA) | 4 | 48,226 | 4 | 7,290 | 3 | 40,936 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV (MSA) | 5 | 46,311 | 5 | 6,485 | 5 | 39,826 |
| Sebastian-Vero Beach, FL (MSA) | 6 | 45,336 | 8 | 5,682 | 6 | 39,654 |
| Boston-Cambridge-Quincy, MA-NH (MSA) | 7 | 45,195 | 7 | 6,226 | 7 | 38,970 |
| Trenton-Ewing, NJ (MSA) | 8 | 43,657 | 10 | 5,523 | 8 | 38,134 |
| New York-Northern New Jersey-Long Island, NY-NJ-PA (MSA) | 9 | 43,496 | 6 | 6,337 | 11 | 37,160 |
| Boulder, CO (MSA) | 10 | 43,076 | 9 | 5,623 | 10 | 37,453 |
| Barnstable Town, MA (MSA) | 11 | 41,851 | 16 | 4,844 | 12 | 37,007 |
| Seattle-Tacoma-Bellevue, WA (MSA) | 12 | 41,593 | 40 | 4,064 | 9 | 37,529 |
| Minneapolis-St. Paul-Bloomington, MN-WI (MSA) | 13 | 40,915 | 12 | 5,155 | 16 | 35,760 |
| Santa Cruz-Watsonville, CA (MSA) | 14 | 40,907 | 18 | 4,652 | 13 | 36,255 |
| Napa, CA (MSA) | 15 | 40,835 | 11 | 5,261 | 17 | 35,574 |
| Denver-Aurora, CO (MSA) | 16 | 40,583 | 22 | 4,486 | 15 | 36,097 |
| Hartford-West Hartford-East Hartford, CT (MSA) | 17 | 40,504 | 13 | 4,935 | 18 | 35,569 |
| Sarasota-Bradenton-Venice, FL (MSA) | 18 | 40,356 | 30 | 4,190 | 14 | 36,166 |
| Reno-Sparks, NV (MSA) | 19 | 40,065 | 20 | 4,538 | 19 | 35,527 |
| Baltimore-Towson, MD (MSA) | 20 | 39,032 | 14 | 4,921 | 26 | 34,111 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD (MSA) | 21 | 38,869 | 19 | 4,569 | 23 | 34,300 |
| Ann Arbor, MI (MSA) | 22 | 38,635 | 21 | 4,504 | 25 | 34,131 |
| Manchester-Nashua, NH (MSA) | 23 | 38,634 | 70 | 3,575 | 21 | 35,059 |
| Casper, WY (MSA) | 24 | 38,550 | 86 | 3,384 | 20 | 35,166 |
| San Diego-Carlsbad-San Marcos, CA (MSA) | 25 | 38,536 | 25 | 4,341 | 24 | 34,195 |


| Rankings of Bottom 25 MSAs in 2004 Per Capita Income |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rank |  |  |  |  |

Rankings of Top25 MSAs in 2004 Per Capita Personal Taxes

## Metropolitan Statistical Area

Bridgeport-Stamford-Norwalk, CT
Naples-Marco Island, FL
San Francisco-Oakland-Fremont, CA
San Jose-Sunnyvale-Santa Clara, CA
Washington-Arlington-Alexandria, DC-VA-MD-WV
New York-Northern New Jersey-Long Island, NY-NJ-PA
Boston-Cambridge-Quincy, MA-NH
Sebastian-Vero Beach, FL
Boulder, CO
Trenton-Ewing, NJ
Napa, CA
Minneapolis-St. Paul-Bloomington, MN-WI
Hartford-West Hartford-East Hartford, CT
Baltimore-Towson, MD
Santa Barbara-Santa Maria-Goleta, CA
Barnstable Town, MA
Oxnard-Thousand Oaks-Ventura, CA
Santa Cruz-Watsonville, CA
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD
Reno-Sparks, NV
Ann Arbor, MI
Denver-Aurora, CO
Charlottesville, VA
Madison, WI
San Diego-Carlsbad-San Marcos, CA

Rank

## Capita Personal Taxes



## Per Capita Personal Personal <br> Taxes

| Rank <br> Per <br> Capita | Per <br> Personal <br> Pepita <br> Income | Personal <br> Income | Rank <br> Per Capita <br> Personal <br> Income |
| :---: | :---: | :---: | :---: |
| 1 | 64,224 | Per Capita <br> Disposable <br> Personal <br> Income |  |
| 3 | 49,043 | 1 | 51,119 |
| 2 | 49,989 | 4 | 40,798 |
| 4 | 48,226 | 2 | 42,661 |
| 5 | 46,311 | 3 | 40,936 |
| 9 | 43,496 | 5 | 39,826 |
| 7 | 45,195 | 11 | 37,160 |
| 6 | 45,336 | 7 | 38,970 |
| 10 | 43,076 | 6 | 39,654 |
| 8 | 43,657 | 10 | 37,453 |
| 15 | 40,835 | 8 | 38,134 |
| 13 | 40,915 | 17 | 35,574 |
| 17 | 40,504 | 16 | 35,760 |
| 20 | 39,032 | 18 | 35,569 |
| 28 | 38,313 | 26 | 34,111 |
| 11 | 41,851 | 33 | 33,394 |
| 27 | 38,367 | 12 | 37,007 |
| 14 | 40,907 | 28 | 33,678 |
| 21 | 38,869 | 13 | 36,255 |
| 19 | 40,065 | 23 | 34,300 |
| 22 | 38,635 | 19 | 35,527 |
| 16 | 40,583 | 25 | 34,131 |
| 73 | 33,813 | 15 | 36,097 |
| 32 | 37,490 | 90 | 29,342 |
| 25 | 38,536 | 34 | 33,089 |
|  | 24 | 34,195 |  |


| Rankings of Bottom 25 MSAs in 2004 Per Capita Personal Taxes |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## MSA PER CAPITA PERSONAL TAXES - 2004



MSA TAX RATES - 2004


## Issues

The proposed methodology yields reasonable estimates for disposable personal income for metropolitan statistical areas. Critical to the estimation of MSA DPI is IRS sub state data by zip or county for tax liabilities. IRS was unable to produce tax estimates by zip code for tax year 2003. However, IRS has delivered zip code estimates for tax year 2004 and 2005. Because the federal income tax is paid by the upper end of the income distribution, SOI's method of suppressing data needs more review. BEA plans to extend this series as data becomes available. Another area of research is to explore techniques to produce current estimates of MSA personal taxes. The lag on the IRS data is two years.

A excel spreadsheet with more detailed results for 2001-2004 is available with the working paper.

| Appendix A. States with Substate Details by Tax Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2002 | 2003 | 2004 |
| Alabama | x | x | n.a. | n.a. |
| Alaska | No state income tax |  |  |  |
| Arizona | x | x | n.a. | n.a. |
| Arkansas | n.a. | n.a. | n.a. | n.a. |
| California | x | x | x | x |
| Colorado | x | x | x | x |
| Connecticut | x | x | x | x |
| Delaware | n.a. | n.a. | n.a. | n.a. |
| Florida | No state income tax |  |  |  |
| Georgia | X | x | x | x |
| Hawaii | x | X | X | x |
| Idaho | n.a. | n.a. | n.a. | n.a. |
| Illinois | x | x | x | x |
| Indiana | n.a. | n.a. | n.a. | n.a. |
| lowa | x | x | x | x |
| Kansas | x | x | x | x |
| Kentucky | n.a. | n.a. | n.a. | n.a. |
| Louisiana | n.a. | n.a. | n.a. | n.a. |
| Maine | x | n.a. | n.a. | n.a. |
| Maryland | x | x | x | x |
| Massachusetts | x | x | x | x |
| Michigan | x | x | x | x |
| Minnesota | x | x | x | x |
| Mississippi | x | x | x | x |
| Missouri | n.a. | n.a. | n.a. | n.a. |
| Montana | x | x | x | x |
| Nebraska | x | x | x | x |
| Nevada | No state income tax |  |  |  |
| New Hampshire | n.a. | n.a. | n.a. | n.a. |
| New Jersey | x | x | x | x |
| New Mexico | n.a. | n.a. | n.a. | n.a. |
| New York | x | x | x | x |
| North Carolina | n.a. | n.a. | n.a. | n.a. |
| North Dakota | x | x | x | x |
| Ohio | x | x | x | x |
| Oklahoma | n.a. | n.a. | n.a. | n.a. |
|  |  | 18 |  |  |


| Oregon | X | X | X | X |
| :---: | :---: | :---: | :---: | :---: |
| Pennsylvania | X | X | X | X |
| Rhode Island | Entire state in MSA |  |  |  |
| South Carolina | X | X | X | X |
| South Dakota | No state income tax |  |  |  |
| Tennessee | X | X | X | X |
| Texas | No state income tax |  |  |  |
| Utah | X | X | $x$ | X |
| Vermont | X | X | X | X |
| Virginia | X | X | X | X |
| Washington | No state income tax |  |  |  |
| West Virginia | X | X | $x$ | X |
| Wisconsin | X | X | X | X |
| Wyoming | No state income tax |  |  |  |

X : State income tax by county, zip code, city or town available n.a.: not available

## Appendix B

## Federal Individual Income Tax Progressive

|  | Average Income (CBO) 2004 year dollars 2001 | Effective <br> Federal Income Tax Shares 2001 | Effective <br> Federal <br> Income Tax <br> Rates 2001 | Average Income (CBO) <br> 2004 year dollars 2004 | Effective Federal Income Tax Shares 2004 | Effective <br> Federal <br> Income Tax <br> Rates 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 15,900 | -2.3 | -5.6 | 15,400 | -2.9 | -6.2 |
| Second Quintile | 36,700 | 0.3 | 0.3 | 36,300 | -0.9 | -0.8 |
| Middle Quintile | 55,800 | 5.3 | 3.9 | 56,200 | 4.7 | 2.9 |
| Fourth Quintile | 80,500 | 14.3 | 7.1 | 81,700 | 13.8 | 5.9 |
| Highest Quintile | 194,900 | 82.4 | 16.3 | 207,200 | 85.3 | 13.9 |
| All Quintiles | 76,700 | 100.0 | 10.3 | 78,700 | 100.0 | 8.7 |
| Top 10\% | 276,000 | 67.7 | 18.7 | 297,800 | 70.8 | 15.9 |
| Top 5\% | 404,900 | 55.2 | 20.8 | 443,400 | 58.4 | 17.6 |
| Top 1\% | 1,118,700 | 34.4 | 24.1 | 1,259,700 | 36.7 | 19.6 |
|  |  | http://ww | w.cbo.gov/ftp | docs/77xx/doc77 | 18/Suppleme | Source: CBO talTables.xls |

Notes: Effective tax rates are calculated by dividing taxes by comprehensive household income. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18. 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). Households with negative income are excluded from the lowest income category but are included in totals. 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.

## 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

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


[^0]:    2 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 2004, contributions for government social insurance account for 8.5 percent of personal income. Contributions for social insurance consist of the payments 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.

    3 This simplified definition may be less appropriate as "in-kind" transfer programs like Medicaid, Medicare, and other imputed income grows as a share of personal income. In 2001, Medicare and Medicaid accounted for about 5.5 percent of personal income. Also, 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.

[^1]:    6 New York City commuter earnings tax ended for NY State residents by State law and for residents of other states by decision of the NY State Supreme Court Appellate Division on April 4, 2000

[^2]:    7 Current Personal Taxes in BEA's National Income and Product Accounts 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 www.bea.gov/regional/pdf/spi2006/09\%20Personal\%20current\%20taxes.pdf.

[^3]:    8 See Appendix B for more detail. CBO Report Effective Federal Tax Rates Under Current Law, 1979 to 2004 December 2006, Table 2

