

## TAXING METROPOLIS:

## Tax Capacity and Tax Effort in Large U.S. Cities

New York City government collects $\$ 20$ billion in tax revenues annually. It is often argued that these taxes impose a much heavier burden than that borne by taxpayers in other major cities, and that New York City's economy suffers as a result. However, accurate inter-city comparisons are difficult since New York City has a consolidated government-the city government encompasses almost all of thefunctions performed in other cities by counties, school districts, transportation districts, and other overlapping local governments.

This study compares levels of taxation in the ten most populous U.S. cities by devel oping a city-specific measure of total local taxes-the taxes that all local governments (municipal and overlapping) levy within the city. Matching this local tax total with the city's taxable resources-the sum of city household earnings and city business profits-provides a measure of local tax effort in each city. Our key findings include:

- New Y ork City has the highest overall local tax effort of the ten cities, even when overlapping county, school district, and other local government taxation is taken into account.
- Local government taxes in New Y ork City absorbed \$7.82 of every $\$ 100$ of city taxable resources in 1997, almost 80 percent more than the $\$ 4.35$ average in the next nine largest cities.
- While other largecities tend to rely on just two taxes-in most cases property and sales taxes-for the vast majority of local government tax revenue, New York City relies on a broad mix of taxes: property, general sales, personal income, and business income taxes.
- Even without income taxes, New York City's tax effort exceeds the average for the other large cities. The city's income tax effort is six times the other cities' average.
- Since 1997, tax cuts have reduced local tax effort in New York City by about eight percent (\$0.63) and narrowed the gap between New York and other large cities.


## Aim and Scope of Study

Analyses of the fiscal capacity of cities must begin with measures of the levels of taxation imposed by and within cities. Yet this information cannot be easily obtained from existing government finance records. Instead, it has to be constructed or extrapolated from various sources. Likewise, city-level measures of the capacity to bear taxes are not readily available. To overcome these data limitations, the present study develops three measures that have not been available in earlier studies: ${ }^{1}$

- A city-specific total local taxation measure consisting of the taxes collected in a city by all overlapping local governments (city, county, school district, other district);
- A city taxable resources measure consisting of resident household income plus local business net income;
- A local tax effort measure expressed as amount of total local taxation per $\$ 100$ of city taxable resources.

These measures have been calculated for fiscal year 1997 for the ten most populous cities in the United States-New York City, Los Angeles, Chicago, Houston, Philadelphia, San Diego, Phoenix, San Antonio, Dallas, and Detroit. The measures allow us to see how these cities compare in terms of the distribution of tax collections among local jurisdictions, reliance on different taxes, allocation of taxable resources between households and businesses, and level of local government taxation relative to local taxable resources. ${ }^{2}$

It is important to stress that the intensity of local government tax effort in a city does not in itself precisely measure the local tax burden in a city. The tax burden includes the impacts of any adjustments households and firms may make to minimize tax liabilities. In some instances these adjustments spread the costs of local government taxes to nonresidents (tax exports). Conversely, some of the costs of non-overlapping government taxes may end up being borne by city residents (tax imports). But before we can begin to account for those impacts, we must know how much local tax revenue is actually collected in cities. That is the first objective of the present study.

## Methodology

To compare the cities' mix of taxes and local tax effort, we had to classify different types of taxes, define what constitutes a local tax, allocate taxes among overlapping governments, and develop a measure of capacity to pay. This section provides a brief overview of our methods and the resources used in this study. The Appendix provides a more in-depth discussion.

Classification of Taxes. Taxes are grouped into six major categories: property, sales, personal income, business income, utility, and other/unspecified.

- Property taxes include taxes on both personal and real property. Special assessments and payments to business improvement districts, where identifiable, are also contained in the property tax totals.
- Sales taxes include only general sales tax revenue. Any selective sales tax revenue is classed in the "other/ unspecified" category.
- The personal income tax category covers taxes on wages, salaries, and other personal income.
- Business income taxes comprise anything labeled as a business privilege tax, franchise tax, or gross receipts tax. Unincorporated business income taxes are counted in this category as well.
- Utility taxes are taxes on the gross output of utilities (energy, water, telephone). These taxes are similar to gross receipts taxes on non-utility businesses; the difference is in the type of business being taxed. ${ }^{3}$
- The other/unspecified category covers a large array of miscellaneous taxes, plus other tax revenue for which detail was not provided.

Defining a Local Tax. There are some cases where the definition of local taxes is not clear cut. For example, many taxes are administered by broader jurisdictions that allocate a portion of the collections to local governments. When the allocation is based on the proportionate share of collections generated in a locality, this study considers the allocation to be local government tax revenue. Allocations based on other criteria, such as population, are characterized as intergovernmental aid.

In several cases, this rule of thumb resulted in the reclassification of what local governments consider intergovernmental aid as tax revenue and vice versa. For example, Illinois collects a 1.0 percent sales tax that is returned to the municipality in which the sale was made. Chicago considers this revenue intergovernmental aid from the state. However, because the allocation is based on where the sale was made (and thus Chicago gets back the taxes paid within its borders), this study considers this to be state-administered local tax revenue.

Another major adjustment involves California's unusual property tax system. Under Proposition 13, property taxes in California are limited to 1.0 percent of assessed property value, plus voter-approved debt service. The 1.0 percent levy is collected by county governments and distributed to localities based on a complicated formula involving, among other things, each locality's share of local property taxes prior to the 1978 passage of Proposition 13. Because property tax revenue is not allocated based on what is collected from property owners in each city or school district, we count the 1.0 percent levy as a county tax for Los Angeles and San Diego counties.

City Shares of Overlapping Government Taxes. For any jurisdiction larger than the city (such as counties) or not completely contained within the city (such as school districts), we have estimated the portion of taxes generated within the city. Roughly speaking, this was done by applying the tax rate to the portion of the tax base belonging to the city. For example, the city's share of a county's property tax was estimated by multiplying the county property tax rate by the city's assessed property value.

Note that consistent with our treatment of overlapping government taxes, any city government income taxes not billed to resident taxpayers are also excluded. (As explained immediately below, it is not necessary to make a similar adjustment for consumption taxes.)

Measuring Capacity to Pay. City taxable resources expresses the capacity of a city to yield revenues to governments. This measure combines city household income and city business profits or net income, with adjustments to account for federal tax and transfer impacts and to eliminate double-counting of any income that shows up in both components.

City taxable resources as defined here are a function of two of the most fundamental decisions that individuals make with respect to supporting the taxes levied in cities-and indeed with respect to a city's basic sustainability: where to live and where to locate a business. The decision where to purchase goods and services is to a degree also encompassed in our measure, since the business component of city taxable resources includes the income absorbed by nonfederal indirect (sales, property, and excise) taxes paid-by residents and nonresidents alike-on such purchases in cities.

An alternative measure allocating employment income by place of work rather than place of residence was rejected because local (unlike state) governments for the most part cannot directly tax nonresident earnings, meaning that in most cities local tax policy is less of a factor in employment location decisions than in residence, investment, and expenditure location decisions.

## Findings

We now present our key findings, showing how the ten largest U.S. cities compare in terms of city taxable resources, total local taxation, taxation by jurisdiction, tax mix, and intensity of local tax effort.

City Taxable Resources. Table 1 shows total household and business net income in the ten most populous U.S. cities in 1997. The most striking finding is that there are large variances in the ratios of business to household income among large cities, ranging from only $\$ 0.43$ of net business income for every dollar of household income in Detroit to $\$ 1.18$ of net business income for every household income dollar in Houston. Higher ratios of business to household income suggest relatively greater net exports of city industry output, and perhaps also more capital-intensive industry mixes (higher output/labor ratios).

| City | Population | (dollars in billions) |  |  | Business income per dollar of household income |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Household income | Net business income | Total city taxable resources |  |
| New York City | 7,385,494 | \$148.6 | \$101.5 | \$250.1 | \$0.68 |
| Los Angeles | 3,563,656 | 63.0 | 29.1 | 92.1 | 0.46 |
| Chicago | 2,807,709 | 53.1 | 32.4 | 85.6 | 0.61 |
| Houston | 1,765,587 | 30.0 | 35.4 | 65.4 | 1.18 |
| Philadelphia | 1,450,683 | 21.9 | 9.6 | 31.5 | 0.44 |
| San Diego | 1,198,520 | 21.6 | 10.3 | 31.9 | 0.48 |
| Phoenix | 1,184,353 | 16.1 | 11.8 | 27.9 | 0.73 |
| San Antonio | 1,093,400 | 15.1 | 7.8 | 22.9 | 0.51 |
| Dallas | 1,061,891 | 29.6 | 26.3 | 55.8 | 0.89 |
| Detroit | 977,649 | 12.7 | 5.4 | 18.1 | 0.43 |
| Non-NYC sum/avg. | 15,103,448 | \$263.0 | \$168.0 | \$431.1 | \$0.64 |
| Note: Population estimate for 7/97. Includes institutionalized population. <br> Sources: Independent Budget Office; Census Bureau. |  |  |  |  |  |

These variances indicate that yardsticks of city fiscal capacity relying on either resident income alone or business earnings alone will yield very different rankings of the tax efforts of individual cities. ${ }^{4}$

Per capita household income ( $\$ 20,124$ ) and per capita business net income $(\$ 13,741)$ in New York City are respectively about 16 percent and 24 percent higher than the averages for the next nine largest cities ( $\$ 17,416$ household, $\$ 11,126$ business). New York City ranks second (to Dallas) in per capita household income and third (behind Dallas and Houston) in both per capita business income and per capita overall city taxable resources.

Total Local Taxation. Table 2 shows the total taxes collected by city and overlapping local governments within the ten largest U.S. cities in 1997. The right column indicates the percentage of total local taxes collected by the city governments. Table A2 in the Appendix provides more detail on the share of total taxes collected by cities, counties, school districts, and other local government jurisdictions. Our major findings are:

- More local taxes were collected in New York City (\$19.6 billion) than in the next nine largest U.S. cities combined ( $\$ 18.8$ billion).
- The $\$ 18.8$ billion collected by New York's city government was over twice as much as was collected by the city governments of the next nine largest cities combined ( $\$ 8.6$ billion).
- City government tax collections accounted for 96.4 percent of total local government tax collections within New York City, over twice the average city government share ( 46.1 percent) in the other nine big cities. ${ }^{5}$

| Table 2. Total Local Taxes Collected in the Ten Largest U.S. Cities, 1997 (dollars in thousands) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| City | City government | Overlapping governments | Total | City govt. share of total |
| New York City | \$18,849,753.0 | \$707,762.9 | \$19,557,515.9 | 96.4\% |
| Los Angeles | 1,447,092.0 | 2,303,519.8 | 3,750,611.8 | 38.6\% |
| Chicago | 1,972,329.7 | 2,580,595.0 | 4,552,924.7 | 43.3\% |
| Houston | 890,159.0 | 1,709,408.1 | 2,599,567.1 | 34.2\% |
| Philadelphia | 2,084,225.2 | 0.0 | 2,084,225.2 | 100.0\% |
| San Diego | 342,697.0 | 824,722.4 | 1,167,419.5 | 29.4\% |
| Phoenix | 406,673.0 | 777,695.7 | 1,184,368.7 | 34.3\% |
| San Antonio | 329,013.5 | 664,524.5 | 993,538.0 | 33.1\% |
| Dallas | 601,711.0 | 1,048,047.3 | 1,649,758.3 | 36.5\% |
| Detroit | 573,967.3 | 195,626.9 | 769,594.2 | 74.6\% |
| Non-NYC sum | \$8,647,867.6 | \$10,104,139.9 | \$18,752,007.5 | 46.1\% |

Note: $\quad$ The taxes collected by both city and overlapping governments represents only the share of tax revenue drawn from city taxable resources. See Table A2 for greater detail.
Source: Independent Budget Office.

Just over $\$ 700$ million in local non-city taxes were collected in New York City in 1997, including $\$ 661$ million in Metropolitan Transportation Agency (MTA) regional taxes and surcharges collected within the city, and $\$ 46$ million in special assessments collected for business improvement districts. In the other nine large cities, overlapping local governments collected $\$ 10.1$ billion in taxes within the central cities. County governments accounted for $\$ 4.3$ billion ( 22.5 percent of total local taxation in the nine cities) and school districts for $\$ 4.0$ billion (21.0 percent).

The county government shares of total local taxation were largest in San Diego ( 59.5 percent) and Los Angeles ( 53.2 percent). This reflects the fact that we have classified almost all property taxes collected in California as county taxes and almost all the property tax revenue distributed by counties to cities and school districts as intergovernmental aid.

The independent school district shares of total local taxation were largest in the Southwestern cities (Houston, Dallas, San Antonio, and Phoenix), ranging from 36.3 percent to 46.9 percent of total local taxation. These were the only cities in which the school districts collected more taxes within the cities than either the counties or the city governments themselves.

Tax Mix. The distribution of total local city taxes by type of tax is shown in Table 3 and Chart 1, with greater detail provided in Appendix Table A3. Some notable findings for the ten largest cities are:

- The typical major city-that is, all cities except New York City, Philadelphia, and Detroit-relies primarily on property taxes and secondarily on general sales taxes. Among the seven typical cities, the proportion of total local tax revenue coming from these two sources ranges from 71.8 percent (Los Angeles) to 97.5 percent (Phoenix).
- New York City, Philadelphia, and Detroit are the only cities in this sample that levy personal income taxes and are also the cities that rely least on property taxes.
- New York City has the greatest tax diversity of the ten cities. Four different categories of taxes comprise a significant portion of total local tax revenue: property taxes, personal income taxes, business income taxes, and general sales taxes.
- Eight of the ten largest cities collect some type of business income taxes. However, in New York City these taxes account for nearly four times more total local tax revenue ( 16.4 percent) than the average for the other nine cities ( 4.3 percent).

| Table 3. Mix of Local Government Taxes in the Ten Largest U.S. Cities, 1997 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| City | Property | General Sales | Personal Income | Business Income | Utility | Other and Unspecified | Total |
| New York City | 37.5\% | 16.0\% | 21.0\% | 16.4\% | 1.6\% | 7.5\% | 100.0\% |
| Los Angeles | 54.8\% | 17.0\% | - | 7.6\% | 12.8\% | 7.8\% | 100.0\% |
| Chicago | 61.9\% | 13.1\% | - | - | 9.3\% | 15.8\% | 100.0\% |
| Houston | 73.0\% | 20.2\% | - | 4.5\% | - | 2.4\% | 100.0\% |
| Philadelphia | 39.7\% | 4.4\% | 33.3\% | 12.4\% | - | 10.2\% | 100.0\% |
| San Diego | 64.8\% | 19.3\% | - | 2.3\% | - | 13.6\% | 100.0\% |
| Phoenix | 65.5\% | 32.0\% | - | - | - | 2.5\% | 100.0\% |
| San Antonio | 77.6\% | 16.6\% | - | 1.7\% | - | 4.2\% | 100.0\% |
| Dallas | 71.7\% | 21.0\% | - | 5.4\% | - | 2.0\% | 100.0\% |
| Detroit | 50.6\% | - | 30.9\% | 3.0\% | 7.1\% | 8.4\% | 100.0\% |
| Non-NYC <br> Average | 61.2\% | 15.8\% | 5.0\% | 4.3\% | 5.1\% | 8.6\% | 100.0\% |

Source: Independent Budget Office. See Table A3 for greater detail.

City governments tend to rely on a broader mix of taxes than other local jurisdictions. Property taxes are the sole tax revenue source for the independent school districts in this sample and almost the sole source for county governments. ${ }^{6}$ "Other" local jurisdictions (overlapping special districts and regional authorities) in most cases depend heavily on sales taxes and secondarily on property taxes, although in two instances (Chicago and Phoenix) property taxes are the primary or sole tax revenue source. ${ }^{7}$

Philadelphia and Detroit are similar to the typical city in that they derive most of their tax revenue from just two taxes. Here, however, the two taxes are property and personal income taxes. There is little or no local government sales taxation in these two cities.

As we shall see in the next section, the low property tax shares in New York, Philadelphia, and (to a lesser extent) Detroit do not mean that property tax effort (collections relative to city taxable resources) is exceptionally low in these cities.

## Chart 1. Local Government Tax Mix New York City Compared to Other Large U.S. Cities

New York City<br><br>Unspecified

## Non-NYC Average



Source: Independent Budget Office. See Table 3.

Local Tax Effort. The amount of total local taxation per $\$ 100$ of city taxable resources measures the intensity of local tax effort. The results for our ten large cities are shown in Table 4 and Chart 2, with additional detail shown in Appendix Table A4. Our major finding is that the intensity of local tax effort in New York City is the highest of any major city and is much higher than the average for other big cities, even when local overlapping government taxes are accounted for. Other findings include:

- The 1997 local tax effort in New York City ( $\$ 7.82$ per $\$ 100$ of city taxable resources) was 80 percent greater than the average local tax effort for the next nine largest U.S. cities (\$4.35).
- New York City's tax effort was 18 percent greater than that of the second ranked city, Philadelphia ( $\$ 6.62$ ). As well as being the two Northeastern cities on our list, and the two oldest cities, these are also the two big cities without overlapping county governments or independent school districts.

Table 4. Local Tax Effort in the Ten Largest U.S. Cities, 1997

| City | Taxes per \$100 City Taxable Resources |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property | General Sales | Personal Income | Business Income | Utility | Other and Unspecified | Total | Rank |
| New York City | \$2.93 | \$1.25 | \$1.64 | \$1.28 | \$0.13 | \$0.59 | \$7.82 | 1 |
| Los Angeles | 2.23 | 0.69 | - | 0.31 | 0.52 | 0.32 | 4.07 | 7 |
| Chicago | 3.29 | 0.70 | - | - | 0.49 | 0.84 | 5.32 | 3 |
| Houston | 2.90 | 0.80 | - | 0.18 | - | 0.09 | 3.98 | 8 |
| Philadelphia | 2.63 | 0.29 | 2.20 | 0.82 | - | 0.68 | 6.62 | 2 |
| San Diego | 2.37 | 0.71 | - | 0.08 | - | 0.50 | 3.66 | 9 |
| Phoenix | 2.78 | 1.36 | - | - | - | 0.11 | 4.25 | 5 |
| San Antonio | 3.37 | 0.72 | - | 0.07 | - | 0.18 | 4.34 | 4 |
| Dallas | 2.12 | 0.62 | - | 0.16 | - | 0.06 | 2.96 | 10 |
| Detroit | 2.15 | - | 1.31 | 0.13 | 0.30 | 0.36 | 4.24 | 6 |
| Non-NYC average | \$2.66 | \$0.69 | \$0.22 | \$0.19 | \$0.22 | \$0.37 | \$4.35 |  |

Source: Independent Budget Office. See Table A4 for greater detail.

- The $\$ 7.00$ average local tax effort of the four "Frostbelt" cities (New York City, Philadelphia, Chicago, and Detroit), was 83 percent higher than the average $\$ 3.83$ local tax effort of the six "Sunbelt" cities.
- New York City's local tax effort exceeded the average for the other nine big cities for every type of tax except utility.

New York City is distinguished from the other large cities in that it combines above-average property and sales tax effort with much heavier than average local income tax effort. As noted in the previous section, seven of the ten largest cities have no local personal income taxes and rely heavily on property and general sales taxes. Yet the combined tax effort for property and general sales taxes in New York City (\$4.18) was 25 percent higher than the average combined property-sales tax effort (\$3.35) in those seven cities. Even the highest combined property-sales tax effort in 1997 among the "typical" seven-Phoenix's $\$ 4.14$-was less than New York City's. ${ }^{8}$


New York City's resident personal income tax effort (\$1.64) was less than Philadelphia's (\$2.20) and greater than Detroit's (\$1.31). However, New York is the only one of these three cities that also supports a substantial local sales tax. New York City is unique among large American cities in the intensity of local tax effort brought to bear on overall city capacity via levies on wealth and income and transactions under the city's jurisdiction.

As Chart 2 indicates, just looking at city government tax effort overstates the extent to which New York City is a heavy tax outlier. The city government tax effort here (\$7.54) is three and a half times the city government average for the other nine large cities (\$2.01). But overlapping local government tax effort averages $\$ 2.34$ in the
other cities versus $\$ 0.28$ in New York City, somewhat narrowing what is still a very substantial total local tax effort gap. ${ }^{9}$

Further Considerations. A full analysis of pressures and trends in local tax effort lies beyond the scope of this study. However, two additional issues concerning New York City tax effort deserve mention.

First, New York City is unique in that it is the only large city in which local government is required to shoulder a substantial share of the costs of public and medical assistance. ${ }^{10}$ These costs are normally split between state and federal governments, but New York State requires its localities to pick up almost half of the nonfederal costs. Those transfers cost New York City about $\$ 5.2$ billion in 1997, of which $\$ 4.7$ billion-or $\$ 1.87$ of local tax effort-was funded by the tax collections sustained by city taxable resources. ${ }^{11}$

The additional $\$ 1.87$ in New York City tax effort to finance transfers does not necessarily imply an extra strain on city taxable resources, however. At least part of it may be offset by a reduction in state tax effort as some of the responsibility for financing transfers is shifted to localities. This underscores the importance of ultimately accounting for state as well as local tax effort in cities.

Second, New York City's current tax effort is lower than reported here due to tax cuts that have been enacted since 1997. Had current tax policy-which features significant cuts in almost all major tax categories since 1997-been in place in the fiscal year used in our study, New York City's total local tax effort would have been about 8 percent ( $\$ 0.63$ ) lower. Available information indicates that other large cities have not matched the tax cutting vigor of New York City, suggesting that the tax effort gap between New York and the other cities has shrunk since 1997.

## Conclusion

This study contributes to the body of work on fiscal capacity and comparative taxation by looking at the level of taxation imposed by all overlapping local governments within the boundaries of the ten most populous U.S. cities and comparing this to a newly developed measure of capacity to pay.

Using these new tools, we found that the ten cities exhibit significant differences in the composition and size of city taxable resources, significant differences in the level of reliance on the taxing authority of local jurisdictions and in tax mix, and significant differences in the intensity of local tax effort. New York City has the greatest overall intensity of tax effort of the large cities, and stands apart from the other cities in its heavy dependence on a broader variety of taxes.

As stated at the outset, this study measures the local taxes collected in large cities and the intensity of local government tax effort. A first step in expanding the analysis would be to incorporate locally raised non-tax revenue such as charges and user fees that are close substitutes for taxes. The subsequent step would be to add in state taxes collected from cities. This would account for differences in local tax effort resulting from differences in how fiscal responsibilities are shared between state and local governments.

A further adjustment would deal with differences between nominal tax burdens (who is legally liable for the tax) and final burdens (who ultimately bears the tax). The latter takes into account population and wealth shifts related to local tax differentials and the impact of such shifts on wages, prices, and returns to investment in different localities.

Finally, a full accounting of city fiscal capacity would take into account not just the burden of taxation, but also the scope and quality of government services provided within each city. Variation among cities in the scope
of services financed by local tax dollars reflects differences in need or taste, choices regarding the extent to which services are publicly or privately financed, and the impact of state mandates. The willingness to pay local taxes and user charges is related both to the perceived direct and indirect benefits resulting from those payments and to the costs of avoiding payment. Until the benefit side is taken into account, caution should be used in characterizing the entire difference between taxes borne in different localities-or indeed only the difference in taxes borne-as a difference in burdens.

## Notes

${ }^{1}$ An Appendix to this report is available on-line at the Independent Budget Office website at http://www.ibo.nyc.ny.us. The Appendix reviews other methods of comparing city taxes and includes a more complete discussion of data and methodology issues in this study and detailed tables of findings. Hard copy of the Appendix will be provided upon request.
${ }^{2}$ The competitiveness of cities and surrounding metropolitan areas is also important. Some of this is addressed in a parallel IBO study, "Comparing Homeowner Tax Burdens Across New York State," Independent Budget Office (February 2000).
${ }^{3}$ While utility gross receipts taxes are kept separate from other business income taxes, property taxes paid by utilities are included in the property tax category, utility sales taxes are lumped with other general sales taxes, and so on. Utility taxes also do not include charges for services by public utilities.
${ }^{4}$ The city government share of local tax collections was 100 percent in Philadelphia. This study classifies Philadelphia's school taxes as city government tax collections because the school district is included in the city's annual financial report. However, the Philadelphia school district has some degree of independence-there are separate school taxes and the system is presented as a discrete component unit of government. If the schools were treated as a fully independent jurisdiction, the Philadelphia city government's share of total local taxes would be 71.8 percent.
${ }^{5}$ In contrast to fully independent school districts, Philadelphia's school taxes include a broad mix of sources. In addition to the property tax, Philadelphia's schools are supported by taxes on investment earnings, commercial rent and alcohol.
${ }^{6}$ New York City is an exception in that the Metropolitan Transit Authority derives a substantial amount of tax revenue from business and utility tax surcharges.
${ }^{7}$ The March 2000 elimination of sales taxes on clothing priced under $\$ 110$ in New York City probably will push the city's combined property-sales tax effort slightly below that of Phoenix.
${ }^{8}$ Our sample is too small to draw any conclusions regarding relationships between the level of overall local tax effort, the tax mix, and the distribution of local taxing authority, but this subject deserves further study.
${ }^{9}$ Nontax revenues such as government fees and charges and nonresident income taxes also support income transfer costs.
${ }^{10}$ Four of the other nine large cities also have some locally financed transfers, but nothing on the scale of New York City. A small share of public assistance costs were supported by county government financing in Los Angeles and San Diego, and some Medicaid long-term care costs were locally funded in Phoenix (by Maricopa County) and Philadelphia.
${ }^{11}$ Nontax revenues such as government fees and charges and nonresident income taxes also support income transfer costs.

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Table A2. Total Local Taxes Collected In the Ten Largest U.S. Cities, 1997

| City | Level of government | Taxes collected by city, county, school, and other local jurisdications in central city (\$ thousands) |  |  |  |  |  |  | $\begin{array}{\|c\|} \hline \text { Share } \\ \text { of Total } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Property | General Sales | Personal Income | Business Income | Utility | Other and unspecified | Total |  |
|  | City | 7,290,685.4 | 2,937,083.1 | 4,100,641.4 | 2,925,017.0 | 217,326.8 | 1,378,999.4 | 18,849,753.0 | 96.4\% |
|  | County |  |  |  |  |  |  |  |  |
|  | School |  |  |  |  |  |  |  |  |
|  | Other | 46,300.0 | 183,567.7 |  | 282,730.8 | 103,605.0 | 91,559.3 | 707,762.9 | 3.6\% |
|  | Total | \$7,336,985.4 | \$3,120,650.8 | \$4,100,641.4 | \$3,207,747.8 | \$320,931.9 | \$1,470,558.7 | \$19,557,515.9 | 100.0\% |
|  | City | 188,229.1 | 283,957.0 |  | 283,384.0 | 466,206.0 | 225,316.0 | 1,447,092.0 | 38.6\% |
|  | County | 1,842,879.2 | 70,989.2 |  |  | 14,298.0 | 68,924.0 | 1,997,090.4 | 53.2\% |
|  | School | 6,129.5 |  |  |  |  |  | 6,129.5 | 0.2\% |
|  | Other | 16,342.9 | 283,957.0 |  |  |  |  | 300,299.8 | 8.0\% |
|  | Total | \$2,053,580.6 | \$638,903.2 |  | \$283,384.0 | \$480,504.0 | \$294,240.0 | \$3,750,611.8 | 100.0\% |
|  | City | 650,014.0 | 330,835.7 |  |  | 421,580.0 | 569,900.0 | 1,972,329.7 | 43.3\% |
|  | County | 323,833.5 | 88,979.1 |  |  |  | 147,827.0 | 560,639.6 | 12.3\% |
|  | School | 1,278,700.0 |  |  |  |  |  | 1,278,700.0 | 28.1\% |
|  | Other | 563,530.3 | 177,725.1 |  |  |  |  | 741,255.4 | 16.3\% |
|  | Total | \$2,816,077.8 | \$597,539.8 |  |  | \$421,580.0 | \$717,727.0 | \$4,552,924.7 | 100.0\% |
|  | City | 470,676.0 | 262,149.0 |  | 117,355.0 |  | 39,979.0 | 890,159.0 | 34.2\% |
|  | County | 401,836.9 |  |  |  |  | 21,505.0 | 423,341.9 | 16.3\% |
|  | School | 943,949.0 |  |  |  |  |  | 943,949.0 | 36.3\% |
|  | Other | 79,968.2 | 262,149.0 |  |  |  |  | 342,117.2 | 13.2\% |
|  | Total | \$1,896,430.1 | \$524,298.0 |  | \$117,355.0 |  | \$61,484.0 | \$2,599,567.1 | 100.0\% |
|  | City | 827,125.8 | 91,366.6 | 693,230.4 | 259,266.1 |  | 213,236.2 | 2,084,225.2 | 100.0\% |
|  | County |  |  |  |  |  |  |  |  |
|  | School |  |  |  |  |  |  |  |  |
|  | Other |  |  |  |  |  |  |  |  |
|  | Total | \$827,125.8 | \$91,366.6 | \$693,230.4 | \$259,266.1 |  | \$213,236.2 | \$2,084,225.2 | 100.0\% |
| cio | City | 28,463.7 | 129,005.3 |  | 26,655.0 |  | 158,573.0 | 342,697.0 | 29.4\% |
|  | County | 662,386.5 | 32,251.3 |  |  |  |  | 694,637.9 | 59.5\% |
|  | School | 65,581.9 |  |  |  |  |  | 65,581.9 | 5.6\% |
|  | Other |  | 64,502.6 |  |  |  |  | 64,502.6 | 5.5\% |
|  | Total | \$756,432.2 | \$225,759.3 |  | \$26,655.0 |  | \$158,573.0 | \$1,167,419.5 | 100.0\% |
| $\begin{aligned} & \frac{\times}{\bar{\omega}} \\ & \text { © } \\ & \frac{0}{\square} \end{aligned}$ | City | 100,834.0 | 304,654.0 |  |  |  | 1,185.0 | 406,673.0 | 34.3\% |
|  | County | 111,397.6 | 74,017.0 |  |  |  | 28,730.0 | 214,144.6 | 18.1\% |
|  | School | 555,353.4 |  |  |  |  |  | 555,353.4 | 46.9\% |
|  | Other | 8,197.6 |  |  |  |  |  | 8,197.6 | 0.7\% |
|  | Total | \$775,782.7 | \$378,671.0 |  | \$0.0 |  | \$29,915.0 | \$1,184,368.7 | 100.0\% |
| に | City | 163,855.7 | 110,034.5 |  | 16,660.1 |  | 38,463.2 | 329,013.5 | 33.1\% |
|  | County | 161,078.7 |  |  |  |  | 2,864.0 | 163,942.7 | 16.5\% |
|  | School | 415,621.0 |  |  |  |  |  | 415,621.0 | 41.8\% |
|  | Other | 29,943.6 | 55,017.2 |  |  |  |  | 84,960.8 | 8.6\% |
|  | Total | \$770,499.0 | \$165,051.7 |  | \$16,660.1 |  | \$41,327.2 | \$993,538.0 | 100.0\% |
| $\begin{aligned} & \text { n } \\ & \stackrel{\pi}{\bar{\sigma}} \end{aligned}$ | City | 308,050.0 | 173,032.0 |  | 88,314.0 |  | 32,315.0 | 601,711.0 | 36.5\% |
|  | County | 184,474.0 |  |  |  |  |  | 184,474.0 | 11.2\% |
|  | School | 666,756.8 |  |  |  |  |  | 666,756.8 | 40.4\% |
|  | Other | 23,784.5 | 173,032.0 |  |  |  |  | 196,816.5 | 11.9\% |
|  | Total | \$1,183,065.3 | \$346,064.0 |  | \$88,314.0 |  | \$32,315.0 | \$1,649,758.3 | 100.0\% |
|  | City | 204,125.0 |  | 238,029.3 | 23,035.7 | 54,641.4 | 54,135.9 | 573,967.3 | 74.6\% |
|  | County | 71,334.1 |  |  |  |  | 10,431.0 | 81,765.1 | 10.6\% |
|  | School | 113,861.8 |  |  |  |  |  | 113,861.8 | 14.8\% |
|  | Other |  |  |  |  |  |  |  |  |
|  | Total | \$389,320.9 | \$0.0 | \$238,029.3 | \$23,035.7 | \$54,641.4 | \$64,566.9 | \$769,594.2 | 100.0\% |
|  | City | 2,941,373.3 | 1,685,034.0 | 931,259.7 | 814,669.9 | 942,427.4 | 1,333,103.3 | 8,647,867.6 | 46.1\% |
|  | County | 3,759,220.6 | 266,236.7 |  |  | 14,298.0 | 280,281.0 | 4,320,036.3 | 23.0\% |
|  | School | 4,045,953.5 |  |  |  |  |  | 4,045,953.5 | 21.6\% |
|  | Other | 721,767.1 | 1,016,382.9 |  |  |  |  | 1,738,150.1 | 9.3\% |
|  | Total | \$11,468,314.5 | \$2,967,653.6 | \$931,259.7 | \$814,669.9 | \$956,725.4 | \$1,613,384.3 | \$18,752,007.5 | 100.0\% |
| Source: Independent Budget Office |  |  |  |  |  |  |  |  |  |

Table A3. Mix of Local Government Taxes Collected in the Ten Largest Cities, 1997

| City | Level of government | Distribution of taxes collected by city, county, school, and other local jurisdictions in city |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Property | General Sales | Personal Income | Business Income | Utility | Other and unspecified | Total |
|  | City | 38.7\% | 15.6\% | 21.8\% | 15.5\% | 1.2\% | 7.3\% | 100.0\% |
|  | County |  |  |  |  |  |  |  |
|  | School |  |  |  |  |  |  |  |
|  | Other | 6.5\% | 25.9\% | - | 39.9\% | 14.6\% | 12.9\% | 100.0\% |
|  | Total | 37.5\% | 16.0\% | 21.0\% | 16.4\% | 1.6\% | 7.5\% | 100.0\% |
| $\stackrel{\stackrel{Q}{\infty}}{\stackrel{\circ}{0}}$ | City | 13.0\% | 19.6\% | - | 19.6\% | 32.2\% | 15.6\% | 100.0\% |
|  | County | 92.3\% | 3.6\% | - | - | 0.7\% | 3.5\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 5.4\% | 94.6\% | - | - | - | - | 100.0\% |
|  | Total | 54.8\% | 17.0\% | - | 7.6\% | 12.8\% | 7.8\% | 100.0\% |
| $\begin{aligned} & \text { O} \\ & \text { O. } \\ & \text { た } \\ & \hline \end{aligned}$ | City | 33.0\% | 16.8\% | - | - | 21.4\% | 28.9\% | 100.0\% |
|  | County | 57.8\% | 15.9\% | - | - | - | 26.4\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 76.0\% | 24.0\% | - | - | - | - | 100.0\% |
|  | Total | 61.9\% | 13.1\% | - | - | 9.3\% | 15.8\% | 100.0\% |
| $\begin{aligned} & \text { 등 } \\ & \text { No } \\ & \text { 오 } \end{aligned}$ | City | 52.9\% | 29.4\% | - | 13.2\% | - | 4.5\% | 100.0\% |
|  | County | 94.9\% | - | - | - | - | 5.1\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 23.4\% | 76.6\% | - | - | - | - | 100.0\% |
|  | Total | 73.0\% | 20.2\% | - | 4.5\% | - | 2.4\% | 100.0\% |
|  | City | 39.7\% | 4.4\% | 33.3\% | 12.4\% | - | 10.2\% | 100.0\% |
|  | County |  |  |  |  |  |  |  |
|  | School |  |  |  |  |  |  |  |
|  | Other |  |  |  |  |  |  |  |
|  | Total | 39.7\% | 4.4\% | 33.3\% | 12.4\% | - | 10.2\% | 100.0\% |
| に. . | City | 8.3\% | 37.6\% | - | 7.8\% | - | 46.3\% | 100.0\% |
|  | County | 95.4\% | 4.6\% | - | - | - | - | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | - | 100.0\% | - | - | - | - | 100.0\% |
|  | Total | 64.8\% | 19.3\% | - | 2.3\% | - | 13.6\% | 100.0\% |
|  | City | 24.8\% | 74.9\% | - | - | - | 0.3\% | 100.0\% |
|  | County | 52.0\% | 34.6\% | - | - | - | 13.4\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Total | 65.5\% | 32.0\% | - | - | - | 2.5\% | 100.0\% |
| ஸico | City | 49.8\% | 33.4\% | - | 5.1\% | - | 11.7\% | 100.0\% |
|  | County | 98.3\% | - | - | - | - | 1.7\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 35.2\% | 64.8\% | - | - | - | - | 100.0\% |
|  | Total | 77.6\% | 16.6\% | - | 1.7\% | - | 4.2\% | 100.0\% |
|  | City | 51.2\% | 28.8\% | - | 14.7\% | - | 5.4\% | 100.0\% |
|  | County | 100.0\% | - | - | - | - | - | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 12.1\% | 87.9\% | - | - | - | - | 100.0\% |
|  | Total | 71.7\% | 21.0\% | - | 5.4\% | - | 2.0\% | 100.0\% |
|  | City | 35.6\% | - | 41.5\% | 4.0\% | 9.5\% | 9.4\% | 100.0\% |
|  | County | 87.2\% | - | - | - | - | 12.8\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other |  |  |  |  |  |  |  |
|  | Total | 50.6\% | - | 30.9\% | 3.0\% | 7.1\% | 8.4\% | 100.0\% |
|  | City | 34.0\% | 19.5\% | 10.8\% | 9.4\% | 10.9\% | 15.4\% | 100.0\% |
|  | County | 87.0\% | 6.2\% | - | - | 0.3\% | 6.5\% | 100.0\% |
|  | School | 100.0\% | - | - | - | - | - | 100.0\% |
|  | Other | 41.5\% | 58.5\% | - | - | - | - | 100.0\% |
|  | Total | 61.2\% | 15.8\% | 5.0\% | 4.3\% | 5.1\% | 8.6\% | 100.0\% |

Source: Independent Budget Office

Table A4. Local Tax Effort in the Ten Largest U.S. Cities, 1997

| City | Level of government | Local Taxes per \$100 City Taxable Resources |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Property |  | General Sales |  | PersonalIncome |  | Business Income |  | Utility |  | Other and unspecified |  | Total |  |
|  | City | 2.91 |  | 1.17 |  | 1.64 |  | 1.17 |  | 0.09 |  | 0.55 |  | 7.54 |  |
|  | County |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | School |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Other | 0.02 |  | 0.07 |  | - |  | 0.11 |  | 0.04 |  | 0.04 |  | 0.28 |  |
|  | Total | \$2.93 | 3 | \$1.25 | 2 | \$1.64 | 2 | \$1.28 | 1 | \$0.13 | 4 | \$0.59 | 3 | \$7.82 | 1 |
| 苋 | City | 0.20 |  | 0.31 |  | - |  | 0.31 |  | 0.51 |  | 0.24 |  | 1.57 |  |
|  | County | 2.00 |  | 0.08 |  | - |  | - |  | 0.02 |  | 0.07 |  | 2.17 |  |
|  | School | 0.01 |  | - |  | - |  | - |  | - |  | - |  | 0.01 |  |
|  | Other | 0.02 |  | 0.31 |  | - |  | - |  | - |  | - |  | 0.33 |  |
|  | Total | \$2.23 | 8 | \$0.69 | 7 | \$0.00 |  | \$0.31 | 3 | \$0.52 | 1 | \$0.32 | 6 | \$4.07 | 7 |
|  | City | 0.76 |  | 0.39 |  | - |  | - |  | 0.49 |  | 0.67 |  | 2.31 |  |
|  | County | 0.38 |  | 0.10 |  | - |  | - |  | - |  | 0.17 |  | 0.66 |  |
|  | School | 1.49 |  | - |  | - |  | - |  | - |  | - |  | 1.49 |  |
|  | Other | 0.66 |  | 0.21 |  | - |  | - |  | - |  | - |  | 0.87 |  |
|  | Total | \$3.29 | 2 | \$0.70 | 6 | \$0.00 |  | \$0.00 |  | \$0.49 | 2 | \$0.84 | 1 | \$5.32 | 3 |
| $\begin{aligned} & \text { ᄃ } \\ & \text { © } \\ & \text { 호 } \end{aligned}$ | City | 0.72 |  | 0.40 |  | - |  | 0.18 |  | - |  | 0.06 |  | 1.36 |  |
|  | County | 0.61 |  | - |  | - |  | - |  | - |  | 0.03 |  | 0.65 |  |
|  | School | 1.44 |  | - |  | - |  | - |  | - |  | - |  | 1.44 |  |
|  | Other | 0.12 |  | 0.40 |  | - |  | - |  | - |  | - |  | 0.52 |  |
|  | Total | \$2.90 | 4 | \$0.80 | 3 | \$0.00 |  | \$0.18 | 4 | \$0.00 |  | \$0.09 | 9 | \$3.98 | 8 |
|  | City | 2.63 |  | 0.29 |  | 2.20 |  | 0.82 |  | - |  | 0.68 |  | 6.62 |  |
|  | County |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | School |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Other |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Total | \$2.63 | 6 | \$0.29 | 9 | \$2.20 | 1 | \$0.82 | 2 | \$0.00 |  | \$0.68 | 2 | \$6.62 | 2 |
|  | City | 0.09 |  | 0.40 |  | - |  | 0.08 |  | - |  | 0.50 |  | 1.08 |  |
|  | County | 2.08 |  | 0.10 |  | - |  | - |  | - |  | - |  | 2.18 |  |
|  | School | 0.21 |  | - |  | - |  | - |  | - |  | - |  | 0.21 |  |
|  | Other | - |  | 0.20 |  | - |  | - |  | - |  | - |  | 0.20 |  |
|  | Total | \$2.37 | 7 | \$0.71 | 5 | \$0.00 |  | \$0.08 | 7 | \$0.00 |  | \$0.50 | 4 | \$3.66 | 9 |
|  | City | 0.36 |  | 1.09 |  | - |  | - |  | - |  | 0.00 |  | 1.46 |  |
|  | County | 0.40 |  | 0.27 |  | - |  | - |  | - |  | 0.10 |  | 0.77 |  |
|  | School | 1.99 |  | - |  | - |  | - |  | - |  | - |  | 1.99 |  |
|  | Other | 0.03 |  | - |  | - |  | - |  | - |  | - |  | 0.03 |  |
|  | Total | \$2.78 | 5 | \$1.36 | 1 | \$0.00 |  | \$0.00 |  | \$0.00 |  | \$0.11 | 8 | \$4.25 | 5 |
| Co 읃 | City | 0.72 |  | 0.48 |  | - |  | 0.07 |  | - |  | 0.17 |  | 1.44 |  |
|  | County | 0.70 |  | - |  | - |  | - |  | - |  | 0.01 |  | 0.72 |  |
|  | School | 1.82 |  | - |  | - |  | - |  | - |  | - |  | 1.82 |  |
|  | Other | 0.13 |  | 0.24 |  | - |  | - |  | - |  | - |  | 0.37 |  |
|  | Total | \$3.37 | 1 | \$0.72 | 4 | \$0.00 |  | \$0.07 | 8 | \$0.00 |  | \$0.18 | 7 | \$4.34 | 4 |
|  | City | 0.55 |  | 0.31 |  | - |  | 0.16 |  | - |  | 0.06 |  | 1.08 |  |
|  | County | 0.33 |  | - |  | - |  | - |  | - |  | - |  | 0.33 |  |
|  | School | 1.19 |  | - |  | - |  | - |  | - |  | - |  | 1.19 |  |
|  | Other | 0.04 |  | 0.31 |  | - |  | - |  | - |  | - |  | 0.35 |  |
|  | Total | \$2.12 | 10 | \$0.62 | 8 | \$0.00 |  | \$0.16 | 5 | \$0.00 |  | \$0.06 | 10 | \$2.96 | 10 |
|  | City | 1.13 |  | - |  | 1.31 |  | 0.13 |  | 0.30 |  | 0.30 |  | 3.16 |  |
|  | County | 0.39 |  | - |  | - |  | - |  | - |  | 0.06 |  | 0.45 |  |
|  | School | 0.63 |  | - |  | - |  | - |  | - |  | - |  | 0.63 |  |
|  | Other |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Total | \$2.15 | 9 | \$0.00 |  | \$1.31 | 3 | \$0.13 | 6 | \$0.30 | 3 | \$0.36 | 5 | \$4.24 | 6 |
|  | City | 0.68 |  | 0.39 |  | 0.22 |  | 0.19 |  | 0.22 |  | 0.31 |  | 2.01 |  |
|  | County | 0.87 |  | 0.06 |  | - |  | - |  | 0.00 |  | 0.07 |  | 1.00 |  |
|  | School | 0.94 |  | - |  | - |  | - |  | - |  | - |  | 0.94 |  |
|  | Other | 0.17 |  | 0.24 |  | - |  | - |  | - |  | - |  | 0.40 |  |
|  | Total | \$2.661 |  | \$0.69 |  | \$0.22 |  | \$0.19 |  | \$0.22 |  | \$0.37 |  | \$4.35 |  |
| Source: Independent Budget Office |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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