



**Metropolitan Area Disposable Personal Income  
Methodology and Results**

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Metropolitan Area Disposable Personal Income -  
**Methodology and Results for 2001-2002**

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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 researches practical and conceptual issues in producing sub-state personal current taxes, investigates source data availability, and presents annual estimates of disposable personal income for the 361 metropolitan areas for 2001 and 2002. The methodology relies on sub-state IRS personal tax data and individual state data. Also, preliminary estimates of DPI are presented for the 179 BEA economic areas in appendix B.

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## Introduction

Currently, the Bureau of Economic Analysis (BEA) produces annual estimates of state disposable personal income (SDPI). This paper explores the feasibility of estimating disposable personal income (DPI) for the 361 metropolitan statistical areas (MSAs).<sup>1</sup>

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,
- and personal current transfer receipts,
- less contributions for government social insurance.<sup>2</sup>

Disposable personal income is personal income less personal tax receipts. Personal tax receipts consist primarily of the Federal income tax, state and local income taxes, motor vehicle taxes paid by persons, motor vehicle operator license fees, 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. In addition, personal taxes *do not*

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1 The **metropolitan area definitions** used by BEA for its entire series of personal income estimates are the new county-based definitions issued by the Office of Management and Budget (OMB) in June 2003 (with revisions released in February 2004) for Federal statistical purposes. 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.

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, 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.

include sales taxes, which are included as part of personal consumption expenditures.

DPI is often used as a measure of the income available for spending in a particular geographic area.<sup>3</sup> The motivation for this research paper comes from users' requests for DPI for metropolitan areas, because MSAs provide a high degree of economic cohesiveness as compared to states. BEA initiated this research to address these requests. Further, the most recent comprehensive revision of the National Income and Product Accounts made it feasible to estimate DPI for metropolitan areas by redefining personal current taxes to exclude personal nontaxes, for which there were no sub-state data available.

This study investigated the practical and conceptual issues in producing sub-state personal current taxes, investigated source data availability, and after determining the feasibility of developing estimates, prepared annual estimates of disposable personal income for the 361 metropolitan areas for 2001-2002. In addition, disposable personal income estimates for the 179 BEA economic areas were also prepared.

### **Issues and Source Data Availability**

DPI is about 14 percent less than personal income, or equivalently, personal taxes comprise 14 percent of personal income. The Federal personal income tax accounts for 80 percent of total personal taxes in 2001, followed by state income taxes which account for 17 percent and local income taxes which account for another 1 percent. Together, personal *income* taxes account for 98 percent of personal taxes in both 2001 and 2002. The feasibility of producing disposable personal income for metropolitan areas relies on the availability of source data for these income taxes at the sub-state level.

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3 This simplified measure is less appropriate as "in-kind" transfer programs like Medicaid, Medicare, and food stamps become larger. 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.

**The Relationship Between  
State Personal Income  
and State Disposable Personal Income**

	<i>(millions of dollars)</i>		<i>Shares</i>	
	2001	2002	2001	2002
<b>State PI</b>	8,716,992	8,872,521		
<b>State DPI</b>	7,480,971	7,823,603	0.86	0.88
<b>Difference (Personal taxes)</b>	1,236,021	1,049,918	0.14	0.12
<b>Federal</b>				
Federal Income Tax	993,277	829,866	0.80	0.79
<b>State &amp; Local</b>				
State Income tax	205,519	183,092	0.17	0.17
Local Income tax	17,577	16,488	0.01	0.02
Other Personal Taxes	19,648	20,472	0.02	0.02
Motor Vehicle Taxes	11,301	11,933		
Personal Property	5,044	5,080		
Other	3,303	3,459		

Although the Internal Revenue Service (IRS) has prepared county income data from its Individual Master File since 1969, it has not reported county data on taxes paid by individuals below the state level. Recently, however, the IRS Statistics of Income Division has begun to report total tax liability on a zip coded file of annual income and tax statistics from the individual income tax returns.<sup>4</sup> Zip codes can be coded to counties and metropolitan areas based on U.S. Postal Service data on the geographic location of zip codes. The availability of this source, which would account for 80 percent of total personal taxes, is essential to the production of personal current taxes for MSAs. Unfortunately, because of quality issues in the collection of electronic data for tax years 1999 and 2000, the IRS did not release those years to the public. In addition, IRS has indicated that future releases of the zip code data file will depend on whether there is a demand for the file. If the IRS zip code file is not available, BEA does not have a suitable alternative source of data for Federal income taxes for metropolitan areas. This component of personal taxes is considered feasible to produce provided that the data continue to be released by the IRS.

For income taxes received by state governments, our research found sub-state data available from 34 states, accounting for 87 percent of the state income taxes received from individuals in 2001. Estimates for ten states, accounting for 13 percent of the state income taxes, were based an alternative source.<sup>5</sup> Six states (Florida, Nevada, South Dakota, Texas, Washington, and Wyoming) do not have a state income tax.

Local income taxes, the next largest component of personal current taxes, were only collected in 13 states in 2001. The quinquennial Census of Governments reports local income taxes by county for those states, so a metropolitan area level estimate can be produced. In addition, New York, Maryland, and the District of Columbia, three of the larger areas with a local income tax, annually report sub-state local income taxes collected from individuals. For the other states with local income taxes, the annual state income tax data would be a reasonable proxy for producing intercensal years of estimates. Enough data are therefore available to produce reasonable estimates of local income taxes.

Although no direct sub-state data are available to produce other state and local personal taxes, the component comprises only 2 percent of personal current taxes. Secondary sources and methods can reasonably be used to distribute this component below the state level without significantly affecting the quality of the estimates of metropolitan area disposable personal income.

The use of the above sources requires us to make several assumptions to produce personal current tax estimates for metropolitan areas:

- The state and local county distribution data on income taxes which is usually on a liability basis approximates the distribution on a “cash” basis.
- The source data are valid and the impact of suppressions does not distort the MSA results.<sup>6</sup>

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4 IRS has released zip coded income and tax data for tax year 1991, 1998, 2001, and 2002.

5 The ten states are Arkansas, Colorado, Delaware, Idaho, Indiana, Kentucky, Missouri, New Hampshire, North Carolina and Oklahoma. At the state level, the states range from 0.04 percent to 3.7 percent of the U.S. state income taxes. For some states data with missing data, state analysts stated that county distributions would be available in the future.

6 There were 570 special zips in 2001 that the IRS used to combine data for suppression purposes; they were assigned a county code based on the first three digits of the zip code. David Jordan at the IRS reports that suppressions were not a major problem. See Appendix C for details

- The use of IRS and state government revenue department data sources 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. See Appendix D for details.
- State and local government personal taxes are assumed to be paid only by residents.

These assumptions are reasonable to make at the metropolitan area level. However, estimating levels of personal current taxes for any lower geography, such as counties, would have significant problems. For example, BEA's residence adjustment research has shown that the IRS metropolitan area adjusted gross income data have matched very well with the BEA personal income estimates, but that the county level data have not always matched well, primarily because of differences in definition of residence between IRS and BEA. It is reasonable to expect that the taxes paid by residents would have a similar issue between the place of filing for IRS and the place of residence for BEA.

In addition to source data issues, there are geographic issues to address. There are 361 metropolitan statistical areas. 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, six MSAs have a 2001 population greater than 5 million, accounting for almost 20 percent of the US total population and over 23 percent of personal income. The most populous MSA, New York-Northern New Jersey-Long Island, NY-NJ-PA, with a 2001 population of 18.4 million, has a population slightly less than the state of New York, but its 2001 personal income estimate is greater than that of New York state. This contrasts with 312 MSAs that each has population of less than one million. Carson City, NV, the smallest MSA in terms of population, had a population in 2001 of only 53,454. The 25 most populous MSAs in 2001 accounted for 41.4 percent of the U.S. population and 48.3 percent of state personal income. Two hundred and seventy one MSAs have 2001 population of less than 500,000.

<b>Distribution of 2001 Population by MSA</b>	
Less than 500,000	271
500,000 to 999,999	41
1,000,000 to 2,499,999	20
2,500,000 to 4,999,999	13
5,000,000 or more	6

The range of sizes of metropolitan areas poses estimating problems similar to those in preparing county estimates of personal income. For example, small areas are subject to more variability due to the fact that an error in one record in the collection of data by the tax collection agency will have a larger impact on areas with fewer returns. In addition, where an individual files has more impact on smaller areas than on larger ones. Although the range of sizes of metropolitan areas is an issue, producing estimates of personal current taxes for all metropolitan areas is still feasible.

A methodology for producing personal current taxes for metropolitan areas was investigated. The result of the research follows.

### **Methodology**

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

#### *Federal Personal Income Tax*

The IRS compiles and publishes selected income tax line items by zip code. The item, Total Tax Liability, is available on the IRS zip code file and is used as a proxy for income tax.<sup>7</sup> Using a zip-to-county crosswalk developed from data from the U.S. Postal Service, it is possible to construct estimates of total income tax by county.<sup>8</sup> However, a metropolitan area can be

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7 Total Tax Liability is tax liability before the earned income tax credit (EITC) is applied. Unlike the IRS, the national income accounts treat the refundable EITC as a transfer payment, not a negative income tax.

8 Total income tax is income tax after tax credits but before the earned income tax. The line item used in the state

comprised of counties from more than one state. For each county in a state, the county is coded with an MSA code or a blank if the county is not in an MSA. The county estimates for each state are then allocated to the Federal income tax control for that state and aggregated to the MSA portions within each state. The state MSA portions are then combined and summed on the MSA code to yield MSA estimates that are consistent with BEA's state estimates. This procedure also yields metro/nonmetro estimates for each state.<sup>9</sup>

### *State Income Tax*

State income data by county is available for 34 states for 2001 and 33 states in 2002. Six states (Florida, Nevada, South Dakota, Texas, and Washington, Wyoming) have no state income taxes. County estimates are coded for MSA, allocated to state income tax controls, and summed on the MSA. 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 are used to impute sub-state estimates. About 87 percent of total state government income taxes have actual source data for sub-state geography, so only about 13 percent was imputed.

### *Local Income Tax*

The *2002 Census of Governments* contains fiscal year data by county for local income taxes which were used for most states for the 2001 and 2002 distributions. Actual data were used for New York, Washington, DC, and Maryland. These distributions were allocated to BEA local income tax controls. This methodology assumes that the local income tax attributed to an MSA was paid by the residents of the MSA.<sup>10</sup>

### *Other State and Local Taxes*

Other state and local government personal taxes totaled \$19.6 billion in 2001. These

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estimates, Income Tax, is a better match for the NIPA income tax, but it was not available. Almost all the EITC is refunded or applied to other taxes.

<sup>9</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 nonresidents who work in the county).

<sup>10</sup> The 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.

taxes consist mainly of personal property taxes (primarily property taxes on motor vehicles), motor vehicle registration taxes, motor vehicle operator license fees, and hunting and fishing license taxes. Because the amount is relatively small, the state aggregate was distributed using the Census estimate of county population 16 years and over for 2001 and 2002. Again, the county estimates were coded for MSAs and allocated to the state controls. The results were then summed by MSA.

**Results**

Per capita personal taxes for the United States averaged \$4,335 in 2001. The average per capita personal taxes for all metropolitan areas were \$4,706 compared to the average of only \$2,548 for all non-metropolitan areas. Table 1 summarizes the overall results:

<b>Table 1</b>							
<b>MSA/NONMSA RESULTS</b>							
				Shares		Range	
	MSA	NONMSA	US	MSA	NON	High	Low
Personal Income	7,601,665,486	1,115,326,514	8,716,992,000	0.87	0.13		
Per Capita PI	32,198	22,758	30,575			61,780	14,383
Disposable PI	6,490,539,732	990,431,268	7,480,971,000	0.87	0.13		
Per Capita DPI	27,491	20,209	26,240			45,630	13,300
Personal Taxes	1,111,125,754	124,895,246	1,236,021,000	0.90	0.10	16,150	1,083
Federal	901,343,438	91,933,562	993,277,000	0.91	0.09	14,039	988
State and Local	209,782,316	32,961,684	242,744,000	0.86	0.14	2,814	55
Per Capita Personal Taxes	4,706	2,548	4,335				
Per Capita Federal	3,818	1,876	3,484				
Per Capita State & Local	889	673	851				

Looking at the detailed results for MSAs, per capita taxes ranged from a high of \$16,150 in Bridgeport-Stamford-Norwalk CT MSA (Fairfield County) to a low of \$1,082 in the McAllen-Edinburg-Mission TX MSA. The results are dominated by the Federal income tax, which accounts for about 80 percent of total personal taxes. The Federal income tax is a progressive tax with the top 1 percent paying about 34 percent of the total tax and the highest quintile paying

about 82 percent according to a Congressional Budget Office (CBO) study.<sup>11</sup> The lower half of the income distribution pays less than five percent of the Federal income tax. The progressive property of the Federal income tax is revealed in the study's results.

The 361 MSAs are a diverse set of areas. Thus, the primary determinants of per capita personal taxes are not only the total income in the area and population characteristics, but the income distribution in the area. The Federal income tax 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.

The Bridgeport-Stamford-Norwalk, CT MSA (Fairfield County, CT) has a per capita personal income of \$61,780, but its per capita disposable personal income is \$45,630. Its effective tax rate using personal income as a measure of income is 26.1 percent compared to the national average of 14.1 percent in 2001. San Jose-Sunnyvale-Santa Clara CA, San Francisco-Oakland-Fremont CA, Naples-Marco Island FL, and Boston-Cambridge-Quincy MA-NH round out the top five MSAs in personal taxes per capita. It is important to remember that BEA's personal income does not include capital gains or retirement income, but its personal income taxes do include income taxes on capital gains and retirement income.<sup>12</sup>

McAllen-Edinburg-Mission TX, Brownsville-Harlingen TX, Hinesville-Ft Stewart GA, Yuma AZ, and Laredo TX have the lowest per capita personal current taxes. These metropolitan areas are either located along the Mexican border or have a large military presence. Having a large military presence can have an impact on personal current taxes because of the tax treatment of some of the military pay.<sup>13</sup>

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11 See Appendix for more detail. CBO Report **Effective Federal Tax Rates Under Current Law, 2001 to 2014** August 2004, Table 2.

12 A report by the Center for Population Research at the University of Connecticut estimates that Fairfield County (in the Bridgeport-Stamford-Norwalk, CT MSA) had an additional income of about \$11.6 billion derived from capital gains in 1999. For a reconciliation of BEA's personal income concept to IRS adjusted gross income see Mark A. Ledbetter, "Comparison of BEA Estimates of Personal Income and IRS Estimates of Adjusted Gross Income," *Survey of Current Business* Volume 84 (April 2004): 8-24.

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 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. This residence may not necessarily be where the military member is stationed.

The tables below show the results for the top 25 and bottom 25 MSAs ranked by personal taxes per capita. Accounting for personal taxes does change the relative rankings for personal income and disposable personal income. Detailed results for all MSAs are available in a separate Excel worksheet.

Naples FL ranks fourth in personal taxes per capita and sixth in personal income per capita but ranks only thirteenth in disposable personal income. The four MSAs of Naples FL, Vero Beach, FL, Reno-Sparks, NV and Seattle-Tacoma-Bellevue, WA appear in the top 25 for per capita personal taxes despite having no state or local income taxes. The remaining 21 MSAs in the top 25 are in areas with high state and local income taxes. The Federal income tax, which accounts for about 80 percent of personal taxes, dominates the results.

The Killeen-Temple-Fort Hood, TX MSA ranks 348 out of 361 in personal taxes per capita, 301 in personal income per capita, but 272 in disposable personal incomes per capita. This MSA with a 2001 population of over 330,000 is the home to Ft. Hood Army Base, the largest military post in the world and the largest single-site employer in Texas.<sup>14</sup>

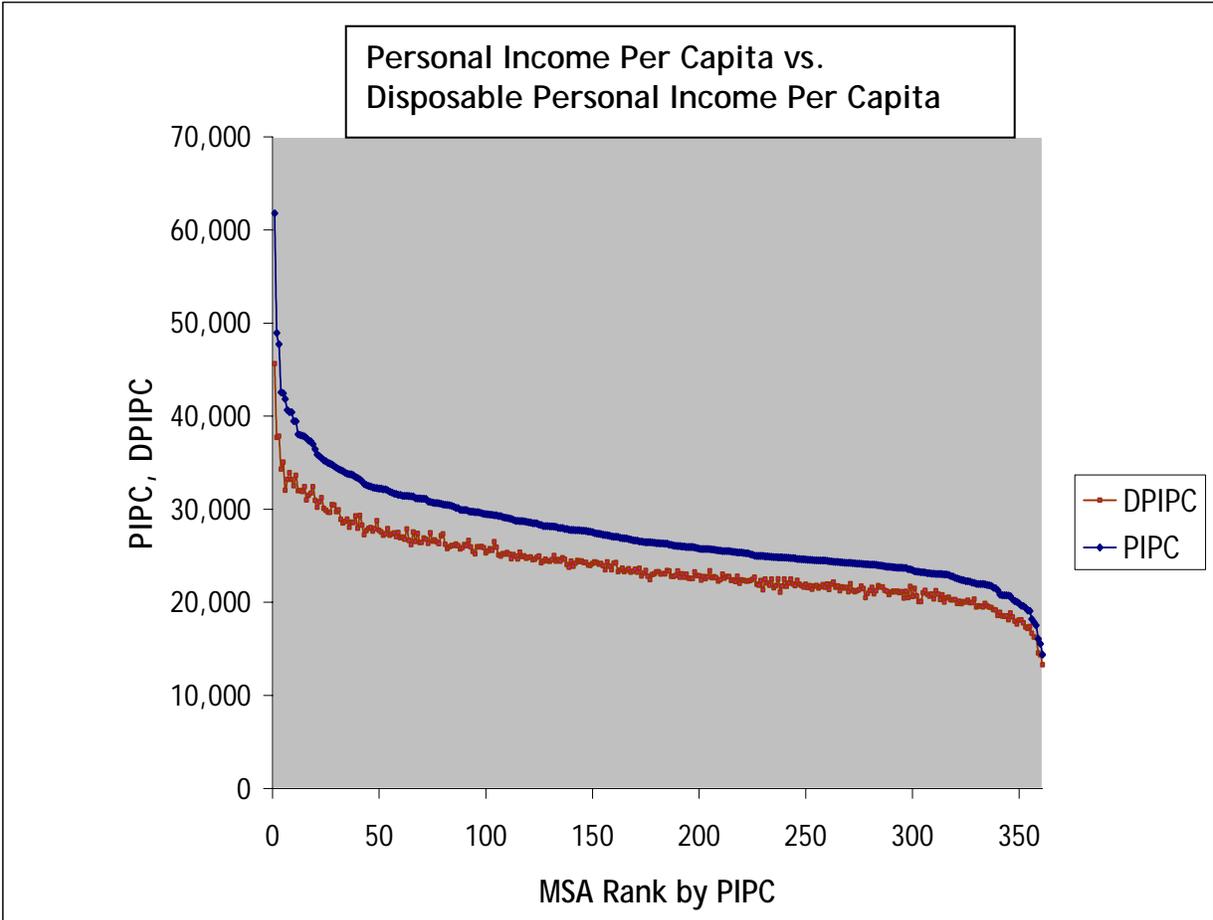
### **Summary**

The proposed methodology yields reasonable estimates for disposable personal income for metropolitan statistical areas. Critical to the estimation of MSA DPI is access to IRS sub-state data for tax liabilities by zip code or county. IRS was unable to produce tax estimates by zip code for tax year 2003. However, IRS has stated it will produce zip code estimates for tax year 2004 and future years if there is a demand. BEA plans to extend this series as data become available. Another area of research is to explore techniques to produce current estimates of MSA personal taxes. The lag on the availability of IRS data is two years.

An Excel spreadsheet with more detailed results for 2001 and 2002 is available with the working paper.

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<sup>14</sup> Texas Comptroller of Public Accounts, Fiscal Notes – July 2004.  
<http://www.window.state.tx.us/comptrol/fnotes/fn0407/covering.html>



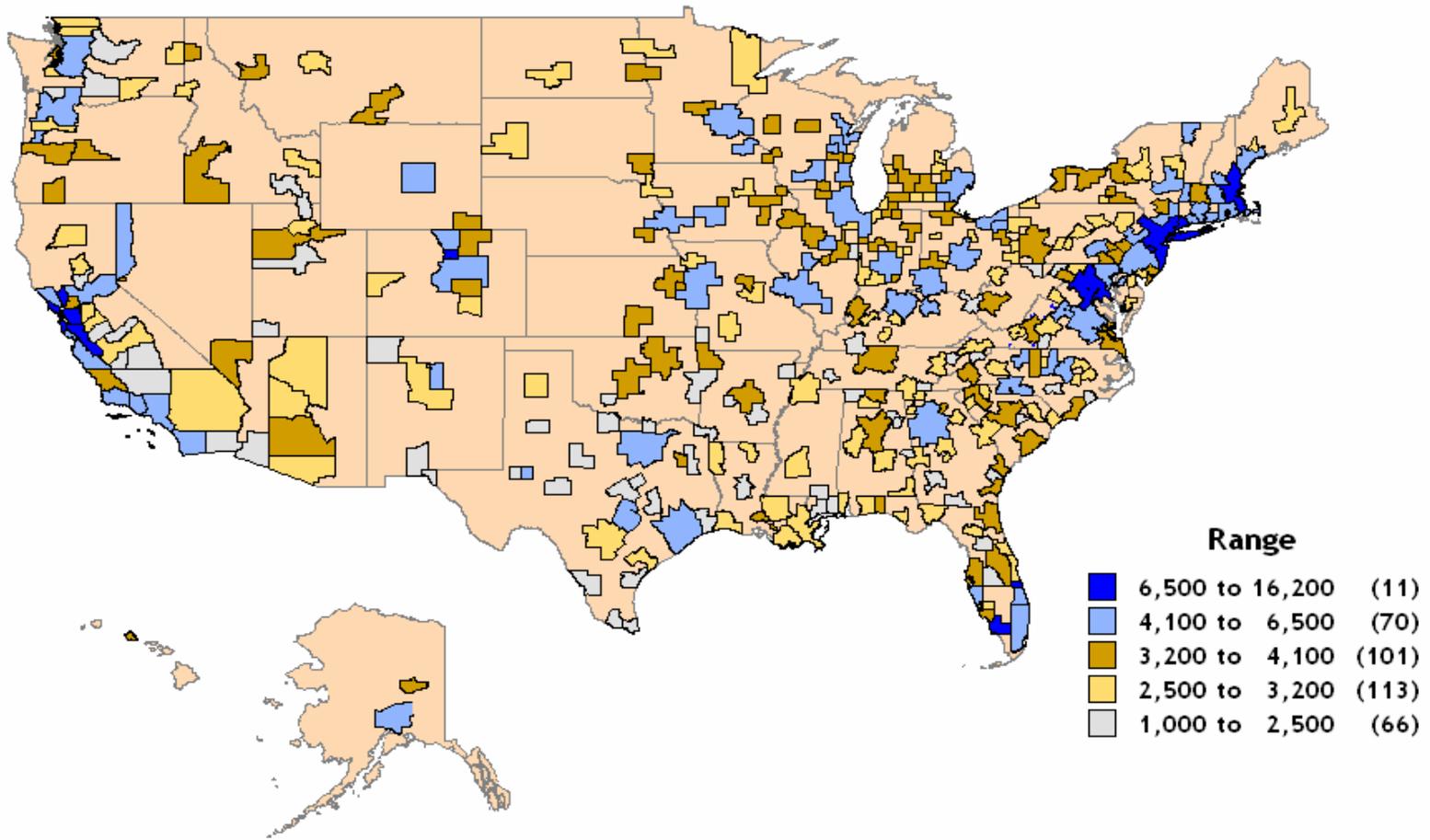
### Rankings of Top 25 MSAs in 2001 Personal Taxes Per Capita

<b>Metropolitan Statistical Area</b>	<b>Rank Personal Taxes Per Capita</b>	<b>Personal Taxes Per Capita</b>	<b>Rank Personal Income Per Capita</b>	<b>Personal Income Per Capita</b>	<b>Rank Disposable Personal Income Per Capita</b>	<b>Disposable Personal Income Per Capita</b>
Bridgeport-Stamford-Norwalk, CT	1	16,150	1	61,780	1	45,630
San Jose-Sunnyvale-Santa Clara, CA	2	11,238	2	48,948	3	37,710
San Francisco-Oakland-Fremont, CA	3	9,891	3	47,722	2	37,831
Naples-Marco Island, FL	4	9,794	6	41,836	13	32,042
Boston-Cambridge-Quincy, MA-NH	5	8,256	4	42,552	5	34,296
New York-Northern New Jersey-Long Island, NY-NJ-PA	6	7,447	7	40,649	8	33,202
Washington-Arlington-Alexandria, DC-VA-MD-WV	7	7,389	5	42,451	4	35,062
Trenton-Ewing, NJ	8	7,234	9	40,428	9	33,194
Vero Beach, FL	9	6,950	10	39,462	10	32,513
Napa, CA	10	6,617	16	37,623	20	31,007
Boulder, CO	11	6,517	8	40,435	6	33,919
Santa Cruz-Watsonville, CA	12	6,059	12	38,044	15	31,985
Barnstable Town, MA	13	5,985	14	37,898	16	31,913
Hartford-West Hartford-East Hartford, CT	14	5,972	13	37,976	14	32,004
Minneapolis-St. Paul-Bloomington, MN-WI	15	5,879	17	37,370	18	31,491
Denver-Aurora, CO	16	5,788	11	39,432	7	33,644
Oxnard-Thousand Oaks-Ventura, CA	17	5,713	36	33,761	42	28,047
Ann Arbor, MI	18	5,679	21	35,867	25	30,188
Raleigh-Cary, NC	19	5,587	33	34,107	40	28,520
Reno-Sparks, NV	20	5,557	18	37,287	17	31,730
Santa Rosa-Petaluma, CA	21	5,495	20	36,435	21	30,940
Santa Barbara-Santa Maria, CA	22	5,452	43	32,702	61	27,249
Seattle-Tacoma-Bellevue, WA	23	5,392	15	37,805	12	32,413
Worcester, MA	24	5,392	40	33,345	44	27,953
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	25	5,296	26	34,976	30	29,681

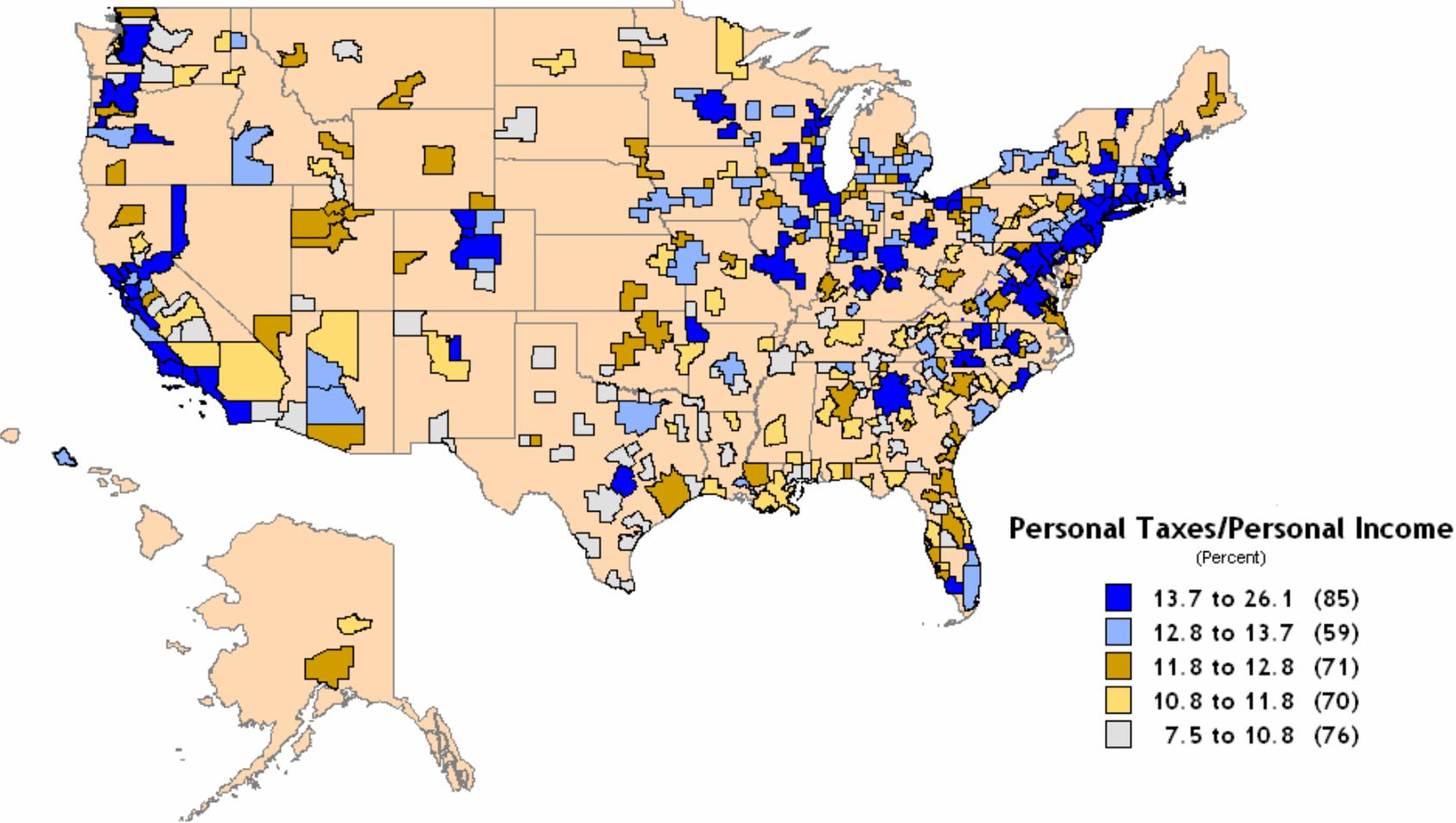
### Rankings of Bottom 25 MSAs in 2001 Personal Taxes Per Capita

<b>Metropolitan Statistical Area</b>	<b>Rank Personal Taxes Per Capita</b>	<b>Personal Taxes Per Capita</b>	<b>Rank Personal Income Per Capita</b>	<b>Personal Income Per Capita</b>	<b>Rank Disposable Personal Income Per Capita</b>	<b>Disposable Personal Income Per Capita</b>
Lawton, OK	337	2,156	312	23,038	300	20,883
St. George, UT	338	2,145	348	20,120	350	17,976
Gadsden, AL	339	2,136	328	22,119	326	19,983
Logan, UT-ID	340	2,066	353	19,414	354	17,348
Odessa, TX	341	2,062	334	21,930	329	19,867
Johnson City, TN	342	2,049	326	22,270	319	20,221
Madera, CA	343	1,946	354	19,135	355	17,189
Abilene, TX	344	1,944	306	23,211	281	21,267
Merced, CA	345	1,887	347	20,319	346	18,432
Sumter, SC	346	1,887	341	20,818	340	18,931
Yakima, WA	347	1,831	311	23,062	285	21,231
Killeen-Temple-Fort Hood, TX	348	1,829	301	23,334	272	21,504
Clarksville, TN-KY	349	1,822	299	23,541	257	21,720
Visalia-Porterville, CA	350	1,811	346	20,647	341	18,837
Las Cruces, NM	351	1,797	352	19,588	351	17,791
Pine Bluff, AR	352	1,785	350	19,872	349	18,086
Morristown, TN	353	1,756	329	22,104	314	20,348
El Centro, CA	354	1,688	355	19,079	353	17,391
Hanford-Corcoran, CA	355	1,604	357	17,873	357	16,270
El Paso, TX	356	1,542	351	19,650	348	18,109
Laredo, TX	357	1,537	359	16,092	359	14,555
Yuma, AZ	358	1,531	356	18,207	356	16,676
Hinesville-Fort Stewart, GA	359	1,307	358	17,525	358	16,218
Brownsville-Harlingen, TX	360	1,174	360	15,532	360	14,358
McAllen-Edinburg-Mission, TX	361	1,082	361	14,383	361	13,300

# MSA PER CAPITA PERSONAL TAXES - 2001



# MSA TAX RATES - 2001



## Appendix A

### Federal Individual Income Tax Is Progressive

	Average Income (CBO) current year dollars 2001	Effective Federal Income Tax Shares 2001	Effective Federal Income Tax Rates 2001	Average Income (CBO) current year dollars 2002	Effective Federal Income Tax Shares 2002	Effective Federal Income Tax Rates 2002
Lowest Quintile	14,900	-2.3	-5.6	14,400	-2.6	-6.0
Second Quintile	34,200	0.3	0.3	33,600	-0.2	-0.2
Middle Quintile	51,200	5.2	3.8	51,100	5.3	3.5
Fourth Quintile	75,600	14.3	7.2	75,900	14.8	6.8
Highest Quintile	182,700	82.5	16.3	175,900	82.8	15.6
All Quintiles	71,800	100.0	10.4	69,800	100.0	9.7
Top 10%	259,000	67.7	18.7	244,500	67.4	18.0
Top 5%	379,000	55.2	20.8	350,700	54.5	20.1
Top 1%	1,050,100	34.4	24.1	938,100	33.0	23.8

Source:CBO

## **Appendix B**

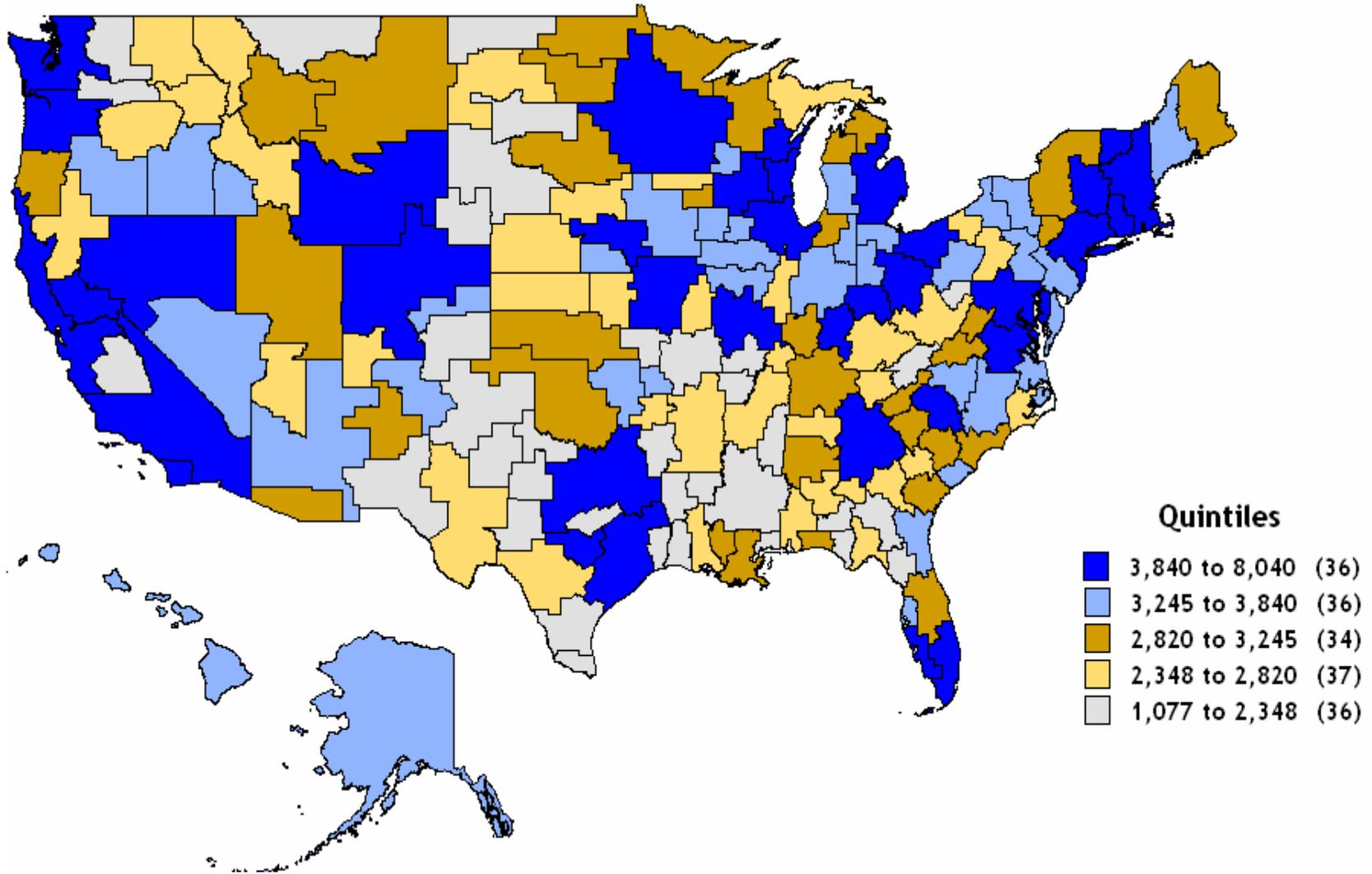
### **Results for BEA Economic Areas**

BEA's economic areas define the relevant regional markets surrounding metropolitan or micropolitan statistical areas. They consist of one or more economic nodes - metropolitan or micropolitan statistical areas that serve as regional centers of economic activity - and the surrounding counties that are economically related to the nodes.<sup>15</sup> There are 179 economic areas compared to the 361 MSAs. Unlike the MSAs, the BEA economic areas are defined to encompass all of the United States.

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<sup>15</sup> The economic areas were redefined on November 17, 2004, and are based on commuting data from the 2000 decennial population census, on redefined statistical areas from OMB (February 2004), and on newspaper circulation data from the Audit Bureau of Circulations for 2001.

BEA ECONOMIC AREAS PERSONAL TAXES PER CAPITA 2001



Rankings of Top and Bottom 5 BEA Economic Areas in Personal Taxes Per Capita

BEA Economic Areas	Rank Personal Taxes Per Capita	Personal Taxes Per Capita	Rank Personal Income Per Capita	Personal Income Per Capita	Rank Disposable Personal Income Per Capita	Disposable Personal Income Per Capita
Rankings of Bottom 5 BEA Economic Areas in Personal Taxes Per Capita						
San Jose-San Francisco-Oakland, CA (EA)	1	8,040	1	40,943	1	32,903
New York-Newark-Bridgeport, NY-NJ-CT-PA (EA)	2	7,574	2	40,370	2	32,796
Boston-Worcester-Manchester, MA-NH (EA)	3	6,606	3	38,242	3	31,188
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV (EA)	4	6,271	4	37,794	4	31,971
San Diego-Carlsbad-San Marcos, CA (EA)	5	5,324	5	36,128	5	28,608

Rankings of Bottom 5 BEA Economic Areas in Personal Taxes Per Capita						
Wenatchee, WA	175	1,891	143	22,889	152	20,998
Abilene, TX	176	1,833	156	22,571	150	20,739
Texarkana, TX-Texarkana, AR	177	1,762	164	21,537	171	19,776
El Paso, TX	178	1,566	178	19,401	178	17,835
McAllen-Edinburg-Pharr, TX	179	1,077	179	14,548	179	13,471

## **Appendix C IRS ZIP Code Data Documentation Guide Tax Year 2001**

### **What the Data Show**

ZIP Code Data show selected income and tax items classified by state, ZIP code, and size of adjusted gross income. The data are based on administrative records (individual income tax returns) from the Internal Revenue Service's Individual Master File (IMF) system, which includes a record for every Form 1040, 1040A, 1040EZ, 1040PC, 1040NR and 8814 filed by U.S. citizens and aliens with the IRS. The records included in this study were all of these types of returns that were filed between January 1, 2002 and December 31, 2002 including a limited number of late-filed returns for tax years before 2001.

### **How the Tables Were Developed**

The ZIP Code Data were developed by sorting the returns by the ZIP code provided on the return by the taxpayer. No attempt was made to correct the ZIP Codes provided by the taxpayers. In many cases, ZIP codes which are currently invalid were valid at some time in the past. Returns with foreign or APO or FPO addresses, or which did not contain a ZIP code were not included in these statistics. The state in which a return belonged was determined by the ZIP code.

Several steps were taken to avoid disclosure of information about individual taxpayers. ZIP codes from which fewer than 10 returns were filed were combined into a base ZIP code. For example, the ZIP Code 80100 represents all ZIP Codes within the range 80101 through 80199 that had a total of less than 10 returns. Many of these ZIP codes were either invalid or reserved for commercial or government offices. Also, when an Adjusted Gross Income (AGI) class for a given ZIP code had a frequency of less than 10, it was combined with another AGI class within the same ZIP Code to create a total of 10 or greater. If the total frequency for salaries and wages, taxable interest, earned income credit, total tax or number of returns with Schedules A, C or F for a particular ZIP Code was less than 10, that total was not shown and the amount was deleted from the state total.

## **Statistical Items Shown in the File**

The file is organized into 13 columns. Selected income and tax items are tabulated by state, ZIP code, and size of adjusted gross income. The AGI size classes included in this file are: Under \$10,000 (which includes deficit returns); \$10,000 under \$25,000; \$25,000 under \$50,000; and \$50,000 or more.

## **Selected Income and Tax Items**

“Number of Returns” includes a count of all Forms 1040, 1040A, 1040EZ, 1040PC, 1040NR (U. S. Nonresident Alien Income Tax Return) and 8814 (Parent’s Election to Report Child’s Interest and Dividends) filed by citizens and resident aliens with the IRS filed between January 1, 2002 and December 31, 2002. Note that Forms 1040NR and 8814 are not included in counts of individual income tax returns shown in the *SOI Bulletin* or *Statistics of Income—Individual Income Tax Returns, 2001*.

“Total Number of Exemptions” reflects the number of individuals covered on the tax returns. Persons who were claimed as a dependent on another person’s return were not allowed to claim an exemption for themselves on their own return.

“Number of Dependent Exemptions” includes exemptions claimed for children at home, children away from home, parents, and other dependents.

“Adjusted Gross Income” is the sum of all taxable sources of income less any adjustments allowed. This is the equivalent of line 33 of Form 1040 for Tax Year 2001. On Form 8814, this amount is taken from line 4.

“Salaries and Wages” is the amount generally reported to the taxpayer on Form W-2 and shown on line 7 of Form 1040.

“Taxable Interest” is the taxable portion of interest reported to the taxpayer on Form 1099-INT and shown on line 8a of Form 1040 and line 1a of Form 8814.

“Total Tax” is the amount of tax owed by the taxpayer for the tax year reduced by any credits to which the taxpayer is entitled. However, neither tax payments (such as withholding) nor the earned income credit were deducted from “Total Tax.” This is the equivalent of line 58 of Form 1040.

“Schedule C” is used by taxpayers to report income and expenses related to a non-farm

sole proprietorship.

“Schedule F” is used by taxpayers to report income and expenses related to a farm sole proprietorship.

“Schedule A” is used by taxpayers to report their total itemized deductions after being limited on Form 1040 for high-income taxpayers and, for most taxpayers, when this amount is larger than their standard deduction. These deductions include deductions for medical expenses, state and local taxes, deductible interest expenses, charitable contributions, and other miscellaneous deductions. Taxpayers whose standard deduction exceeds these amounts generally do not file Schedule A.

## **Appendix D Zip Codes**

The IRS data was tabulated by 5-digit zip codes. Zip codes are primarily designed by the United States Postal Service (USPS) to facilitate mail delivery assignments. Zip codes can be difficult to work with because they usually do not have clearly identifiable boundaries and about 5 percent change each year. A single 5-digit zip code can cover sections of as many as five counties. For 2001, of a total of 53,456 zip codes, 12,048 zip codes covered areas of more than one county.

The USPS compiles several listings of zip codes. This project used a representative month of the USPS delivery statistics file updated annually that gives for each zip code the state and county and delivery characteristics to convert the IRS zip data to state and county. The delivery statistics file closest to the data year was match first. The unmatched records were then compared to the previous year's delivery statistics file and so on. This is necessary because people may continue to use a discontinued zip code. If a zip covers more than one county, the IRS data were distributed using the ratio of the number of residential mail boxes in a county to the total residential mail boxes in the zip code. Often researchers using zip coded data will impose a one to one mapping which can distort results.

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