

Washington Research Council

= Special Report =

October 1988

Understanding Washington's Taxes

Overview

For the past several months the Washington Research Council has conducted a systematic review of the state tax structure. In the course of this study we met frequently with experts from business, government and academe to identify and evaluate characteristics of the system. Our research also benefited from the widespread public scrutiny the fiscal system has received this year, largely as a result of the Governor's Committee of Washington's Financial Future. This report synthesizes the available information on state taxes and draws important conclusions regarding the fundamental characteristics of the tax system.

Government taxes in order to spend and the functions are not easily separated. The current debate attempts to link them by tying spending limitations to expanded taxing authorities. We believe it is possible and desirable to unravel the two sides of the equation and to understand our tax system and how well it performs against several well established criteria.

In this paper we review five major areas of taxation necessary to a thorough understanding of our tax system. First is a concise historical summary of how Washington's system of taxes evolved. Next, we review current state tax collections by source, and summarize major exemptions and special rates. Then, we evaluate the stability and elasticity of tax revenues and the burden of our tax structure on households and businesses. None of these characteristics lends itself to precise measurement. Rather the analyses allow us to understand general tendencies of the system with regard to these measures.

Stability and elasticity are issues of primary concern to legislators and other officials as they relate to the ability of the tax structure to fund government. Here we focus on state-level government and, therefore, look at the stability and elasticity of state general fund taxes. **Washington's major tax sources work together to provide a stable flow of revenues with which to finance state government. And our system of state taxes is probably more stable than most of our alternatives.** This is due primarily to the presence of the the business and occupations (B&O) tax and the absence of income-based taxes in our system — especially the corporate income tax.

We also review the elasticity of the system both in and out of recession and discuss the technical problems and limitations inherent in measuring elasticity. During the

recession of the early 1980s, one of the most severe economic downturns in our state's history, state tax revenues were harder hit than the economy in general. However, **in most years Washington's system of state taxes produces revenues for state government at a pace similar to or ahead of growth in the economy.**

Finally, tax burden, both on households and on businesses, is reviewed. Unlike stability and elasticity, tax burden is an issue which is viewed from the perspective of taxpayers, rather than public officials. Taxpayers want the whole picture when trying to understand the burden the tax system places on them. In the section on burden, we present state and local tax information, where it is available.

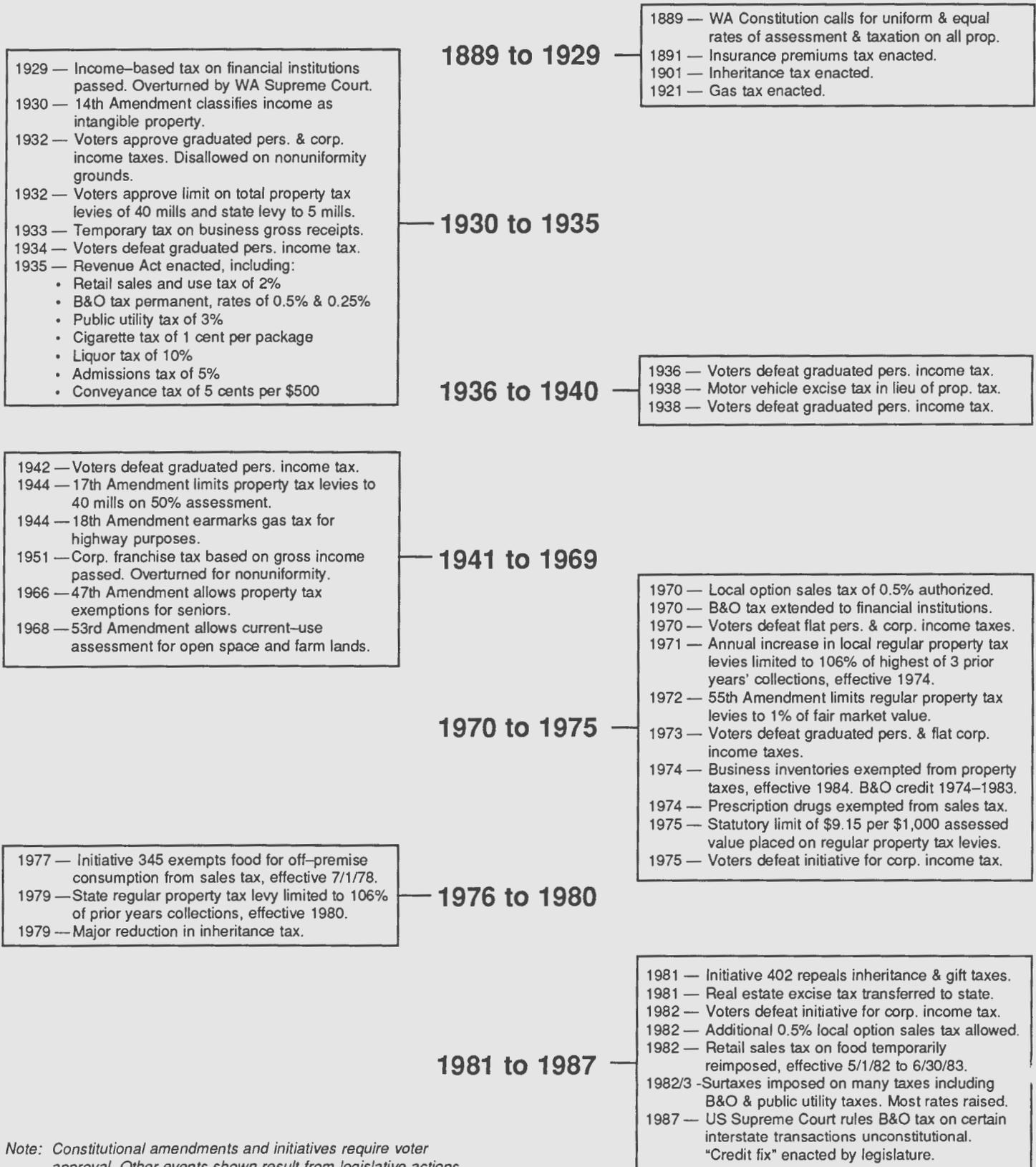
Washington's state and local taxes represent about \$116 of each \$1,000 of state personal income (PI). This figure is normally referred to as a state's "tax burden." **Washington ranks 18th in the country in overall tax burden, ahead of the national average of \$113 per \$1,000 PI. Washington, which has historically trailed the nation in overall tax burden, surpassed the national average for the first time in 1983 and has been ahead since then.**

Washington's taxes are paid primarily by households and businesses in the state. Households pay about 52 percent of state and local taxes and lower-income families probably pay a slightly larger share of their annual income in taxes than do wealthier families. The assumptions necessary to measure burden, however, will often predispose the results and the results are, therefore, usually arguable.

Businesses carry more of the overall state and local tax burden in Washington than in other states — about 44 percent of total taxes, compared with about one-third nationally. **About 28 percent of business taxes are paid through the B&O tax.** Reliable data on the distribution of the remaining 72 percent of the business tax burden are not available in sufficient detail to draw many substantive conclusions.

As the country and Washington state prepare for the challenges of the 21st century, the discussion of taxes is timely and crucial. Only by understanding the characteristics of our current system can we understand the extent to which there is a problem. We have drawn our conclusions about these characteristics and they are presented here, accompanied by the information on which they were based.

Figure 1
Major Tax Events in Washington



Note: Constitutional amendments and initiatives require voter approval. Other events shown result from legislative actions.

The History of State Taxes

Like many other states, Washington adopted major taxes during the Depression to complement property taxes. The retail sales and use tax, B&O tax and most other taxes making up Washington's current tax structure were enacted in the 1930s. In the late 1960s and in the early 1970s, when many states were again adding major taxes, Washington voters elected to retain the existing tax structure. Since 1935, Washington voters have defeated corporate and personal income tax measures seven times.

Until the 1930s most state and local government revenue came from taxes on property. In 1927, for example, property taxes accounted for more than 90 percent of state and local tax revenue in Washington. When the national economy failed in 1929, property assessments fell and tax defaults increased. Citizens and legislators acted to relieve property tax burden and to find new sources of tax revenue.

Efforts to institute personal and corporate income taxes in Washington were stymied by constitutional provisions. The Washington Constitution requires all property to be assessed and taxed uniformly. In a 1929 ruling that an income tax on financial institutions was unconstitutional, the state Supreme Court found that income was a form of property and must be taxed at the same rate as other property. The next year voters approved the 14th Amendment to the Washington State Constitution. It stated that "all taxes shall be uniform upon the same class of property." Many supporters of the amendment believed that the court would allow graduated tax rates if income was classified separately from tangible property. However, after voters approved personal and corporate graduated income taxes in 1932, the state Supreme Court again disallowed the tax, ruling that all income falls into the same class of property and must be taxed uniformly.

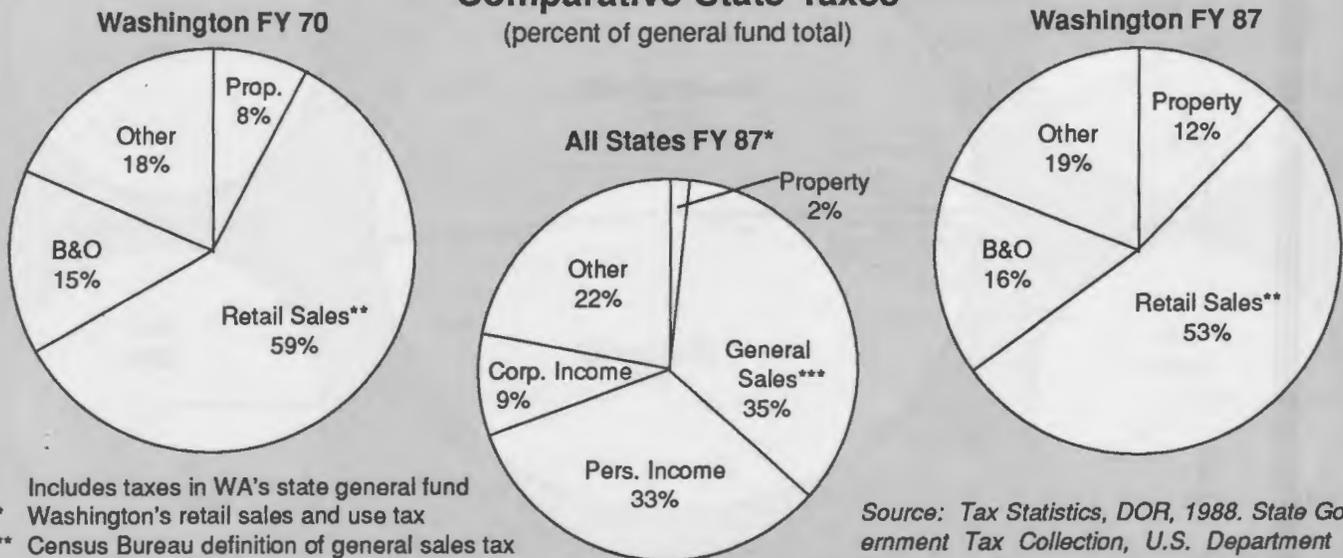
In 1933 the legislature passed a temporary tax on business gross receipts. This tax survived legal challenges as a tax on the privilege of doing business rather than a property tax. Renamed the B&O tax, it became a permanent part of the Revenue Act of 1935, the most sweeping tax measure in the state's history. The Revenue Act also initiated taxes on retail sales and use, public utilities, liquor, cigarettes, admissions and other sources.

Efforts to enact state income taxes continued. The 1935 Legislature approved a flat-rate corporate income tax as part of the Revenue Act and, in a separate bill, a personal income tax with two rates. Both were overturned by the state Supreme Court and voters defeated amendments to allow graduated personal and corporate income taxes in 1934, 1936, 1938 and 1942.

By 1940, nearly all components of the current tax structure were in place. As shown in figure 1, there have been rate changes, additions and subtractions from tax bases, and constitutional and statutory limitations placed on property tax levies since that time. But despite tax advisory committees in 1966, 1968, 1971 and 1982 recommending various forms of income taxes, efforts to add personal or corporate income taxes have failed.

In the 1960s and early 1970s many states added sales or income taxes to their tax structure to meet increasing education costs of baby boom school enrollments. After 1971 pressures on state tax systems decreased. Only one state, New Jersey, has enacted income taxes since then and no state has enacted a state sales tax. In Washington voters turned down proposed constitutional amendments that would have authorized corporate and personal income taxes in 1970 and 1973. And in 1975 and 1982 corporate income tax initiatives were defeated.

Figure 2
Comparative State Taxes
(percent of general fund total)



* Includes taxes in WA's state general fund
 ** Washington's retail sales and use tax
 *** Census Bureau definition of general sales tax includes WA's sales & use and B&O taxes

Source: Tax Statistics, DOR, 1988. State Government Tax Collection, U.S. Department of Commerce, Bureau of the Census, 1988.

Current Structure of State Taxes

Washington State expects to collect about \$10.3 billion in general fund tax revenue during the current bienium. General fund tax revenues generally represent about 90 percent of total state tax collections. By far the largest general fund tax source for the state is the retail sales and use tax, accounting for about 53 percent of the total.

As shown in figure 2 (page 3) our state's reliance on the retail sales tax has diminished over the last 17 years. In FY 70 it accounted for about 59 percent of the total, falling to 53 percent by FY 87. The bulk of this decrease was made up by an increased reliance on property taxes which rose from 8 percent to 12 percent over the same period. In addition to the removal of food and drugs from the sales tax base, this is due in part to a shift in the collection of regular property taxes for funding K-12 education from the local to state level. The other major tax source is the B&O tax.

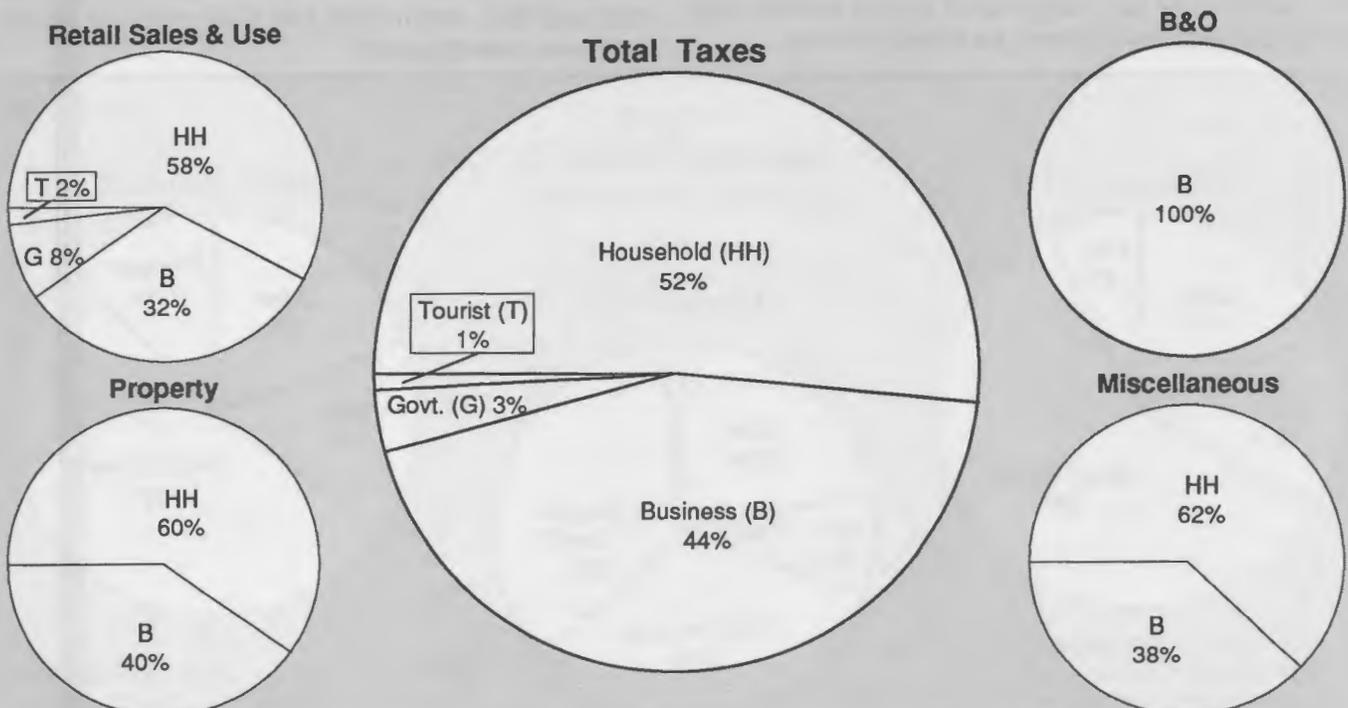
B&O and retail sales taxes both fall into the category of general sales taxes as defined by the U.S. Census Bureau. Nationally, state governments rely on these types of taxes for about 35 percent of their total tax revenue compared with 69 percent in Washington. This reliance is due in part to the fact that Washington State does not levy a personal or corporate income tax. In addition, as shown in figure 3, businesses in Washington carry a heavier overall initial tax burden than do businesses in other states on average. A recent analysis by

James McIntire for the Institute of Public Policy and Management at the University of Washington found that business in Washington pays about 44 percent of state and local taxes, initially, compared with about one-third for state and local business taxes nationwide. The B&O tax accounts for 16 percent of general fund taxes in Washington, compared with 9 percent for corporate income taxes nationally. And the higher retail sales figures for Washington include taxes paid primarily by business on construction labor, a levy peculiar to Washington.

Finally, the state levies numerous miscellaneous taxes which account for about 19 percent of total general fund taxes compared with 22 percent nationally. Although a substantial source of revenue, the gas tax is not included in this analysis of state taxes since it is not part of the state general fund.

All levels of government levy taxes: federal, state and local. When examining the characteristics of a taxing system, the combination of taxes most reasonable for review depends on the issue being discussed. In this report on Washington's taxes we are most concerned with the characteristics of the state's tax structure as it relates to state government. We, therefore, focus primarily on the major taxes levied by state government — what they are, how much money they raise, and how they produce over time. These questions are addressed in sections on structure, stability and elasticity.

Figure 3
Distribution of State and Local Tax Burden
(percent of total)



Source: Tax Alternatives Model, DOR, 1988.

The issue of who pays taxes is also of interest and we evaluate how our system affects different classes of taxpayers in Distribution of Tax Burden. For this portion of the discussion, total tax burden — how much is coming out of one's pocket — is the issue. Therefore, when discussing burden, we review taxes at both state and local levels of government and compare Washington with other states. As well, from a taxpayer's perspective, federal taxes are an important element of total tax burden. These data, however, are not currently available. The following discussion takes a closer look at Washington's major tax sources to see who pays the taxes, at what rate and on what base.

Retail Sales and Use Tax

Households and businesses pay retail sales tax on tangible property purchased for their own use. This source accounts for more than half of state general fund tax collections. Consumers also pay sales taxes on certain services, like repairs, cleaning and construction. The use tax applies to all tangible property used in Washington on which sales tax was not collected at the point of purchase. Use tax applies, for example, to items purchased in other states by Washington residents and used cars purchased from private individuals.

The state retail sales tax rate is 6.5 percent. Overall, the Department of Revenue (DOR) estimates that businesses pay about 32 percent of all retail sales and use taxes in Washington. In addition to the retail sales taxes paid for operational supplies and materials, businesses are subject to retail sales and use taxes on plant construction (labor and materials) and purchase and installation of equipment. DOR estimates that taxes paid on these capital expenditures will make up about 18 percent of FY 89 state retail sales and use tax collections.

DOR estimates there will be about \$6.9 billion in state exemptions to the retail sales and use tax during the 1987-89 biennium. About 45 percent of these exemptions are either

Retail Sales and Use Tax	
Enacted	1935
1987-89 yield*	\$5,413.9 million
Rate	6.5%
Exemptions and Special Rates	
	1987-89* (percent of total)
Total	\$6,923 million
Mandated	44.8%
Services	30.5
Food	10.6
Motor Fuel	3.6
Prescription Drugs	1.7
Agricultural Products	1.6
Manufacturers Deferral	0.4
Other	6.9
* Estimated	Source: DOR

Business and Occupations Tax

Enacted	1935
1987-89 yield*	\$ 1,815.8 million
Major Rates	0.471%
	0.484%
	1.500%
Exemptions and Special Rates	
	1987-89* (percent of total)
Total	\$1,066 million
Wages and Salaries	37.2%
Mandated	28.1
Deductions	21.0
Differential Rates	4.0
Agricultural	3.0
Government Activities	2.3
Under \$1,000/month	0.3
Other	4.1
* Estimated	Source: DOR

court-mandated or required by federal or state constitutions. For example, these include exemptions necessary to comply with federal interstate commerce law. As in many states, Washingtonians do not pay sales tax on food and prescription drugs. Voters lifted the tax on food for off-premise consumption in a 1977 ballot initiative. The legislature rescinded the exemption in 1982 in response to recession-related budget pressures, but reinstated it in 1983. Other exemptions include personal and professional services; gasoline and other fuels subject to a per gallon excise tax; seed, livestock and other agricultural products; and a deferral of taxes on capital construction and equipment for manufacturing facilities located in officially designated "distressed" areas.

Business and Occupations Tax

The B&O tax is paid exclusively by businesses operating in Washington and is based on a company's gross receipts. Washington is one of three states which impose a broad based tax on gross receipts. The state expects to collect about \$1.8 billion from this source in 1987-89. Corporations, partnerships, sole proprietorships and nonprofit corporations engaged in business are subject to the B&O tax.

Of the total \$1.1 billion in exemptions anticipated by DOR in the current biennium, wages and salaries received by employees are the largest single area, accounting for about 37 percent of the total. Mandated exemptions, 28 percent of the total, include deductions to assure compliance with interstate commerce laws. Real estate sales are taxed through the real estate excise tax and, therefore, exempted under the B&O. Other exemptions include real estate rental proceeds, certain nonprofit and social service organizations, agricultural businesses, public agencies and miscellaneous business deductions, income from non-financial investments and subsidiaries, and interest on real estate loans. Businesses with gross sales of less than \$1,000 per month are

also exempt, accounting for less than 1 percent of all B&O exemptions.

Most business activities, more than 98 percent, are taxed under one of three major state B&O tax rates: 0.484 percent of gross sales for wholesaling and manufacturing; 0.471 percent of gross sales for retailing, and 1.5 percent for service activities. Six other rates are applied to certain agricultural businesses, travel and insurance agent commissions, and international freight brokers.

The B&O has been a controversial tax. In June 1987 the U.S. Supreme Court ruled certain provisions of the B&O tax unconstitutional because they interfered with interstate commerce. The legislature responded in October of that year, enacting the so-called "double-credit fix" which includes provisions to allow manufacturers to take a credit for certain taxes paid elsewhere against their Washington B&O tax bill. Subsequent court rulings have held that no tax refunds are owed by the state as a result of the original court decision.

Property Tax

Washington State government expects to collect about \$1.2 billion in property taxes during the 1987-89 biennium from households (60 percent) and businesses (40 percent).

Regular property taxes in Washington are subject to a number of statutory and constitutional limitations. The state constitution limits all regular property taxes to 1 percent of the market value of property as determined by the state. Maximum regular levy rates for each type of taxing district, which help to allocate the 1 percent limit among taxing districts, are set in statute. The court has found that income is a class of property and, therefore, subject to the 1 percent limit.

In addition, voters in 1971 approved placing a lid on how fast property tax collections can grow. Excluding the value of new

Property Tax

Enacted	1889
1987-89 yield*	\$1,229.4 million
Rate	\$3.60 per \$1,000 AV

Exemptions and Special Rates	1987-89* (percent of total)
Total	\$1,376 million
Intangibles	60.0%
Government Property	18.8
Business Inventory	6.3
Household and Personal	4.6
Nonprofit Property	2.8
Current Use Assessment	2.8
Mandated	2.0
Senior Citizens	1.1
Other	1.6

* Estimated

Source: DOR

Miscellaneous Taxes

Tax	Enacted	1987-89 yield* (In millions)	Percent of Misc. Taxes
Motor Vehicle Excise	1937	\$570.7	30.7%
Public Utility	1935	268.9	14.5
Real Estate Excise	1981	259.7	14.0
Tobacco Products**	1935	192.6	10.4
Insurance Premiums	1891	189.7	10.2
Liquor Products**	1935	143.5	7.7
Other	—	234.4	12.6
Total		1,859.5	

* Estimated

Source: DOR

construction, taxing districts may not levy property taxes which exceed 106 percent of the highest amount collected in any of the three preceding years without voter approval.

All property, both real and personal, is subject to the property tax unless exempted by law. According to DOR, more than half of the total value of property in Washington is exempt from property taxes. Major exemptions and special rates are allowed for public property (owned by federal, state or local governments); intangible personal property (currency, stocks, bonds, savings); household goods and personal effects; nonprofit schools, churches and health care facilities; current use assessment; and business inventories. Also, senior citizens are allowed certain exemptions and deductions.

Miscellaneous Taxes

Miscellaneous taxes will account for about 18 percent of state general fund taxes in 1987-89, nearly \$1.9 billion.

Taxes on liquor and tobacco products are expected to total about \$336 million in the 1987-89 biennium. A large portion of these tax collections are based on the quantity purchased, like packs of cigarettes or liters of liquor, rather than on the dollar amount of the purchase. Taxes on the basis of quantity account for about 17 percent of miscellaneous tax collections. Because these taxes depend on the amount sold, rather than on price, they do not grow with inflation.

Public utility taxes and the insurance premiums tax are expected to total \$269 million and \$190 million in the 1987-89 biennium. The bases for these two taxes are the gross operating revenue of public and privately-owned utilities and gross premiums received by licensed insurers.

The motor vehicle excise tax is assessed in lieu of property tax on vehicles and will account for about \$571 million in 1987-89. Other in-lieu-of taxes are the public utility district excise, the timber excise and the leasehold excise taxes. The state also assesses excise taxes on sales of real property and expects to collect \$260 million in the 1987-89 biennium. Businesses are estimated to pay about 38 percent of miscellaneous taxes included in the general fund.

Tax System Stability

Washington has a stable system of state taxes. Stability of a tax system is defined here as the degree to which revenues change from year to year — small swings in revenue growth imply greater stability than large swings.

In a 1987 study by DOR, Washington's major state taxes, including retail sales and use, B&O, and property, were compared with the major taxes of four other states—Oregon, California, Michigan and North Carolina (see Measurement Issue: Using Constant Rates and Bases). This study demonstrated Washington's system to be the most stable of the states evaluated, due both to the presence of the B&O tax and to the absence of income-based taxes. Income taxes, both personal and corporate, can add volatility to tax revenue collections. Since the other systems in the analysis had one or both, they were all less stable than Washington.

Stability is best illustrated by graphing revenue flows. Using numbers developed by DOR for its study, figure 4 shows percentage changes in hypothetical tax revenues generated by Washington's major taxes from year to year between 1976 and 1985. These figures are compared with percentage change in revenues which would have been produced by the 1985 systems of major taxes used in the four other states when applied to Washington's economy from 1976 to 1985.

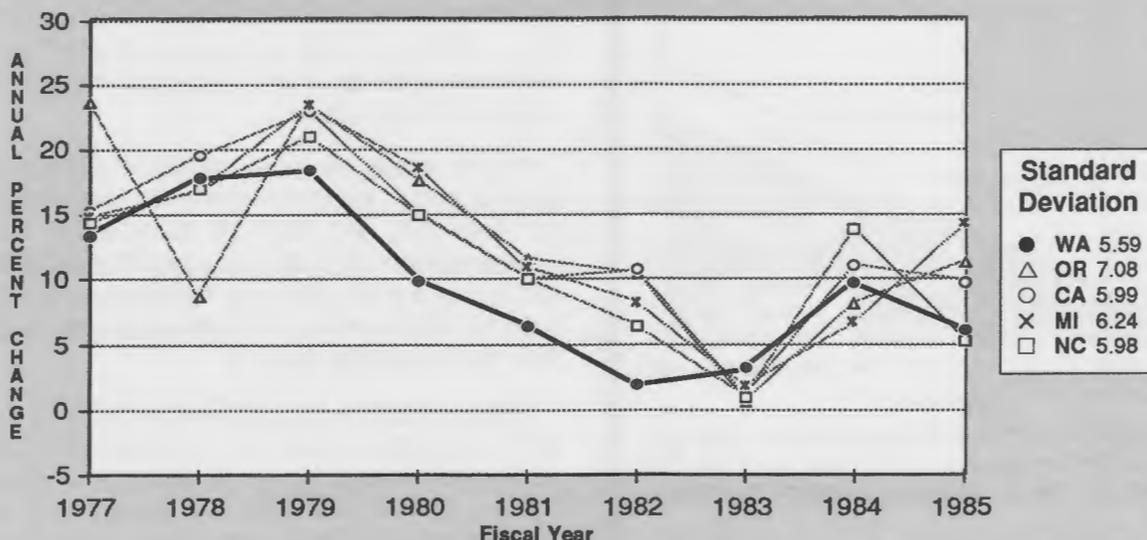
Figure 4 demonstrates that Washington's tax revenues would have grown in each year of the 1976–85 period (i.e. all

points are greater than zero). The rate of growth for Washington's system of major taxes, however, would have begun to slow down sooner going into the 1981–83 recession. The consumption-based retail sales tax is sensitive to recession and Washington relies more heavily on it than the other systems. Because individuals and businesses respond to the threat of economic uncertainty by restricting consumption, Washington's tax revenue growth slows down faster than it would under income-based tax structures.

In income-based systems, tax revenue growth slows down after employment and profits decline, and picks up after job and profit growth resume. Over the period hypothetical tax revenues with Washington's tax structure would have produced revenues more slowly, slowed down earlier, and begun recovering sooner than the other systems.

The system's stability is not surprising. Washington's major tax sources are relatively broad based. For example, the B&O tax is paid by businesses on their total gross receipts, so that most businesses pay something. Similarly, the retail sales tax, ranked 5th nationally by the Institute of Property Taxation for broadness of its base, is paid by everyone on most retail items and some services. In contrast, the corporate income tax has a base which fluctuates with corporate profits and tax systems that rely on it more heavily are predictably more volatile. Similarly, personal income tax systems can be relatively volatile, depending on how they are structured.

Figure 4
Stability Comparison
Major State Tax Revenues



Note: All figures shown represent hypothetical 1985 constant rate and base estimates of major tax sources for the five states shown applied to Washington's economy from 1976 to 1985.

Source: DOR

Tax Growth and the Economy

Washington's state taxes grew slightly in excess of the economy in most years of the last decade. The measure of this relationship is commonly referred to as the tax system's "elasticity." It is the percent change in taxes divided by the percent change in total personal income. When taxes grow faster than the economy, elasticity is greater than 1.00 and the system is said to be more elastic (some say productive). When taxes grow slower than the economy, elasticity is less than 1.00 and the system is said to be less elastic. Like stability, this is a measure which is not precise, but rather one which implies a general tendency.

During the 1980–83 recession, the most severe economic downturn in our state's history since the Depression, state revenues (adjusted to reflect constant tax base and rates) grew more slowly than state personal income. In the remaining eight years of the 11-year period shown in figure 5, state taxes grew faster than the economy with elasticities in excess of 1.00. Over the period from 1976 to 1987, including the recession years, state tax revenues grew at about 90 percent of the economy (elasticity = 0.90, using the end years to calculate a point-to-point measurement of elasticity).

It is important to remember that elasticities are based on hypothetical numbers which assume a constant rate and base. In actuality the legislature raised tax rates and expanded bases in periods of low hypothetical elasticities.

As shown in figure 5, hypothetical tax revenues grew faster than the economy (as measured by personal income) until

1980. The key to reading this graph is to remember to compare relative slopes of the tax lines with personal income. When the slopes of the lines are parallel, elasticities are equal to 1.00. During the recession state tax revenues grew more slowly than personal income. And since 1983 hypothetical tax growth has resumed its earlier performance, growing with, or slightly ahead of, the economy.

Actual tax revenue growth presents a different picture. It was slower than personal income growth between 1976 and 1980. This was due primarily to rapid growth in the economy, exempting food from the sales tax, and placing a lid on property taxes. During the later stages of the recession, however, actual tax growth significantly exceeded economic growth as the legislature acted to balance the state budget. The sales tax was reapplied to food temporarily and numerous tax rates were raised. Actual revenue growth moderated again after 1983, but it continues to exceed economic growth.

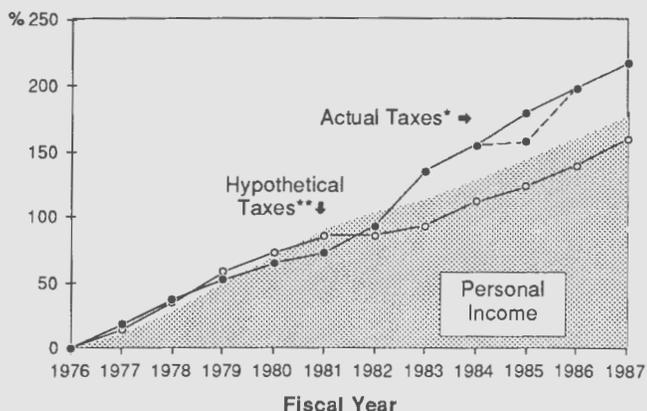
The individual taxes making up the system grow at different rates relative to the state economy. The numbers in figure 5 are from the Tax Alternatives Model developed by DOR. They reflect state-only tax revenues from the retail sales and use tax (elasticity = 0.84) and the B&O tax (elasticity = 0.97), as well as property and miscellaneous taxes.

According to market value studies by DOR, property taxes have a very elastic base, producing at about 137 percent of the rate of growth in the economy (elasticity = 1.37). Voters in 1971, however, approved placing a lid (106 percent of the highest of the last three years' collections) on how fast property tax revenues could grow. This lid has successfully limited property tax growth in Washington, reducing the elasticity of the property tax to less than 95 percent of the rate of growth in the economy from 1976 to 1987. (See Measurement Issue: Using Constant Rates and Bases for additional detail on property and miscellaneous tax estimates.) Figure 5 reflects the property tax base with the 106 percent lid on, since this voter-approved law has successfully reduced the elasticity of the system.

Finally, miscellaneous taxes based on value of purchase are included in the numbers with an elasticity of about 1.05 between 1976 and 1987. As discussed in more detail in Measurement Issue: Using Constant Rates and Bases, taxes, like cigarette and liquor taxes, based on quantities purchased have little relationship to economic growth. They are, therefore, not included in figure 5.

Tax systems which include various forms of income taxes, both corporate and personal, were demonstrated in a 1987 DOR study to have higher tax elasticities than our state tax system. These other systems responded to recessionary effects somewhat later than Washington's system and also demonstrated sharp declines in elasticities during the 1980–83 period. The elasticities of these systems were accentuated by the effects of inflation during the late 1970s when income

Figure 5
Growth Comparison
State Tax Revenue vs Personal Income
(percent change from 1976)



* Due to an accounting change, Washington reported only 11 months of collections for major state taxes in FY 85. The solid line shown here includes the estimated 12th month's collections.

** Constant rate and base estimates using 1985 tax laws. Adjusted to eliminate effects of quantity-based taxes.

Source: Tax Alternative Model, DOR, 1988

tax systems not tied to inflation-adjusting indexes produced revenues much faster than economic growth. Increasingly, such systems are indexed today and their elasticities over time are predictably lower.

What should tax elasticities be? This is a somewhat controversial issue. Tax increases are an inherent characteristic of

tax systems with elasticities greater than 1.00. While systems which grow more slowly than the economy represent diminishing burden over time.

Good fiscal policy would imply tax elasticities which approximate 1.00 over the long term. Tax changes would then require overt and visible action on the part of elected officials.

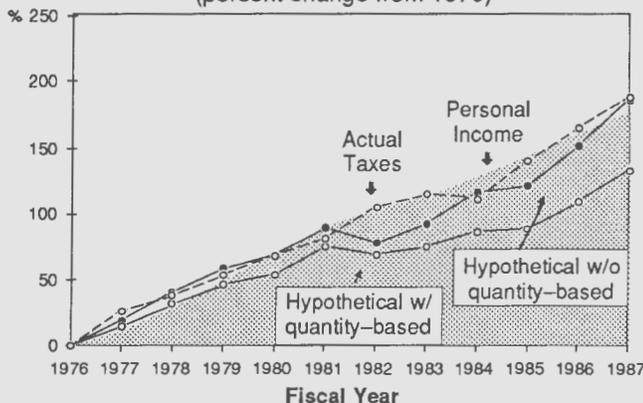
Measurement Issue: Using Constant Rates and Bases

Constant rate and base tax estimates developed by DOR and the Office of the Forecast Council were used for evaluating the stability and elasticity of the state's system of taxes. Constant rate and base figures are hypothetical tax revenues which have been adjusted to reflect tax laws of a given year in each year studied. They factor out the effects of legislative changes, making it easier to see the nature of the separate tax bases.

For example, in *Tax Base Growth and Stability* DOR applied the 1985 tax laws of Washington and four other states (Oregon, California, Michigan and North Carolina) to Washington's economy for each year from 1976 to 1985. That approach enabled us to see how Washington's state tax collections would have fared under these other taxing systems over that period.

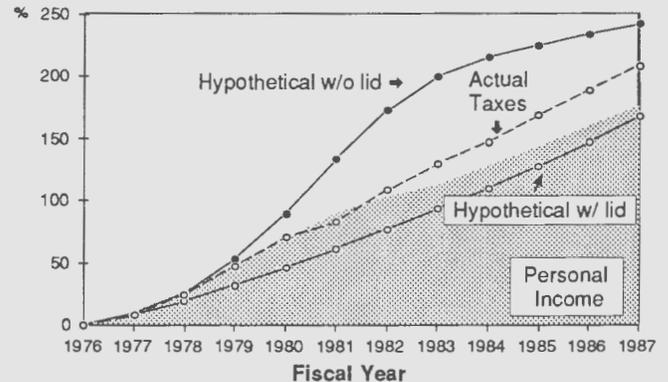
DOR's Tax Alternatives Model, developed in recent months, also includes hypothetical revenue from 1976 to 1987. It incorporates Washington's miscellaneous taxes, creating hypothetical time series for each and allowing elasticity calculations not possible previously. Included in these miscellaneous taxes are alcohol and cigarettes, both of which are taxed based on the quantity purchased (i.e. packs and liters), rather than value of the purchase. Growth or decline in the base of these tax sources bears little relationship to the economy and their tax elasticities are predictably low. So low that even though they account for only 3 percent of total tax revenues, exclusion of cigarette and alcohol taxes from state-only tax elasticity calculations results in a difference of more than five percentage points (see figure below).

Miscellaneous State Tax Revenue
(percent change from 1976)



Source: Tax Alternative Model, DOR, 1988

State Property Tax Revenue
(percent change from 1976)



Source: Tax Alternative Model, DOR, 1988

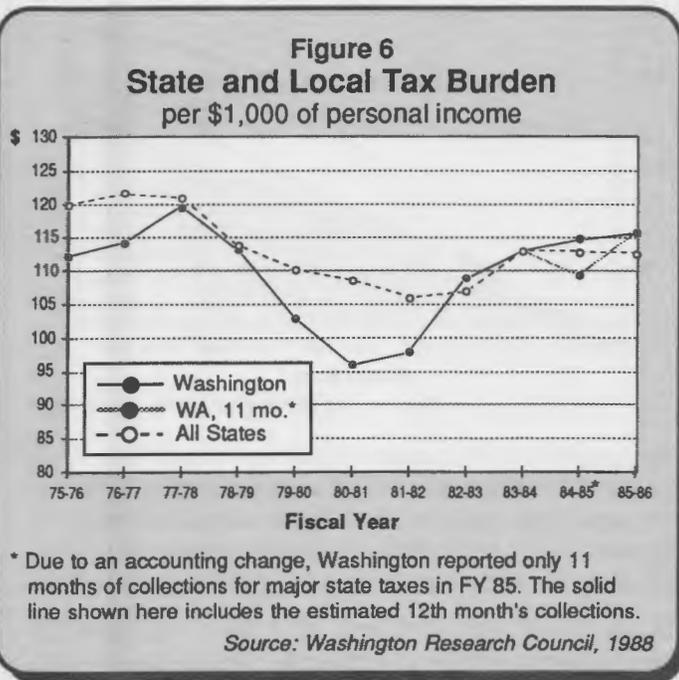
The graphs and discussion in the main text of this report exclude miscellaneous taxes based on quantity purchased and cause state-only tax elasticity to increase from 0.85 to 0.90 over the 11-year period (elasticity figures are calculated using the end years for point-to-point measurement).

In the model, constant rate and base estimates for property taxes were also modified to exclude the revenue effects of voter-approved special levies based on the similarity between legislated rate and base changes and voter-approved changes. In making this adjustment, DOR retained the 106 percent limit on property tax revenue growth.

As shown in the accompanying graph, the market value of property, which is the property tax base without the 106 percent lid, tends to grow more rapidly than the general economy. Voters were effective, through the 106 percent limit, in slowing revenue growth from this source. If the 106 percent lid is retained in the constant rate and base estimates, property tax rates necessarily vary in order to adjust to the lid, contrary to the constant rate and base definition. Equally, DOR's calculation, which keeps the lid on, reflects the dampening effects on elasticities of current law. In the figure above, we graph hypothetical revenues with and without the lid in order to reflect the inherent elasticity of the property tax base, as well as the success of the voter-approved limitations at restricting revenue growth from this source. If numbers showing tax growth in figure 5 were adjusted to remove the dampening effects of the 106 percent lid, the elasticity of the overall system would increase to 0.95.

Distribution of Tax Burden

At \$116 per \$1,000 of personal income (\$1000 PI), Washington ranked 18th in the country in FY 86 state and local tax burden. Unlike the stability and elasticity of a tax system, which are concerns of a particular government, tax burden is an issue which must be viewed from the perspective of taxpayers. Taxpayers care about their whole tax bill, not just those taxes levied by one particular government. In addition, the issue of tax burden is one for which comparison with other states is helpful. We, therefore, evaluate state and local tax burdens in this section.



Washington's state and local tax burden peaked in FY 78 at \$120 per \$1000 PI, very similar to the average burden for all states that year of \$121. From this high point, tax burden fell to \$96 per \$1000 PI in FY 81. After the low in FY 81, Washington's tax burden increased steadily each year, surpassing the national average for the first time in FY 83. As shown in figure 6, we continued to exceed the national average through FY 86.

In the following discussion we review how this tax burden is carried by the state's households and businesses.

Household Tax Burden

Washington's system of major taxes is probably slightly regressive in its treatment of individuals and families. However, this conclusion could have been written to read "nearly proportional." It's a close call and economists do not agree on what to count, or on how to interpret the results.

Households pay about 52 percent of state and local taxes in Washington, according to DOR. This discussion reviews how that burden is distributed across household income classes.

For individuals a tax system is most often defined as "fair" if low-income people pay no greater share of their income in taxes than wealthy people. This definition of fairness in tax systems is measured by determining the percent of income spent on taxes by families with varying levels of income. This measurement is referred to as the system's "proportionality" (or "progressivity" or "regressivity," depending on the finding).

According to the DOR Tax Alternatives Model, a hypothetical family of four earning \$20,000 a year pays about 8.7 percent of its income in state and local taxes, while a family earning \$125,000 pays a little more than 6.9 percent (see table 1). Because the higher-income family pays a smaller percentage in taxes than the low-income family, the system is said to be regressive.

In the DOR model, as with most burden analyses which depend on the Consumer Expenditure Survey for their basic information, the \$20,000 per year family spends more than it earns. DOR explains this as families spending their savings or their future income. In addition, the \$20,000 per year family in the model is presumed to be a renter, rather than a homeowner. As shown in table 1 most of the disparity in tax burden between the \$20,000 per year family and the family earning \$25,000 is in property taxes. The model assumes that this family would rent a more expensive home than it would own.

DOR is in the process of developing a more sophisticated model. It is anticipated that this new model will allow a better understanding of how particular household types are affected by our tax system.

Due to the methodological problems with the \$20,000 per year family, we focus here on the family earning \$25,000 per

Table 1
Household State and Local Tax Burden*
(percent of income)

Household Income	Retail Sales Taxes	Prop. Taxes	Misc. Excise Taxes	Total Tax Burden
\$20,000 **	3.3%	2.9%	2.5%	8.7%
25,000	3.1	2.3	2.5	7.9
35,000	2.8	2.3	2.3	7.4
50,000	2.6	2.7	2.0	7.3
75,000	2.3	3.1	1.5	6.9
125,000	2.2	3.2	1.5	6.9

* Average family of four

** Renter; all others shown represent homeowners

Source: Tax Alternatives Model, DOR, 1988

year in our attempt to understand the relative tax burdens between income classes. For the family of four making \$25,000 per year, the system is also regressive, with a burden representing 7.9 percent of its income, compared with 6.9 percent of the annual income of the family which makes \$125,000 per year.

On the one hand, there are those concerned that a tax system should not place a heavier burden on low-income families than it does on wealthier families. On the other hand, people point to public programs, like welfare and education, which benefit low-income households directly, and assert that the pattern of public spending offsets the regressivity of the tax system.

For example, a tax burden of 7.9 percent for a family of four with \$25,000 in annual income amounts to \$1,975 per year. At the other end of the income scale, 6.9 percent of \$125,000 comes to \$8,625 per year in taxes. Educating one student in Washington's K-12 system today averages more than \$3,000 per year. So, the \$25,000 per year family of four pays less than two-thirds of the cost for educating one child.

Washington's primary taxes on individuals and households are the retail sales tax and the property tax. The portion of these taxes paid by individuals in Washington make up about 44 percent of state and local taxes according to the DOR Tax Alternatives Model.

Measurement Issue: Problems with Household Tax Burden

Analyses of household tax burden are often conducted for a special purpose. As a result, the methodologies and the strengths and limitations of the analyses will vary. The following are examples of some of the more problematic measurement issues for tax burden studies:

The **range of income classes** used to analyze relative tax burden is important. The DOR model used a range of \$20,000 to \$125,000. Other studies reviewed had ranges from \$8,500 to \$612,000. The choice of income classes can substantially affect the results of any analysis of relative tax burden. The general rule is the wider the range, the more likely a system will be found to be regressive.

Using the \$20,000 per year income class as the bottom rung ignores many of the low-income families in our state. According to DOR, it's a limitation of the data. While numbers could have been presented for this group, they would have been summary statistics for the "average" family and this particular portion of the population is not represented well by any specific average. For example, many college students, who may be on their way up, are in this group. Senior citizens, who also make up a large portion of the group with small incomes, have a potentially greater level of real assets. The working poor are here and it is probable that a family with permanent income below \$10,000 per year, living within its means, has a relatively low state and local tax burden. This family likely rents its home, shops frugally for clothes (one of the few necessities still carrying the retail sales tax), has a relatively inexpensive car or uses public transit for transportation, and receives low-income exemptions from local public utility taxes.

On the other end of the income scale, the DOR model examines a family with an annual income of \$125,000 and assumes it has a larger **property tax burden** than the low-income family, making it progressive within the range of income evaluated. In calculating tax burden, other studies assume that the property tax is inherently regressive. In

the DOR model family expenditures for homeownership are based on the criteria used by lending institutions to qualify home buyers for mortgage loans. DOR contends that while the very wealthy family might not borrow as much to purchase a home as it can qualify for, the family earning \$125,000 per year probably still buys a home using its full borrowing potential.

In our paper we compare **families of four** primarily because that is what is available. There are limitations of using a single family type, as we have seen above in looking at those families making less than \$20,000 per year. In addition, demographic changes in our society have combined to make the traditional family of four less representative overall today than it has been in the past. There are a growing number of single-person households, single-parent families, and households of unrelated individuals. In 1987 families of four represented only about 21 percent of all families in the U.S. and people in those families represented about 27 percent of the total population.

Many tax burden studies, including the DOR model, use the **Consumer Expenditure Survey**, conducted periodically by the Census Bureau. It is clear that respondents to the survey do not report all of their taxable retail purchases, since individual purchases do not add up to total spending.

The DOR model includes **miscellaneous taxes** — gas, motor vehicle excise, cigarette, alcohol, public utility and other miscellaneous sources — in its computation of household tax burden. While taxes on cigarettes and alcohol can probably be demonstrated to be regressive today, many researchers agree they should be measured by different criteria given our societal values. The gas tax is a good example of a "user fee" and of another type of tax which most agree should be measured differently. In the case of gas the measure of fairness, rather than relative burden between income classes, is relative burden between different vehicle classes.

Without exemptions of the necessities of food and drugs, the retail sales tax is probably a regressive source of revenue. According to the DOR model a family making \$25,000 pays 3.1 percent of its income in retail sales tax, while a family making \$125,000 pays 2.2 percent. Washington's retail sales tax exempts food and drugs and includes certain services, like auto repair, and a large element of regressivity is thereby removed.

Offsetting the regressiveness of the retail sales tax is Washington's property tax which, according to the DOR model, is slightly progressive. Taken together, the property and retail sales taxes are proportional in the burden they place on low and high income taxpayers.

The element of Washington's tax system which most heavily tips the balance toward regressivity for households in Washington is miscellaneous taxes. Miscellaneous taxes in the DOR model include gas, motor vehicle excise, cigarette, alcohol and public utilities taxes. Many economists agree that quantity-based taxes and user fees cannot be measured by the same criteria of fairness. If tax burden in the DOR model is computed without gasoline, tobacco and alcohol taxes, the slightly regressive system witnessed above (the difference between 7.9 and 6.9 percent of income) becomes a proportional system. With earnings of \$25,000 a typical family of four would pay about 6.3 percent of its income in taxes, while a similar family earning \$125,000 would pay 6.4 percent.

Tax burden studies have numerous methodological problems and limitations. These are discussed in Measurement Issue: Problems with Household Tax Burden.

Table 2
Distribution of State B&O Tax Burden
By Industry
1987

Industry	Number of Firms	Receipts (million)	Percent of Total	Receipts per Firm (million)
Ag, For, Fisheries	5,746	\$882.8	0.5%	\$0.2
Mining	147	311.1	0.2	2.1
Construction	26,587	9,406.0	5.4	0.4
Manufacturing	8,915	42,036.2	24.1	4.7
Food Products	291	5,191.7	3.0	17.8
Lumber/Wood Prod	3,302	4,990.5	2.9	1.5
Paper/Allied Prod	64	3,201.6	1.8	50.0
Primary Metals	87	2,403.4	1.4	27.6
Chemicals	103	1,002.2	0.6	9.7
Petroleum	12	1,039.8	0.6	86.7
Transport Equipmt	698	16,928.1	9.7	24.3
Aircraft	54	15,445.8	8.8	286.0
Transportation	5,434	4,297.6	2.5	0.8
Comm & Utilities	1,152	7,371.2	4.2	6.4
Wholesale Trade	19,136	46,753.8	26.8	2.4
Retail Trade	59,624	34,668.6	19.8	0.6
Fin, Insur & Real Est	7,917	10,179.1	5.8	1.3
Services	84,809	18,783.0	10.8	0.2
Total	219,467	\$174,689.3	100.0%	\$0.8

Source: Quarterly Review of Business, DOR, 1988

Business Tax Burden

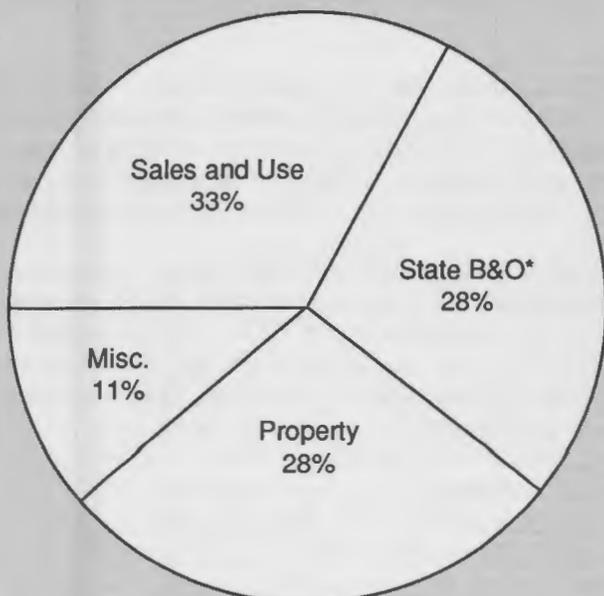
Businesses pay a greater share of state and local taxes in Washington than do businesses in other states. And most of the state B&O tax, in particular, is collected from businesses with gross receipts in excess of \$500,000.

Only 28 percent of state and local taxes paid by businesses in Washington are collected through the state B&O tax. And data are not available with which to understand the distribution of the other 72 percent collected through retail sales and use, property or miscellaneous taxes. We do not have the information necessary, therefore, to understand total burden by different business sectors or by differently sized firms measured either in terms of gross receipts or in terms of profitability. As a result, conclusions about state business taxes which have statistical basis are limited.

The following discussion is based primarily on state tax statistics. As mentioned earlier, an understanding of the total state and local tax bill is preferable when evaluating tax burden. However, reliable statistical detail is not available on local business taxing in communities throughout the state.

Businesses in the state of Washington pay taxes as a charge for the privilege of operating in the state. Much of the current debate in Washington regarding business taxes is centered on whether the concept of a business' relative ability to pay taxes should be defined differently than it is currently.

Figure 7
Distribution of Business Tax Burden
State and Local*
(percent of total)



Source: Tax Alternatives Model, DOR, 1988

Some support moving to a tax based on business profits, either as an addition to the existing gross receipts tax (the B&O) or as an alternative to it.

Heavy Business Tax Burden in Washington

Three major issues underlie the current controversy on business taxation in Washington. First among them is that of total tax burden. As we have seen businesses in Washington pay a larger percentage of total taxes than businesses in other states. DOR estimates that 44 percent of state and local taxes in Washington are paid by business initially. Business tax burden varies from state to state, but it is estimated to be about one-third of total state and local taxes nationwide.

The other major issues are the distribution of tax burden across industries and the effects of this distribution of burden on Washington's economic well being as measured by jobs and income.

Distribution of Major State Business Taxes

Distribution of taxes across industries may be viewed from several different perspectives, including collections from each sector and collections by size of firm measured either by gross receipts or by profitability. Each of these measures of business tax distribution is available for the state B&O tax. None of these measures of business tax distribution is available for the other 72 percent of the taxes paid by business in Washington, including the retail sales and use tax, the property tax or miscellaneous taxes. The following describes what we know about the B&O tax and the other major sources of business taxes in Washington.

Unlike most other states in the country which have some form of corporate income tax, Washington's primary business tax is on gross receipts through the B&O tax. The B&O tax is the most stable of our major taxes, it's easy for the state to administer, and it produces revenues at a rate of growth similar to that of the state's economy. The B&O also has been described as unfair, obsolete and a deterrent to economic development for the state because it taxes firms with little regard to profitability. The following discussion examines the basis of these concerns.

Table 3
Distribution of B&O Tax Burden
by Level of Gross Receipts
FY 1987

Gross Income	Percent of Taxpayers	Percent of Taxes Due
\$0 — 250,000	80.6%	7.3%
250,001 — 500,000	7.7	5.0
500,001 — 999,999	4.9	5.5
Over \$1,000,000	6.8	82.2

Source: DOR

Table 4
Example of B&O Tax Liability

Avg. Firm	Average Gross Recpts	x Rate	= Avg. B&O Tax Liability
Manufacturing	\$4,715,218	.00484	\$22,822
Retailing	581,454	.00471	2,739
Service	221,000	.01500	3,315

As shown in table 2, manufacturing industries in the state paid about 24 percent of total B&O collections in 1987. Retail and wholesale trade paid 20 percent and 27 percent of B&O collections, respectively. Table 2 also shows average tax receipts by firm in particular industries. These ranged from a low of about \$154,000 in agriculture, forestry and fisheries, to a high of \$286,000,000 in the aircraft manufacturing sector.

Table 3 shows B&O receipts by size of firm measured in gross receipts. Firms with gross receipts in excess of \$500,000 accounted for about 12 percent of all businesses and paid more than 88 percent of all B&O collections in FY 87.

More than 98 percent of all B&O receipts are generated by business activities paying one of three rates: most manufacturing and wholesaling activities pay a rate of 0.484 percent (41 percent of B&O taxes), retailing pays 0.471 percent (26 percent of the total), and services pay 1.5 percent (31 percent). Six other rates are used to collect the remaining 2 percent. Table 4 demonstrates how the B&O rates might be applied to average gross receipts of several typical industries.

The debate that the B&O is unfair centers primarily on the fact that businesses pay the tax regardless of profitability. This characteristic of the B&O is cited as a problem for small businesses, start-up businesses and businesses with low and fixed profit margins, especially those experiencing heavy competition from out-of-state firms.

In banking, for example, money is borrowed by the institution and loaned to its clients at a fixed margin. The B&O is assessed on the full value of the transaction, so that if the bank loans at a rate of 7 percent, it pays B&O on the full 7 percent, rather than on the marginal markup over the borrowing rate which it pays for its funds. This problem was most apparent during the hyper-inflationary period of the late 1970s, when interest rates climbed to 22 percent while markups remained constant. Now, with the popularity of floating rate loans, the situation is more widespread in an industry which operates within a competitive national and international marketplace.

Retailers, particularly those with low margins, contend that they are similarly affected by the B&O. To the extent that they are competing with other businesses doing business in the state of Washington, like grocers, for example, their competitive position is probably not jeopardized by the B&O. Industry representatives argue, however, that their competition is

growing from out-of-state catalog and telemarketing firms. These firms often have no identifiable agent or other physical presence in Washington and, therefore, are not subject to Washington's taxes. In addition, retailers which "national price" (that is, which price consistently across the nation), like some major national retailing chains, lose an edge in Washington and are likely subsidizing their Washington operations with profits from states with lower taxes.

The only detailed analysis available on business taxes by sector and by profitability looked at the B&O tax in comparison with other business tax alternatives like corporate profits and value-added taxes. This study was conducted by Dr. Robert Strauss in 1987 for DOR. The purpose of the study was to develop the beginnings of a data base for the department. The study findings, however, have resulted in some misleading reports.

Strauss calculated "effective tax rates" by industry on the basis of profitability. He used B&O taxes paid divided by book income in order to compare the B&O tax burden with corporate profits and value-added tax burdens. These effective rates, however, only reflect the B&O tax; they do not include retail sales and use, property, or any of the other state taxes businesses pay. As a result, the effective tax rates do not reflect the total state (or local) tax burden paid by different sectors.

Including these other taxes would dramatically change the effective tax rates for capital-intensive sectors and sectors which have significant property holdings. Although Strauss attempted to incorporate questions into his survey of businesses statewide which would begin to get at some of this

information, the data base necessary to calculate total effective tax rates is not currently available.

Do Business Taxes Affect Economic Development?

Finally, many debate whether business tax burden, the distribution of tax burden among sectors, and a state's tax policy in general, affect economic well being.

For example, Dr. Robert Genetski of Harris Trust and Savings Bank in Chicago advises policy makers: "What you have to do, according to the research, is look at the total tax burden in your particular state. If the tax burden is going up...the tendency is going to be for that particular state to suffer." He concludes: "Tax policy appears to be one of the important levers that you have available for setting the economic climate of your state.... Taxes do matter."

David Birch of MIT takes a contrary position, saying "Don't consume too much energy worrying about tax policy because it's relatively insignificant to job growth." He emphasized instead paying attention to the other side of the fiscal equation — how money is spent.

Washington, like most other states, has attempted in recent years to develop government incentive programs to encourage business investment and expansion in Washington. Even so, this issue has not been analyzed thoroughly and appears to be clouded with mixed understanding of the underlying issues. Tax policy, to the extent that it affects economic development, is only one component of a broad economic development strategy and its role and significance has not yet been established.

The Washington Research Council would like to acknowledge and thank members of our Technical Advisory Panel which assisted in our detailed review of several technical studies on Washington's tax system. Panel members were:

Murray Aston, Vice President and Manager of Taxes, Rainer Bank;

Dr. Robert Berney, Chair, Department of Economics, Washington State University;

Jeff Cashman, President, IPC Pension Services;

Roy Dowell, Dowell and Associates;

Nick Mullan, Asst. Director of Taxes, Weyerhaeuser Co.;

Rick Peterson, Chief, Research, Washington State Department of Revenue;

Dr. Paul Sommers, former Research Director, *Pacific Northwest Executive*, University of Washington; and

Dr. Barbara Yates, Professor of Economics, Seattle University.

The analyses reviewed by the panel included:

Elasticity of Tax Revenues and Revenue Stability: Washington State's Tax System and Proposed Alternatives To It, Robert Berney, 1987.

Nickles and Dimes, Citizens for Tax Justice, 1988.

Stability and Elasticity of Major Washington State Taxes, Washington Roundtable, 1987.

A Study of Alternative Tax Structures for the State of Washington, Robert P. Strauss, 1987.

Tax Alternatives Model, Washington State Department of Revenue (DOR), 1988.

Tax Base Growth and Stability, 1976-1985, DOR, 1987.

Tax Burdens in Washington, D.C. Compared with Those in the Largest City in Each State, Government of the District of Columbia, 1987.

Interpretations and conclusions in this study are solely those of the staff of the Washington Research Council. No responsibility for these conclusions should be attributed to the panel members, financial contributors to the study, trustees or other supporters of the Research Council.

Summary of Findings and Conclusions

The purpose of this paper has been to develop a clear understanding of the state taxes currently in place in Washington — what they are, how they evolved, who pays them, and how well they interact as a system. Three basic indicators are important to a tax system's performance — stability, elasticity and distribution of burden. Our paper reviews each of these.

Our system of state taxes is stable. In fact, the degree of stability inherent in our state's tax system is one of its major strengths. This stability is due, in major part, to the presence of the B&O tax and the absence of income-based taxes in Washington.

State tax systems should grow at a rate similar to the rate of growth in the state economy, where elasticities approximate 1.00. Faster growth in taxes would effectively constitute a tax increase, while slower growth would constitute a decrease in tax burden.

In most years over the last decade Washington's taxes were elastic, growing slightly in excess of growth in the economy (elasticity ≥ 1.00). During the 1980–83 recession, however, our system, similar to other systems which might have been used, experienced considerably slower revenue growth than is typical of non-recession periods. That recession was the sharpest since the Depression, and forced state lawmakers and administrators to cut budgets, reduce and eliminate programs, and raise taxes in order to balance the state budget. It was an unusual time which required unusual actions. Tax elasticities during the recession fell below 0.50. Over the 11-year period reviewed state taxes grew at about 90 percent of the growth in the state's economy (elasticity = 0.90).

The initial burden of our state and local taxing structure among households appears to be slightly regressive. Despite the popularity of tax burden studies, however, reliable supporting data are hard to find. **For the broad range of taxpayers, the system is probably proportional. The difference is in the treatment of user fees and taxes assessed on quantities purchased, rather than value purchased.** And, in evaluating a state's fiscal policy relative to lower-income individuals and households, it is appropriate to examine patterns of service delivery as well — something that is beyond the scope of this paper.

The tax burden on business is high in this state compared with other states in the country. **The B&O tax is visible and controversial, but it accounts for only 28 percent of total state and local business taxes paid in Washington.** The other 72 percent of business taxes is collected through retail sales and use, property and miscellaneous taxes. The retail sales tax on capital is an acknowledged disincentive to investment. But our examination of the available data found that **sufficient information does not exist with which to support conclusions regarding the distribution of total business tax burden across industries**, either on the basis of gross receipts or on the basis of profitability.

We have reviewed the fundamental characteristics of the present tax system — stability, elasticity and burden. **And our review indicates that the system performs adequately under most conditions, most of the time.** It is a system which raised increased revenues in each of the last 11 years and which will raise more than \$10.3 billion in state general fund tax revenues in the current biennium, representing an increase of about 13 percent over 1985-87 without major rate or base adjustments.

This isn't to say that it is trouble-free, or beyond improvement. However, based on the measures we reviewed and with the exception of business tax burden, for which there is insufficient data on which to base definitive conclusions, **we found Washington's tax system to be fundamentally sound.**

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The **Washington Research Council** is a nonprofit, nongovernmental public policy research organization. Its mission is to serve its members by promoting efficient and effective government through independent analysis of public expenditure and taxation policies, coupled with broad dissemination of these analyses. Funding for the **Research Council's** work comes primarily from member dues and private grants. Members include businesses, schools, libraries, individuals and government agencies.

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For membership information call (206) 357-6643 or write to the **Washington Research Council**, 906 S. Columbia, Suite 350, Olympia, WA 98501.

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For those interested in tax policy, the Research Council has additional information available on the topic. For more details, contact the Research Council office at (206) 357-6643.