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# Virginia Taxes Paid by Manufacturers



# Introduction

This study provides comprehensive estimates of the state and local taxes paid by businesses operating in Virginia. The study finds that businesses paid \$7.1 billion in Virginia state and local taxes in FY 2003, representing 32 percent of total state and local tax revenue. In addition, despite low corporate profitability due to the recent recession, state and local taxes paid by Virginia businesses have continued to rise. From FY 2000 to FY 2003, Virginia businesses paid 49 percent of the increase in total state and local taxes, significantly more than their share of all taxes in FY 2003.

This study also provides estimates of the state and local taxes paid by Virginia manufacturers. Manufacturers paid \$1.2 billion in state and local taxes in FY 2003. In addition to corporate income taxes, the study includes state and local taxes imposed on business property, purchases of inputs, gross receipts and payroll and state and local license fees. The results of this study highlight the importance in the tax policy debate of evaluating both the level of overall business taxes and differences in tax burdens across industries.

The following points may help to guide legislators, tax administrators and the business community in evaluating the current business tax system and discussing tax reform options:

- ▶ The corporate income tax accounts for only 5 percent of total state and local taxes imposed on businesses in Virginia. It is important to consider all state and local business taxes when evaluating Virginia's business tax system and long-run business tax competitiveness.
- ▶ Certain features of Virginia's tax system result in high effective tax rates on manufacturing and other capital intensive industries that may affect Virginia's ability to retain and attract manufacturing jobs and new investments. For example, the effective tax rate on business property in Virginia is 35 percent higher than the weighted average rate in the five comparison states. Because property taxes account for 48 percent of all state and local business taxes, relatively high property tax rates can have a significant impact on Virginia's competitiveness. The state's relatively high property tax rate is especially significant to manufacturers because property taxes account for 63 percent of manufacturers' total Virginia business taxes.
- ▶ The property tax is not the only tax on capital invested in Virginia. Additional taxes include sales taxes on business purchases of machinery and equipment and corporate income taxes<sup>1</sup>. Adding these three taxes together, 69 percent of Virginia's state and local business taxes are taxes directly related to capital investments<sup>2</sup>.
- ▶ Comparisons of state and local tax burdens among selected industries in Virginia and across six comparison states used in this study show that combined state and local taxes on manufacturers in Virginia are relatively high.

<sup>1</sup> Not all manufacturing machinery and equipment purchases are exempt from the sales tax.

<sup>2</sup> Includes all business taxes, not just manufacturing.

## Virginia Business Taxes

Businesses paid \$7.1 billion in state-local taxes in FY 2003, representing 32 percent of total Virginia state and local tax revenue (\$22.0 billion).<sup>3</sup>

The business taxes considered in this analysis include state and local property taxes, sales and excise taxes on business inputs, corporate income and franchise taxes, gross receipts taxes (e.g., insurance premiums taxes and a portion of utility taxes), business license taxes (including the business and occupation tax), and unemployment and workers compensation payroll taxes.

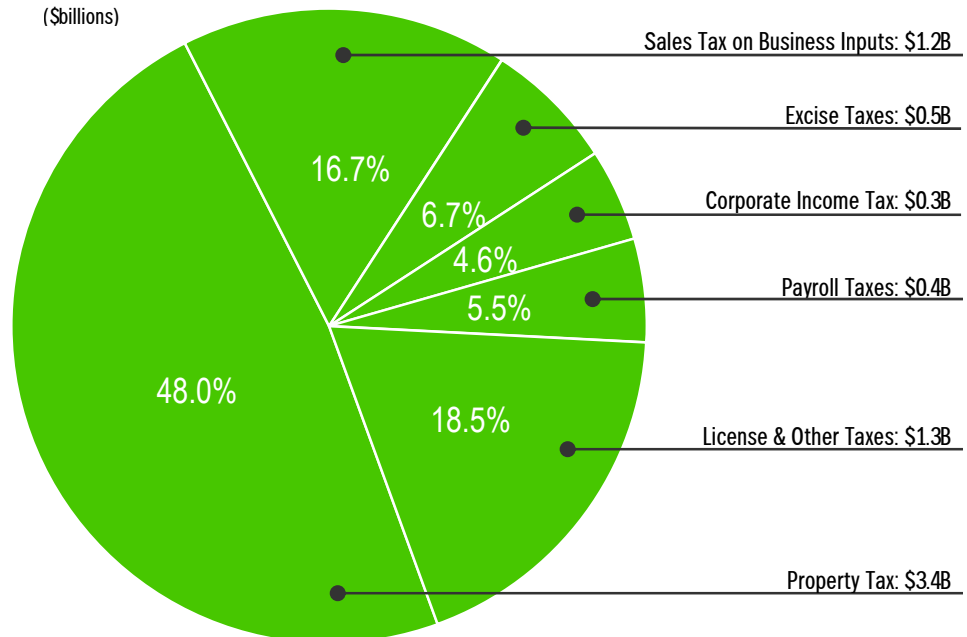
The estimates do not include individual income taxes withheld by employers, sales taxes on final sales of goods and services to consumers, or individual income taxes paid on pass-through business income.

Figure 1 illustrates the composition of total taxes paid by all Virginia businesses in FY2003.

- ▶ Property taxes represent the largest share of business taxes, 48.0 percent.
- ▶ Sales taxes on business inputs and excise taxes (including gross receipts taxes) contribute significantly to the total business tax burden, accounting for 23.4 percent of total business taxes.
- ▶ The corporate income tax accounts for 4.6 percent of total state and local business taxes in Virginia.

**Figure 1**  
**Composition of Virginia Total Business Taxes, FY2003**

(\$billions)



Source: Ernst and Young estimates

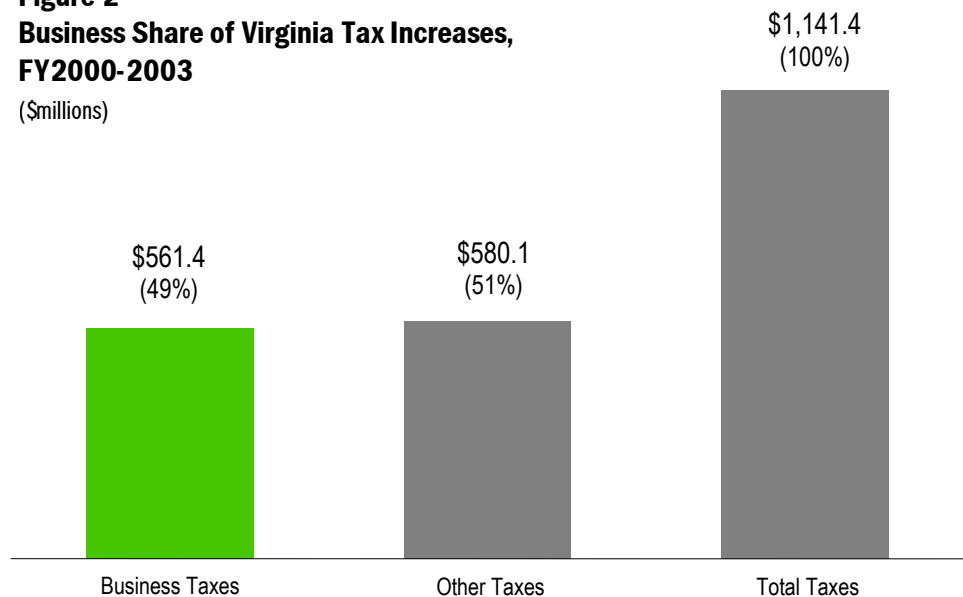
<sup>3</sup> Total taxes are calculated using U.S. Census Bureau data and definitions. The share of total taxes paid by business is a function of the state and local tax structure on both businesses and households and the structure of a state's economy. The share of taxes paid by business cannot be used directly to determine a state's overall business tax competitiveness.

The \$1.3 billion of license and other business taxes, including the business, professional, and occupational license tax (BPOL) are significant liabilities for many business taxpayers.

In addition to paying a significant share of total state and local taxes, businesses accounted for a large percent of the *increase* in Virginia's state and local taxes from FY 2000 to FY 2003. The business share of the \$1.14 billion increase, 49 percent, was significantly higher than the business share of taxes in FY 2003, 32 percent. The faster growth in state and local business taxes was due to the combination of economic factors and legislated changes in tax laws. As a result of these changes, the share of taxes paid by business increased over this period.

**Figure 2**  
**Business Share of Virginia Tax Increases,**  
**FY2000-2003**

(\$millions)



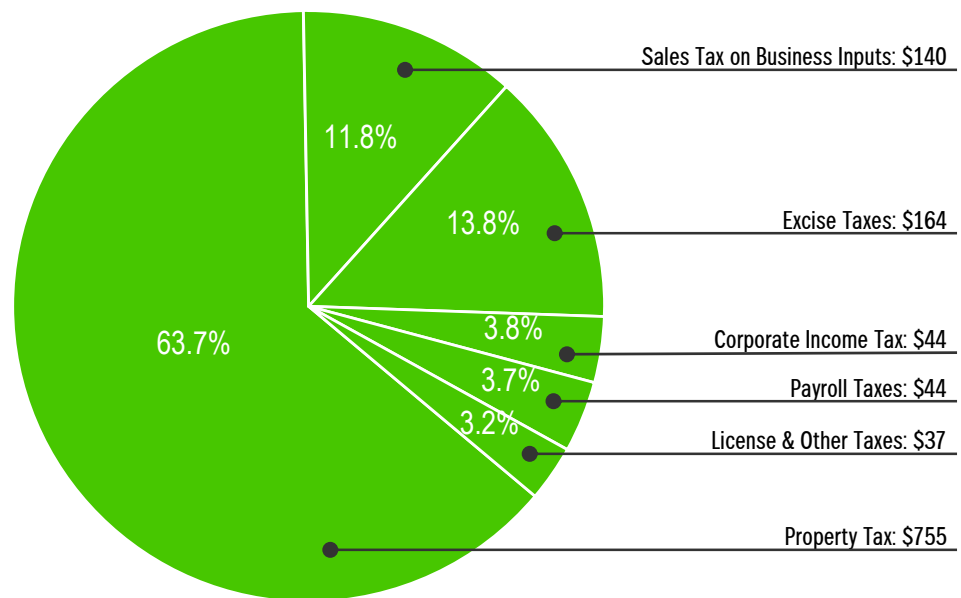
Source: U.S. Census Bureau State and Local Governmental Finances data and Ernst & Young estimates

## Virginia Taxes Paid by Manufacturers

### State and Local Taxes on Manufacturers

Manufacturers paid \$1.2 billion in Virginia state and local taxes in FY2003. The largest tax liability faced by Virginia manufacturers is the property tax, including taxes on real property, personal property, and machinery and equipment. Illustrated in Figure 3, the property tax (\$755 million in FY 2003) represents 63.7 percent of state and local taxes on manufacturers. The second largest tax is the excise tax category at 13.8 percent. This category includes the gross receipts taxes on utilities that are estimated to be passed along in higher prices to manufacturers and other customers. The corporate income tax accounted for less than 4 percent of the total.

**Figure 3**  
**Composition of Virginia Taxes on Manufacturers (\$1.2 billion), FY2003**  
(\$millions)



Source: Ernst & Young estimates

## Effective Virginia Business Tax Rates

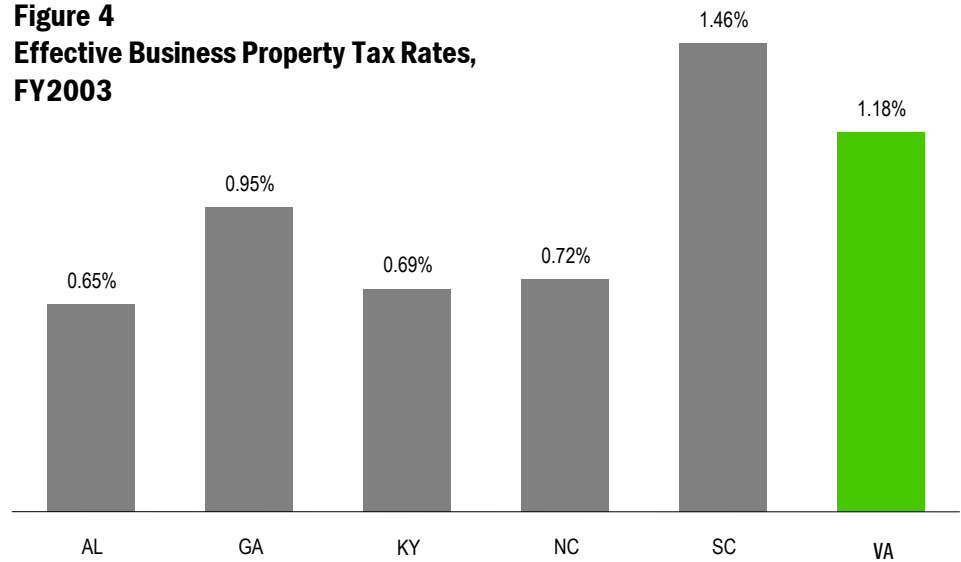
The prior sections presented estimates of the total state and local taxes paid by all Virginia businesses and by manufacturers. This section presents estimates of the relative level of business taxes in Virginia and five neighboring states: Alabama, Georgia, Kentucky, North Carolina, and South Carolina. The metric used to compare across states, *effective tax rates*, is the ratio of taxes to a measure of the tax base. For example, the effective property tax rates in the next section calculate effective tax rates as the ratio of state and local property taxes to the value of business property.<sup>4</sup>

### Property Taxes

Effective tax rates for property taxes paid by all businesses for the six states are presented in Figure 4.

The effective business property tax rate is calculated as revenue from real and personal property tax collections divided by the equivalent real and personal property tax base in each state. As shown in Figure 4, Virginia's effective property tax rate is second highest among the states, 35 percent higher than the weighted average rate (0.87%) in the five comparison states.

**Figure 4**  
**Effective Business Property Tax Rates,**  
**FY2003**



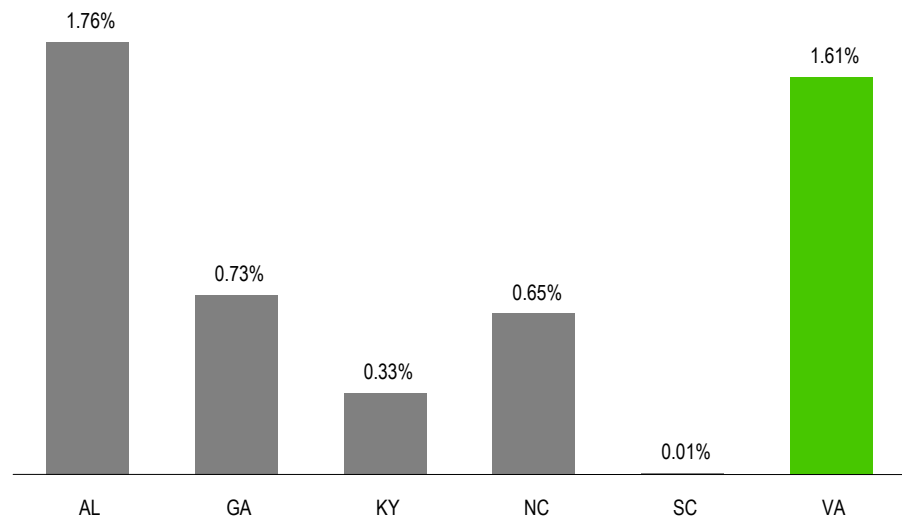
Source: Ernst & Young estimates based on estimated business property tax collections and business fixed asset values.

<sup>4</sup> The real and personal property tax collection data were obtained from individual state property tax reports. The value of business property is estimated by Ernst & Young using U.S. Bureau of Economic Analysis fixed asset tables (real and personal property assets distributed by industry), adjusted for state differences in industry composition.

## Utility Taxes

Figure 5 illustrates the effective tax rate on purchases of electric utility services by manufacturers. The effective tax rate equals estimated electric utility taxes paid by manufacturers divided by the value of utility services purchased by manufacturers. In these calculations the state and local gross receipts and excise taxes imposed on electric utilities are assumed to be passed forward to business (manufacturers) and household consumers of electricity. The Virginia effective tax rate, 1.61 percent, is just below Alabama's rate and significantly higher than the rates in the other states. Because of the importance of electricity to manufacturing businesses, the high effective state and local tax rate on these purchases contributes to a high overall effective tax rate on manufacturers.

**Figure 5**  
**Effective Tax Rates on Electric Utilities Used by Manufacturers**



Sources: Energy information Administration, U.S. Department of Energy; U.S. Census Bureau; Ernst & Young estimates

## Overall Manufacturing Taxes

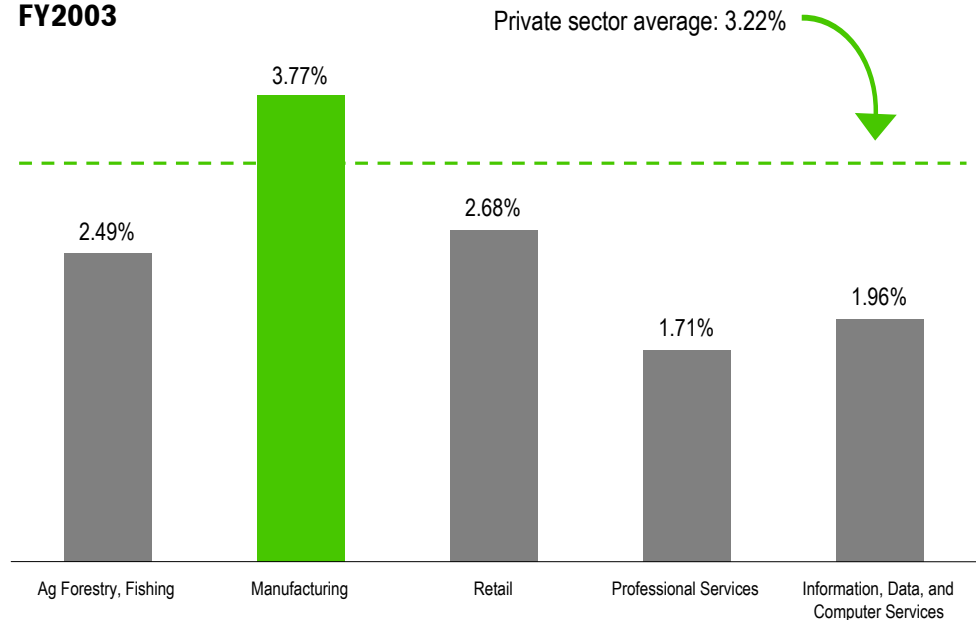
This section compares total state and local taxes imposed on manufacturers to other industries in Virginia and to manufacturing taxes in the comparison states.

### *Comparing Manufacturing to Other Virginia Industries*

Figure 6 presents a comparison of the Virginia effective tax rates, including all state and local business taxes, for manufacturers and four other broad industry groups: agriculture, forestry and fishing; retail; professional services; and information, data and computer services. To compare across industries, the effective tax rates are calculated by dividing total state and local taxes for each industry by industry value added. Value added is a measure of the additional economic activity produced in each industry; it is equivalent to the capital and labor income produced by the industry.<sup>5</sup>

As shown in Figure 6, manufacturing has the highest overall state and local business tax rate, 3.8 percent, for the five industry categories. The disproportionately high effective tax rates on manufacturing machinery, tools, and other property, combined with relatively high tax rates on electric utility services utilities and growing payroll taxes, results in relatively high effective tax rates on manufacturing activities in Virginia (17 percent above the average for all of the industries).

**Figure 6**  
**Effective Virginia State and Local Tax Rates on All Industries,**  
**Measured by Value-Added,**  
**FY2003**



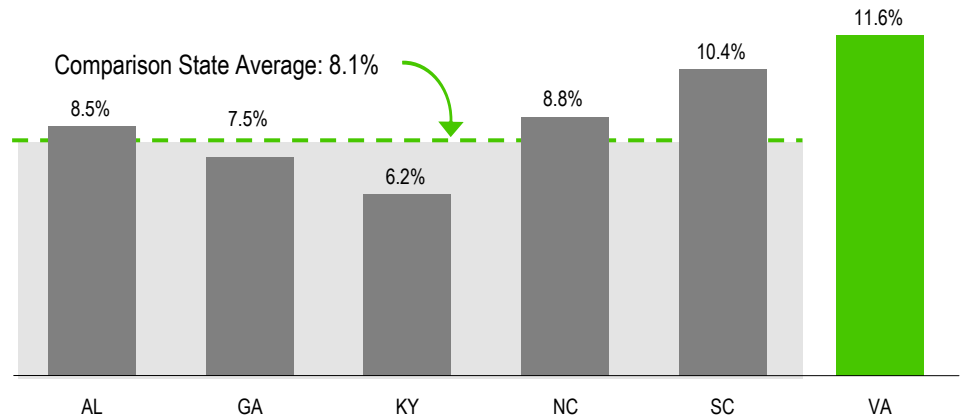
<sup>5</sup> Value added is a measure of the economic contribution of labor and property located in a state. In concept, an industry's value added is equivalent to its gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (consumption of goods and services purchased from other U.S. industries or imported). Thus, a state's value added is often considered the state counterpart of the nation's gross domestic product (GDP). In practice, value added estimates are measured as the sum of the costs incurred and incomes earned in the production of GDP. Note that value added also includes the non-corporate taxes paid by firms in an industry as a cost incurred in production of GDP.



### *Comparison with Other States*

The final effective tax rate comparison compares total state and local taxes paid by manufacturers in Virginia and other selected states. The effective tax rates presented in Figure 7 are calculated as the ratio of total state and local business taxes paid by manufacturers to property income generated in the manufacturing sector.<sup>6</sup> Similar to a reduction in the expected return from investment in the state, the effective tax rate on business property income is a key metric in determining Virginia's ability to attract new capital investment. Virginia's effective manufacturing tax rate is 11.6 percent, 43 percent higher than the weighted average manufacturing rate in the five comparison states and nearly double the effective tax rate on Kentucky manufacturers.

**Figure 7**  
**Effective State and Local Tax Rates on Manufacturers,**  
**Measured by Industry Property Income, FY2003**



<sup>6</sup> Property income consists of two major components: proprietors' income and capital charges. Proprietors' income includes income of unincorporated establishments (adjusted for changes in inventory value), rental income of persons, and non-corporate economic depreciation. Capital charges include corporate profits before taxes (adjusted for changes in inventory value and economic depreciation), net interest, business transfer payments, and subsidies.

## Appendix A: Supplemental Results

### *Size and Composition of the Manufacturing Industry Employment*

Manufacturing employment in each of the study states is presented below as one measure of the size of the manufacturing sector in each state.

**Table A-1. Regional Manufacturing Industry Employment**  
(Employment in Thousands)

Industry	AL	GA	KY	NC	SC	VA
Non-Durable Manufacturing	169,766	257,830	103,482	313,560	145,460	141,700
Durable Manufacturing	170,247	208,839	170,097	308,702	138,441	174,089
<b>Total Manufacturing Jobs</b>	<b>340,013</b>	<b>466,669</b>	<b>273,579</b>	<b>622,262</b>	<b>283,901</b>	<b>315,789</b>

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

### *Permit Fees*

Virginia fees (\$12.9 million) are a significant manufacturing business cost but were not included in the business tax estimates in the study. If these fees were added to corporate income taxes paid by manufacturing corporations in Virginia, they would represent a 29% increase in the tax rate.

**Table A-2. Estimated Permit Fees, Relative to Corporate Income Taxes**  
(\$millions)

State	Estimated Permit Fees	Effective Increase
Alabama	\$8.8	18%
Georgia	17.7	20%
Kentucky	1.6	1%
North Carolina	14.4	8%
South Carolina	4.7	19%
Virginia	\$12.9	29%

Source: Joint Legislative Audit and Review Commission (JLARC) Environmental Fee Study and Ernst and Young calculations.

## Appendix B: Description of Methodology

Generally, business taxes include all taxes that are the legal liabilities of business, including taxes paid with respect to corporations; non-corporate businesses, including partnerships and sole-proprietorships; non-profit entities; and rental property owned by individuals. Sales and excise taxes on sales to households are not considered to be business taxes, even though the taxes may be the legal liability of retailers and wholesalers. Although generally considered a business tax liability, utility gross receipts taxes have been allocated to consumers and business based on consumption and average unit price paid by each group. The individual income taxes paid by owners of pass-through business entities are not included.

**Real and Tangible Property Taxes.** Taxes on residential rental property are treated as business taxes, similar to the treatment by the U.S. Commerce Department in measuring national income. Educational, farm, and not-for-profit entity property was allocated to business to the extent that it was taxed.

**State Intangible Property Taxes and Local Merchants' Capital Taxes.** State-level property taxes on intangible property held by corporations and partnerships and merchants' capital taxes are allocated entirely to business.

**General Sales Tax.** Sales tax paid by businesses on purchases of goods and services used in operations and production and on business purchases of capital equipment was estimated using the E&Y 50-state sales tax model.<sup>7</sup> The model estimates the total taxable business input purchases, business investment purchases, and personal consumption purchases that occur annually in each state to calculate the business share of total sales tax collections.

**Gross Receipts Taxes on Insurance Premiums.** Gross receipt taxes levied on insurance companies were classified as business taxes because they are the legal liability of insurers and are often levied in lieu of generally applicable business taxes.

**Public Utility Taxes.** Taxes on public utility services, including electric and natural gas services, were allocated to industries or households consuming utility services based on the consumption and average price paid by each group.

**Motor Fuel Excise Taxes.** Motor fuel taxes were allocated to the purchaser of the fuel, although many states require the wholesale distributor to remit such taxes. The percent of fuel consumed by business consumers was estimated using national input-output data describing the total value of petroleum refinery products used in commercial transportation activities and by household users. Purchases by other users of petroleum refinery products were excluded from the calculations under the assumption that these users were purchasing non-motor-fuel petroleum products.

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<sup>7</sup> The 50-State Sales Tax Model has been used in the series of state and local business tax studies that Ernst & Young has prepared for the Council on State Taxation. See Robert Cline, Thomas Neubig, Andrew Phillips, and William Fox, "Total State and Local Business Taxes: Nationally and by State: 2000-2004," *State Tax Notes*, May 9, 2005.

**Other Selective Sales Taxes.** Excise taxes on alcohol, pari-mutuels, and tobacco were considered household taxes and excluded from the business tax estimates.

**Corporation Net Income Tax.** These taxes were allocated entirely to business. Individual income taxes were allocated entirely to households, except the portion of these taxes due to income earned by owners of pass-through entities. Individual income taxes paid on corporate dividends were allocated entirely to households.

**Documentary and Stock Transfer Taxes.** These taxes on the transfer of ownership of an asset were allocated 80% to households and 20% to business. Only the 20% of these taxes that were estimated to arise from business acquisition of assets were considered paid by business.

**Estate and Gift Taxes.** All taxes on transfers of assets by gift or bequeath were assumed to be paid by individuals and were excluded from the business tax estimates.

**Business License Taxes, including the BPOL Tax.** These taxes were allocated entirely to business. License taxes paid by businesses selling entirely to consumers were allocated to business because these taxes are the statutory liability of business.

**Motor Vehicle License Taxes.** Taxes on motor vehicle licenses and registrations were allocated to business based on U.S. Department of Transportation data describing the revenue for each type of vehicle by state. Automobile taxes and a portion of truck taxes were allocated to households, while all fees by weight, motor carrier fees, and other truck fees were allocated to business.

**Driver's License and Hunting and Fishing License Taxes.** These fees and taxes were allocated to households because they were generally the liability of individuals, even if directly related to the operation of a business or profession.