The Author

Philip M. Dearborn
Executive Director
D.C. Tax Revision Commission
Washington, D.C.
Revenue mix

The District relies on revenues from taxes, charges and miscellaneous revenues, and federal aid. To consider whether the District relies unduly on some types of revenue sources, it is helpful to compare the District's use of revenue sources to those used by other governments. Because the District uses both state and local revenue sources, the District's revenue mix must be compared to combined state and local revenues.

The most significant difference in the District's revenue mix is its heavy reliance on federal payments and grants. The District receives about 39 percent of its total general revenues from the federal government, or almost double the national average of 20 percent (Figure II-a). This difference is the result of the federal payment received because of the unique District status, and because of the high expenditures for federal matching grant entitlement programs, such as Medicaid.

When only tax mix is examined, the District's mix is similar to the national average, but with a somewhat greater proportion of revenue received from property taxes and a smaller percentage from sales taxes. On a regional basis, the District's sales taxes are much more similar to those of Maryland and Virginia than to the national average. However, Maryland relies on a personal income tax to a much greater extent than does the District.

When percentages of revenues from charges and miscellaneous sources are compared, the District is very low, both nationally and in comparison to neighboring states. The District gets only 11 percent of its revenues from own-source, nontax revenues, compared to 24 percent nationally for all state and local governments. Nontax local revenues primarily consist of charges for services, fees, rents, interest, and fines.

Overall, the District revenue mix shows a reasonably balanced use of the major taxes, a high dependence on federal aid, and a low reliance on service charges and other nontax revenues.
**Relative size of tax bases**

Property taxes are used primarily by local governments, and therefore it is appropriate to compare the District’s taxable property values to those of other local governments. In making such comparisons, differences in assessed values versus actual values must be adjusted so that the values are compared on the same basis. Adjusting assessment differences between jurisdictions cannot be done with complete accuracy and there is no national compilation of taxable values, but reasonably accurate estimates can be made for selected local governments.
When the District is compared to other central cities, its taxable assessed property value per capita is well in excess of Baltimore, Philadelphia, Chicago, and Detroit (Figure II-b). It is not possible from available data to determine whether the higher values are in the residential or the commercial sectors. When compared to neighboring suburban jurisdictions, the District's values are slightly less or about comparable to the others, except in Prince George's County which the District exceeds by a wide margin.

Sales tax base comparisons are difficult because there is no information that directly measures the base to which sales tax rates apply. Each government has its own coverage and exemptions that make each base different. In the Washington area, for example, Virginia taxes all food, while the District and Maryland exempt food purchased for home consumption. A recent national comparison of sales-tax bases uses the yield from a 1 percent sales tax applied to the state's tax base as the state defines it (Figure II-c). On this basis, the District has the third highest yield among the states and was exceeded only by Hawaii (with its high sales to tourists) and New Mexico (with a very broad and inclusive base). This high District yield is the result of a base that is heavily weighted by parking, hotel, and restaurant sales, and by tourist purchases.

Personal income tax bases can be compared in either the aggregate or by income classes. The aggregate federal adjusted gross income (AGI), as reported on
District, Maryland, and Virginia tax returns, was almost identical in the 1994 tax year when compared on either a per capita or per taxpayer basis (Figure II-d). However, when the AGI is compared by the income classes of the taxpayers, differences in the bases are apparent. The percentage of all taxpayers filing returns with AGI over $100,000 is almost identical at 5 percent in the District, Maryland, and Virginia, but the amount of income reported by these taxpayers is 31 percent in the District compared to about 25 percent each in Maryland and Virginia (Figure II-e). In contrast, the District has far fewer filers and income reported in the $50,000–$100,000 class, and far more filers and income in the under $25,000 income class.

Comparisons using reported income for tax purposes do not necessarily reflect the true income bases of the jurisdictions because they include only those residents who

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**Figure II-c**

<table>
<thead>
<tr>
<th>State</th>
<th>Per Capita Sales Tax Revenue per 1% Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 Highest:</strong></td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td>$269.12</td>
</tr>
<tr>
<td>New Mexico</td>
<td>153.25</td>
</tr>
<tr>
<td>District of Columbia</td>
<td><strong>144.23</strong></td>
</tr>
<tr>
<td>South Dakota</td>
<td>128.70</td>
</tr>
<tr>
<td>Nevada</td>
<td>125.11</td>
</tr>
<tr>
<td>Virginia</td>
<td>95.00</td>
</tr>
<tr>
<td>Maryland</td>
<td>88.72</td>
</tr>
<tr>
<td><strong>5 Lowest:</strong></td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>76.10</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>74.79</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>71.00</td>
</tr>
<tr>
<td>West Virginia</td>
<td>69.21</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>59.17</td>
</tr>
</tbody>
</table>

Source: National Tax Journal.
file tax returns and do not include income that is excluded from federal adjusted gross income, such as interest on tax-exempt bonds. Because per capita personal income is unrelated to tax filings, it provides a better measure of the underlying personal income base in jurisdictions. The District’s per capita personal income of $33,452 in 1995 was the highest in the nation and well above the national average of $23,208. Maryland's was $26,333 and Virginia's was $23,974; Connecticut had the highest per capita personal income of any state at $31,776.

### Figure II-d

**Income Tax Bases in the D.C. Area**

*1994 Tax Year*

<table>
<thead>
<tr>
<th></th>
<th>D.C.</th>
<th>Md.</th>
<th>Va.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average AGI* per capita</td>
<td>$16,095</td>
<td>$15,921</td>
<td>$15,058</td>
</tr>
<tr>
<td>Average AGI per taxpayer</td>
<td>35,607</td>
<td>35,999</td>
<td>35,703</td>
</tr>
</tbody>
</table>

*Adjusted gross income.

Source: Tax reports from the District, Maryland, and Virginia.

### Figure II-e

**Distribution of Income Tax Base**

*1994 Tax Year*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,000 or less</td>
<td>57.9%</td>
<td>51.1%</td>
<td>52.8%</td>
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<tr>
<td>$25,000–$50,000</td>
<td>25.6</td>
<td>25.8</td>
<td>25.4</td>
</tr>
<tr>
<td>$50,000–$100,000</td>
<td>11.5</td>
<td>18.2</td>
<td>16.9</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>5.0</td>
<td>4.9</td>
<td>4.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGI</th>
<th>D.C.</th>
<th>Md.</th>
<th>Va.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,000 or less</td>
<td>19.6%</td>
<td>15.1%</td>
<td>16.6%</td>
</tr>
<tr>
<td>$25,000–$50,000</td>
<td>26.1</td>
<td>25.8</td>
<td>25.6</td>
</tr>
<tr>
<td>$50,000–$100,000</td>
<td>22.8</td>
<td>34.5</td>
<td>32.2</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>31.4</td>
<td>24.6</td>
<td>25.6</td>
</tr>
</tbody>
</table>

Source: Tax reports from the District, Maryland, and Virginia.
Individual and business tax liabilities are calculated by applying statutory tax rates to tax bases and deducting any credits that are applicable. As a result, apparently similar tax rates may have different effects on taxpayers when differences in how tax bases are defined and how credits are given are taken into account. Therefore, tax rate comparisons between jurisdictions must adjust the stated or nominal rates to effective rates to provide meaningful comparisons of how the rates actually affect taxpayers’ liabilities.

**Property tax** rate comparisons must take into account differences in assessment ratios as well as tax credits, such as homestead exemptions, to provide an accurate measure of the differences. Because there is no routinely reported national data that provides information on assessment ratios and credits, good comparisons of rates are done infrequently. The most recent and best study available is a 1996 Minnesota study\(^1\) that provides a comprehensive national comparison of rates that are adjusted for both assessments and credits. The report compares tax rates calculated as a percent of actual property value for the District and a large central city in each state. The rates are compared for owner-occupied homes valued at $70,000 and $150,000, and for commercial, industrial, and apartment properties.

This study reported that the District’s residential owner-occupied rate was 48th in the country at 0.46 percent and 0.56 percent on the two different valued house sizes. The commercial rate at 2.315 percent was 26th and the apartment rate at 1.593 percent was 28th. The Minnesota study also identified states where the property tax rate for residential homesteads is lower than for commercial properties. Of the 34 states where this occurs, the District has the fourth largest difference, with its commercial rate estimated at 3.989 times its residential rate (Figure II-f).

These comparisons suggest that, while the commercial and apartment rates are not excessively high on a national basis, they are quite high in comparison to the District’s residential rates.

**Income tax** rate comparisons often compare only the top marginal rates, where the District’s maximum rate of 9.5 percent compares to a combined state and local Maryland maximum rate of 8 percent and Virginia’s top rate of 5.75 percent. Because of the different taxable income thresholds and because of other differences in standard deductions and personal exemptions, the effective rates vary in their application to different income levels. In Maryland for example, the effective rate for lower-income taxpayers is higher than the rate for District taxpayers.

**Sales tax** rate comparisons are complex because of differences in the tax base. For example, Virginia taxes all food purchases, while the District and Maryland do not tax food for home consumption. This means that although the general sales tax rate in Virginia is a maximum of 4.5 percent, the effective tax rate paid by some
residents may be higher than the 5.75 District rate and the 5 percent Maryland rate, depending on how much food a family buys.

Comparisons of tax burdens on typical families or businesses

Tax burden comparisons calculate the tax paid by a “typical” resident or business. In comparisons of residents, assumptions are made about the levels and relationships of various income, family, and wealth characteristics. Similar appropriate assumptions are made about businesses. The taxes that the resident or business would pay in different jurisdictions can then be calculated based on those characteristics.
The District government annually compares its tax burdens on typical taxpayers in four different income groups to tax burdens in the suburbs and in the largest city in each state. In the 1996 national comparison, the District ranked 18th highest for a family of four with a $25,000 income, 15th at the $50,000 level, 14th at the $75,000 level, and 12th at the $100,000 level. For each income level, Baltimore had a higher burden, but Virginia Beach, Va., was higher than the District only for the $25,000 family.

When compared with the six major local governments in the Washington area, the District placed sixth highest at the $25,000 level, fourth at the $50,000 level, third at the $75,000 level, and first for the $100,000 level. However, the local burden study reflects relatively competitive burdens across the area, with only small differ-
ences between the highest and lowest burdens at each income level. The differences are $303 at $25,000, $681 at $50,000, $571 at $75,000, and $993 at the $100,000 level. At the $100,000 level, the District is $451 higher than the second highest jurisdiction (Prince George's County).

Coopers and Lybrand\(^2\) analyzed 1996 tax effects on five hypothetical companies in different types of businesses\(^3\) and compared the District's results to those of selected other governments. The state and local taxes used in the calculations were: corporate income and income-based franchise, sales, business personal property, real property, and other major taxes. The analysis did not consider the effects of these taxes on the federal tax liability. A similar analysis of the Tax Revision Commission's recommendations can be found in Appendix II-C.

This study found that the District's tax structure produced the highest liabilities of any of the 19 jurisdictions compared in the Washington area. The principal cause was the District's property tax rate on businesses. The same study also compares the District with 12 major jurisdictions outside the Washington area. This comparison placed the District's liability sixth highest for each type of firm, except for a biotechnology firm, where the District was fourth highest.

### Representative tax capacity and tax effort

The U.S. Advisory Commission on Intergovernmental Relations developed the Representative Tax System (RTS) in 1962. This system provides a yardstick for comparing the relative tax capacity of states and determines how much tax effort is expended by each state relative to its capacity. The analysis combines all state and local revenues in the state for the calculations. In this system, "fiscal capacity" is defined as the relative per capita amounts of revenue states would raise if they used national average tax rates applied to 27 commonly used tax bases. The tax rates are applied to the base in each state regardless of whether that tax is actually used, so the capacity reflects the potential tax raising ability. Capacities, using this system, vary solely because of differing tax base levels, such as property values or retail sales. "Effort" is defined as the ratio of actual revenues received by a state to its estimated capacity.

To make comparisons easier, the capacity results are indexed to a national average capacity. The effort measure is indexed to each state's capacity. The most recent report of capacity and effort was based on 1991 tax data. Similar analyses made in selected prior years permit a view of how capacity and effort have changed over time.

The District's capacity index was 123 in 1991, or 23 percent above the national average of states.\(^4\) It was seventh highest among states and exceeded Maryland's index of 106 and Virginia's index of 103. The District's capacity has shown little change since 1984, when it was 120.
The District's effort index was 157 in 1991, the highest of any state and slightly ahead of New York's 156. Maryland's effort was slightly above average at 103, while Virginia's was below average at 91. In 1984, the District's effort index was 139.

Per capita comparisons

A national comparison of per capita state and local taxes was conducted by the Federation of Tax Administrators using 1993 data. Although these data are somewhat out of date, the relative stability of most state tax systems make them reasonably accurate at present. The District ranked second among all states for tax revenue per capita at $4,392, compared to Maryland (ninth) at $2,565 and Virginia (29th) at $2,073 (Figure II-g).

There are several problems in interpreting the results of these per capita comparisons, however, that may not accurately describe the tax burden on District resident taxpayers. First, taxes on residents and businesses in the District may appear to be more burdensome than those imposed by other governments, but the comparison may also mean that tax bases in the District are more productive than other jurisdictions. If the rate and the base to which the rate is applied are identical, then the additional per capita revenue may come from a richer tax base or from exporting the tax to nonresidents. In the case of sales tax, for example, it may mean that more tourists are paying tax on their purchases in the District. On the other hand, if the rate is higher or the base is broader in the District, the additional yield merely may reflect higher taxes on residents.

Second, the nature of populations is different between jurisdictions. States with larger families containing nontaxpaying children would show lower taxes per capita than the District, where there is a large proportion of singles and childless couples.

Third, per capita comparisons assume that only the resident population is paying the tax. This is clearly not the case in terms of taxes that are paid by businesses and nonresidents.

Fourth, the population of jurisdictions is determined accurately only in the decennial Censuses. Acknowledged undercounts in Census years in central cities such as the District, however, make even the total population numbers questionable. Relatively small population differences can make substantial changes in per capita comparisons.

Personal income comparisons

Jurisdictions can be compared by calculating the percent of personal income needed to pay state and local taxes. The concept is that because taxes are uli-
mately paid from income, percent of personal income is a good measure of tax burden. The 1993 national comparisons by this measure show the District taxes taking 15.5 percent of personal income, second highest among states. The 15.5 percent compares with Maryland at 11.1 percent, and Virginia at 10 percent (Figure II-g).

While using personal income as a measure overcomes the problems of population size and composition found in per capita comparisons, it presents other problems. Comparisons to personal income do not reflect taxes paid by businesses and tourists. Although all taxes are ultimately paid from someone’s income, most business and tourist taxes are not paid from the income of District residents.

Also, there are three principal components of personal income: 1) wages and other earnings; 2) unearned income, such as interest and dividends; and 3) transfer payments, such as Social Security, welfare, and retirement payments. The composition of personal income and the relation of taxes to it varies between jurisdictions. A tax taking the same percent of personal income in a jurisdiction with a high proportion of unearned income may be much less of a burden than the same tax in a jurisdiction where personal income is received primarily from transfer payments.

**Interaction with federal taxes**

The effects of the interaction of the federal tax system with state and local taxes needs to be considered when making tax comparisons. State and local property and income taxes can be deducted from federal taxable income when taxpayers itemize deductions. State and local sales taxes cannot be deducted and no taxes are deductible from federal taxable income when a standard deduction is used. This federal deduction can mean very different results for comparisons of tax burdens on different taxpayers. Taxpayers in the 31 percent marginal rate bracket can effectively reduce property and income tax burdens by 31 percent by itemizing. In contrast, taxpayers in the 15 percent bracket would get only a 15 percent reduction — or no reduction, if they do not itemize.

Total tax burden comparisons between jurisdictions also can change. A jurisdiction that relies heavily on sales taxes that are not deductible will impose a higher burden on its residents than a government with apparently comparable tax burdens that relies more heavily on income and property taxes.

By the same token, a profitable business will have the burden of state and local taxes reduced when they deduct those taxes and, therefore, reduce their federal corporate profits tax. In contrast, an unprofitable business that cannot take as many deductions will not receive a corresponding reduction in federal taxes.
Conclusions

It is apparent that no matter how hard we try to compare taxes between jurisdictions, they are not going to give any final answers about how District tax levels affect the city's economy. At best, they provide a view of the tax differences between jurisdictions from several perspectives, and permit the following somewhat conflicting possible conclusions.

The District has:

- taxes that are second highest in the country among states on a per capita or percent of income comparison;
- a high tax capacity and an above-average tax effort compared to states;
- tax burdens on residents that are among the top third of states, but are generally comparable to those of other Washington area jurisdictions;
- commercial property tax burdens that are about in the middle in national comparisons, but higher than those of all other Washington area jurisdictions;
- an owner-occupied residential property tax rate that is among the lowest in the country;
- commercial and apartment property tax rates that are about average nationally, but with a very large difference between the residential and commercial rates;
- a large property tax base compared to that of other large cities, but about comparable to that of area jurisdictions;
- a high sales tax base compared to other states, using each state's definition of its base;
- an income tax base that is almost identical to Maryland and Virginia in aggregate, but a per capita personal income that is the highest among states and much higher than the national average; and
- a tax mix that is typical of states, but that relies more heavily on federal aid and less heavily on nontax local revenues.

Endnotes

1 Minnesota Taxpayers Association, 50-State Property Tax Comparison Study, June 1996.
3 The types of companies examined were: a biotechnology manufacturing company, an information technology company, a nonmanufacturing research and develop-
ment firm, headquarters of a business services firm, and headquarters of a nonchar-
itable national trade association.

4 U.S. Advisory Commission on Intergovernmental Relations, RTS 1991: State

5 Ibid.