

# Chapter 9: Methodology and Detailed Conclusions

## Equity

A good tax system should distribute the burden of taxation across taxpayers in a way that is considered fair and equitable. Fairness is defined by the relationship between the ability of a taxpayer to pay the tax and the benefits received by them from government activities and programs. The Committee examined several different types of equity issues with relation to tax fairness:

- Ability to Pay
- Benefits Received
- Horizontal Equity
- Intersectoral/Vertical Equity
- Perceived Equity
- Externalities

## Conclusions

### *Ability to Pay*

- Washington's tax system is regressive. The lowest income group (\$20,000 or less) pays 15.7 percent of income for total excise taxes and property taxes. The highest income group pays 4.4 percent of income for the same taxes.
- Deductibility of taxes causes the tax system to be more regressive.
- When considering lifetime tax burden, Washington's tax system would still be regressive.

### *Horizontal Equity*

- There is significant variation in tax as a percentage of income within income groups. Most of the variation in tax is caused by the sales tax. Sales tax varies considerably within income ranges because spending patterns vary. One factor that causes different spending patterns may be that within a given income group, households may have different expectations of permanent income (or long-term income). Another cause is that household size varies within the income groups.
- There is significant variation in taxes on business as a percent of gross income within industry groups. Property tax causes the most variation.

### *Intersectoral/Vertical Equity*

- Overall, for excise and property taxes measured by initial incidence (who initially pays the tax), households pay 54 percent of the taxes and 46 percent is paid by businesses. According to the Utah Tax Commission Study, Washington has a much higher share of taxes paid by businesses than other Western states.
- Variation in total effective tax rates ranges from 1 percent for agriculture and wholesale to slightly over 2 percent for transportation, communication and utilities.
- Generally new businesses pay a higher effective tax rate than established businesses.
- Some significant activities are not subject to taxation in Washington State.

### *Perceived Equity*

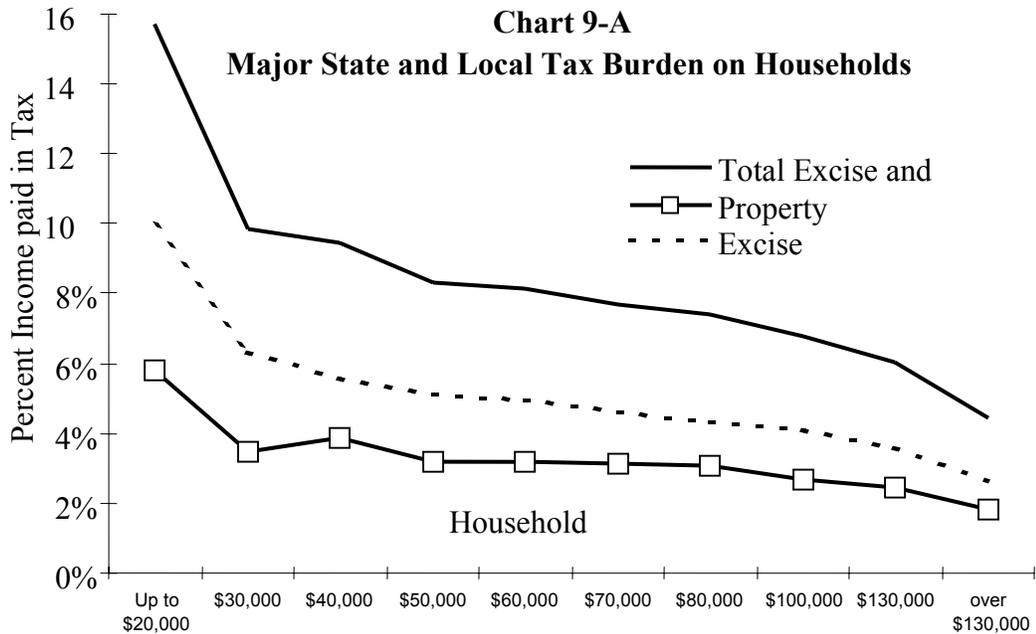
- Most business taxpayers do not perceive that Washington State's tax system has a negative effect on their ability to conduct business.
- Surveys show that taxpayers consider the retail sales tax to be the most fair in terms of treating taxpayers equally.

### Ability to Pay

The equity principle requires that ability to pay be one factor in determining tax burden. Therefore, a high tax burden should not fall on low-income households. Similarly, high-income households should pay a larger percentage of their income in taxes. Washington's tax system is regressive.

### Household Incidence of Excise Taxes

Chart 9-A illustrates the regressive nature typical of excise taxes, where lower income groups pay a higher percentage of their income in taxes (15.7 percent) than higher income groups do (4.4 percent). The sales tax has a relatively flat incidence for the middle-income households and is regressive for households at the high- and low-income ranges. Tobacco taxes are the most regressive. Note that the lowest income category (up to \$20,000 in income) is composed of an eclectic group of households, some of which can skew the results for this category. For example, the under \$20,000 category includes students who may have unreported financial support from parents, unemployed workers who are only temporarily poor, and households with assets but little income.



Source: Washington Excise and Property Tax Microsimulation

Table 9-1 shows percentages of income paid on excise and property taxes. Table 9-2 illustrates the same data using average dollars rather than percentages. Property taxes on rental housing are included in taxes paid by renters. The source of the information is the Washington Excise and Property Tax Microsimulation model which combines information from the Consumer Expenditure Survey and the Washington State Population Survey to estimate Washington household excise and property taxes by income group, household size, home tenure, and total spending. The model is used elsewhere in the study to illustrate the effects of alternatives on households.

#### Equity and Federal Deductibility of Washington State Taxes

Households export part of the cost of taxes by taking itemized deductions on their federal income tax returns. However, less than one-third of Washington households itemize deductions.

For Tax Year 1999, Washington households realized an estimated \$520 million (0.4 percent of their adjusted gross income (AGI)) in federal income tax savings by claiming state and local property taxes as an itemized deduction. Over three-fourths of these savings went to households with AGI greater than \$60,000. The 1986 Federal Tax Reform Act eliminated the deductibility of sales tax paid. If the full value of sales tax paid had been allowed as a federal income tax deduction for 1999, Washington households would have realized an additional estimated \$523 million in tax savings. The majority of these savings would have accrued to higher income households.

**Table 9-1**  
**State and Local Excise and Property Tax**  
**As Percent of Income**  
**1999 Household Income Levels**

	<b>Retail Sales Tax</b>	<b>Other Excise Taxes*</b>	<b>Property Tax</b>	<b>Total Excise and Property Tax</b>
Up to \$20,000	6.7%	3.2%	5.8%	15.7%
\$20,000 to \$30,000	4.4%	1.9%	3.5%	9.8%
\$30,000 to \$40,000	4.0%	1.6%	3.9%	9.4%
\$40,000 to \$50,000	3.7%	1.4%	3.2%	8.3%
\$50,000 to \$60,000	3.7%	1.3%	3.2%	8.2%
\$60,000 to \$70,000	3.5%	1.2%	3.1%	7.7%
\$70,000 to \$80,000	3.3%	1.0%	3.1%	7.4%
\$80,000 to \$100,000	3.2%	0.9%	2.7%	6.8%
\$100,000 to \$130,000	2.9%	0.7%	2.5%	6.0%
Over \$130,000	2.2%	0.4%	1.8%	4.4%

\*Other excise taxes include alcoholic beverages tax, cigarette and tobacco tax, insurance premiums tax, public utility taxes, and gasoline tax.

**Table 9-2**  
**State and Local Excise and Property Tax**  
**1999 Household Income Levels**

	<b>Average Income</b>	<b>Retail Sales Tax</b>	<b>Other Excise Taxes*</b>	<b>Property Tax</b>	<b>Total Tax</b>
Up to \$20,000	\$11,689	\$785	\$372	\$680	\$1,837
\$20,000 to \$30,000	24,448	1,084	467	851	2,402
\$30,000 to \$40,000	34,096	1,355	545	1,317	3,217
\$40,000 to \$50,000	44,358	1,641	637	1,422	3,700
\$50,000 to \$60,000	53,791	1,975	688	1,730	4,393
\$60,000 to \$70,000	63,992	2,208	738	1,990	4,936
\$70,000 to \$80,000	74,000	2,454	766	2,257	5,477
\$80,000 to \$100,000	87,887	2,780	799	2,368	5,947
\$100,000 to \$130,000	112,086	3,244	754	2,771	6,769
Over \$130,000	\$206,840	\$4,593	\$834	\$3,771	\$9,198

\*Other excise taxes include alcoholic beverages tax, cigarette and tobacco tax, insurance premiums tax, public utility taxes, and gasoline tax.

## Distribution of Tax Burdens Based on Lifetime Income

Another way to analyze the equity of household burdens is to examine the tax burdens that a household incurs over a lifetime. The reason to examine lifetime tax burdens is that all households go through different income and spending phases, so that they may face proportionately higher tax burdens in some years and proportionately lower tax burdens other years. For example, a household can face proportionately high taxes in the years the members are college students, since they would be spending all of their income and going into debt. The same household in years before retirement can be enjoying a proportionately low tax burden because their members are in their high-earning years and are saving in anticipation of retirement.

The study, *Who Bears the Lifetime Tax Burden*, by Don Fullerton and Diane Lim Rogers, Brookings Institution, Washington D.C., 1993, found that when comparing lifetime income groups, both income distribution and tax burden are more equal than when comparing annual income groups. This is because many of the variations in annual incomes are caused by life-cycle changes in income. However, the study showed that despite some equalization, sales taxes and payroll taxes are lifetime regressive. Property taxes are lifetime progressive for property owners and lifetime regressive for renters. Federal income tax is lifetime proportional across middle-income groups and lifetime progressive at the very bottom and top of the income distribution.

## Benefits Received

Another equity principle guiding tax policy is that to the extent possible, taxes should be tied to the benefits that households and businesses receive. Washington State has a higher percentage than the average state of total tax revenue generated by dedicated taxes. To some extent, dedicated taxes are tied to benefits received.

In Washington, large sources for dedicated taxes are motor fuels; cigarettes; insurance premiums taxes; and environmental taxes such as litter, oil spill, and hazardous substance taxes. The state property tax levy is dedicated to the support of common schools. On average, states dedicated slightly more than a fifth of their total tax collections in Fiscal Year 1997 for dedicated purposes. Washington dedicated 26.2 percent of its tax receipts in the same period, ranking Washington fifteenth in terms of the highest share of dedicated taxes. Taxes are generally dedicated to transportation, education, and local governments. See Appendix C-2 for more detail on dedicated taxes by state.

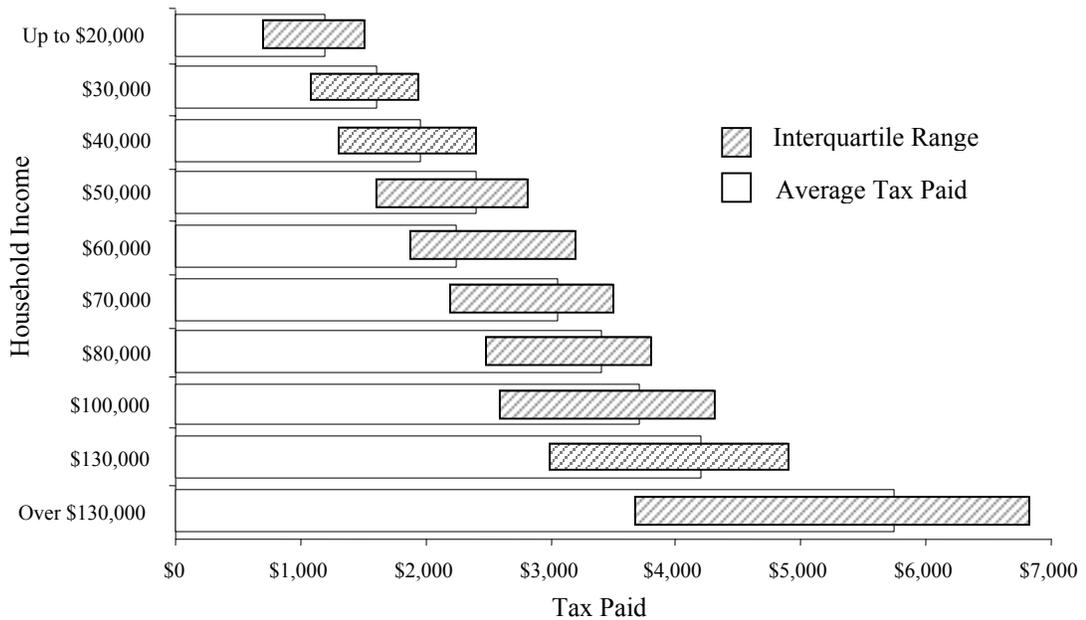
## Horizontal Equity

The principle of horizontal equity states that similarly situated businesses or households should face similar tax burdens. Similarly situated households are

generally considered to be those with similar incomes. Similarly situated businesses are generally considered to be those within the same industry and of similar size.

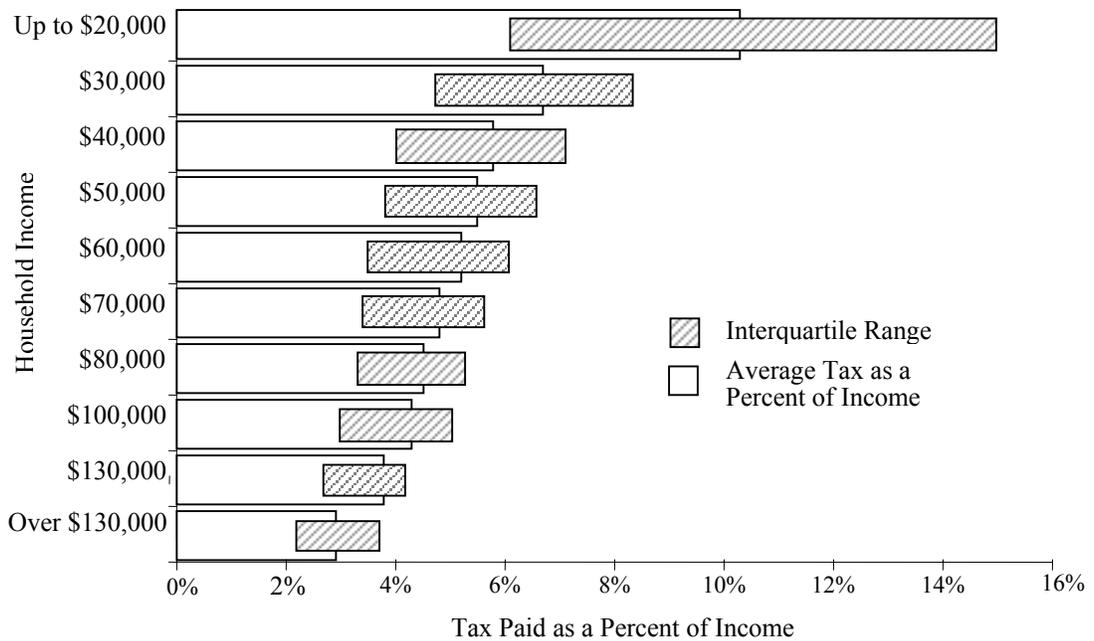
The following graphs illustrate the variation in tax within income groups. Chart 9-B shows the average total tax paid in each income category and the interquartile range of total tax paid. Chart 9-C shows average tax as a percent of income in each income category and the interquartile range of tax as a percent of income. Interquartile range represents the range of tax paid by those households within the middle of the distribution—the second and third quartiles (between 25 percent and 75 percent of taxpayers). The first and fourth quartiles are excluded to eliminate outliers and other distortions.

**Chart 9-B**  
**Average Excise Tax Paid and Interquartile Range**



Source: Washington Excise and Property Tax Microsimulation Model

**Chart 9-C**  
**Average Excise Tax as a Percent of Income**  
**and Interquartile Range**



Source: Washington Excise and Property Tax Microsimulation Model

This same analysis conducted by tax type shows that sales tax contributed the most to tax variation within income groups. (Details are in Appendix C-3.)

Outliers and distortions are especially a problem in the lowest income group. The lowest income group is an eclectic mix of households. One problem is that it includes households whose low-income status is only temporary, for example, unemployed households or new business owners. These households pay a very high tax as a percentage of income because they are basing their expenditures on their permanent income (the longer view of expected income).

Since permanent income and annual income can be quite different, thus causing higher tax variability within income ranges, the Department performed the same analysis using consumption ranges (outlays) instead of income ranges. The results show that the variation between consumption ranges is much smaller than the variation between income ranges (and more consistent from range to range). (See Appendix C-3 for details.) This is not surprising, since sales tax is the biggest driver in variation.

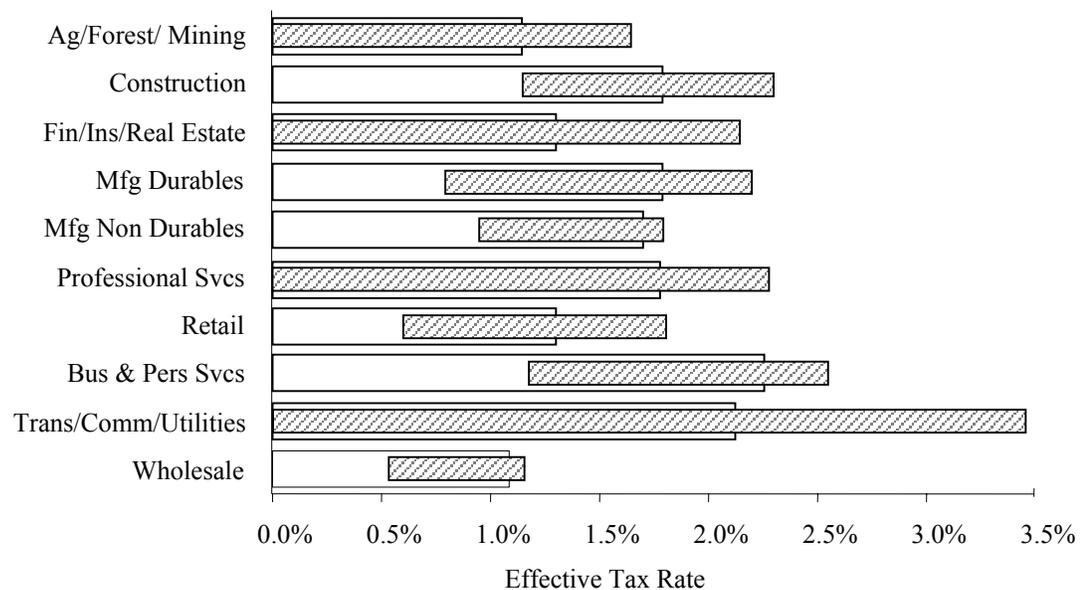
*Horizontal Equity for Business*

Chart 9-D shows the mean effective tax rate and the interquartile range for each industry group. There is much variation in tax rates within industries. Property tax

causes the most variation. This is because taxpayers' holdings of property relative to their gross income vary tremendously. Deductions and credits for specific industries are another factor in variation. Part of the variation within transportation and utilities, professional services, and financial services and real estate is caused by the multitude of business activities taxed at different rates within these specific sectors.

Information displayed in Chart 9-D is derived from a merged firm-level database including B&O tax, public utility tax, property tax, and sales taxes paid on purchases. Allocations of sales tax paid are based on Employment Security Department data on employees and wages and Washington Implan.

**Chart 9-D**  
**Effective Tax Rates by Industry**



*Geographic Variations in Tax Rates: Impact on Business Taxes and Profits*

Property and sales tax rates vary throughout the state. The different rates can cause significant differences in profits based on where a firm is located. In the 1999 study *Tax Incentive Comparison of Six States and One Province*, the Department of Revenue estimated that a high tech call center's tax payments fall some 9 percent when the highest tax rates in the state are replaced by the lowest rates imposed in the state. For general manufacturing, total taxes can be as much as 23 percent lower in low tax locations. Semiconductor manufacturers, software, and biotech firms fell between these two ranges.

### *Different Taxation of Similar Items/Activities*

Another way that inequities can occur in a tax system is through different taxation of similar items or activities. In Washington State, generally, taxpayers are treated similarly to others in the same business classification. Exemptions, credits, and other tax incentives that are available to one category of taxpayers are available to all taxpayers in that category. Tax rates apply equally to all taxpayers in that category.

However, there are anomalies. There are certain circumstances where similar activities are treated differently under the tax system, generally by specific legislative action to fulfill a desired purpose. An example is the disparate treatment of food products depending on the purchase location and type of food. The different taxation anomalies are too numerous to list in this chapter. However, a list is available in Appendix C-5. Although there are many anomalies, they do not constitute a large portion of the tax base.

### Intersectoral/Vertical Equity

Intersectoral or vertical equity relates to tax burdens across different types of taxpayers. Although there is a recognition that taxes will vary for different entities, the principle states that no single group should face an undue tax burden, nor should a group escape taxation.

### *Business/Household*

One measure of intersectoral equity is the business versus household shares of taxation. Table 9-3 shows the percentage of state and local taxes paid by households and businesses. Households pay 54 percent of the total state and local tax burden; businesses pay 46 percent. See Table 9-4 for shares by tax type.

**Table 9-3**  
**Tax Incidence of Household vs. Business**  
**Major Washington State and Local Taxes**  
**FY 2000 – State Taxes/\$Millions**

	Percent Share		Dollar Amount of Share		
	HH	Bus.	Household	Business	Total
Retail Sales/Use	64%	36%	\$4,738	\$2,635	\$7,373
B&O Tax	0%	100%	0	1,855	1,855
Property Tax	58%	42%	3,161	2,251	5,412
Public Utility Tax	47%	53%	115	132	246
Total	54%	46%	\$8,014	\$6,873	\$14,886

Note: Dollar amounts and percentage shares differ somewhat in this measure of initial incidence. Most other presentations herein are estimates for Calendar Year 2005 and include only the retail sales tax, property tax, B&O tax, and public utility tax.

### *Differences in Tax Rates Across Industries*

Another method for analyzing vertical equity is to measure tax burdens across industries. Table 9-4 shows average effective tax rates across industries and by tax type. The mean effective business tax rate (tax due divided by gross income) varies from 1 percent of gross income for wholesale to 2.2 percent of gross income for the services industry.

**Table 9-4**  
**Average Tax Rates Across Industries**  
**Calendar Year 2000**

<b>Standard Industrial Classification (SIC) Codes</b>	<b>PROP</b>	<b>SALES</b>	<b>B&amp;O PUB UTIL</b>	<b>TOTAL</b>
AG/ FORESTRY/ MINING - SICS 1-14	0.57%	0.18%	0.32%	1.14%
CONSTRUCTION - SICS 15-17	0.67%	0.45%	0.42%	1.77%
MANUF NONDURABLE - SICS 20-23, 26-31	0.59%	0.44%	0.41%	1.70%
MANUF DURABLE - SICS 24,25, 32-39	0.61%	0.38%	0.42%	1.78%
TRANS/COMM/ UTILITIES - SICS 40-49, 90s	0.48%	0.18%	0.93%	2.12%
WHOLESALE - SICS 50-51	0.32%	0.21%	0.44%	1.05%
RETAIL - SICS 52 - 59	1.10%	0.34%	0.41%	1.97%
FIN/INSURANCE/REAL ESTATE - SICS 60-67	0.40%	0.24%	0.64%	1.29%
SERVICES - SICS 70-79	0.95%	0.41%	0.72%	2.24%
PROFESSIONAL SERVICES - SICS 80-89	0.51%	0.30%	0.92%	1.83%

### *Differences in Tax Rates Between Small, Medium and Large Firms*

Within an industry group, differences in firm size can affect sales, purchases, capitalization and other factors that can affect tax burden. Table 9-5 shows average effective tax rates by size of firm. The data show that large businesses pay a smaller share of property tax as a percentage of gross income than small businesses. For some industries, small businesses pay a smaller share of sales tax as a percentage of gross income than large businesses. B&O taxes are fairly consistent between large and small firms. For the overall tax rates there are differences between large, medium and small businesses. However, the differences are not consistently higher or lower. (See Appendix C-6 for details on average tax rates by industry and tax type.)

**Table 9-5**  
**Average Tax Rates by Size of Firm**  
**Calendar Year 2000**

<b>SIC CODES</b>	<b>LESS THAN \$5,000,000</b>	<b>\$5,000,000 TO \$25,000,000</b>	<b>GREATER THAN \$25,000,000</b>
AG/ FORESTRY/ MINING - SICS 1-14	1.15%	1.30%	2.36%
CONSTRUCTION - SICS 15-17	1.78%	1.63%	1.81%
MANUF NONDURABLE - SICS 20-23, 26-31	1.72%	2.11%	1.58%
MANUF DURABLE - SICS 24,25, 32-39	1.81%	1.66%	1.75%
TRANS/ COMM/ UTILITIES - SICS 40-49, 90s	2.10%	3.34%	2.52%
WHOLESALE - SICS 50-51	1.10%	0.66%	0.60%
RETAIL - SICS 52 - 59	2.04%	0.67%	0.62%
FINANCE/ INSURANCE/ REAL ESTATE – SICS 60-67	1.29%	1.54%	1.21%
SERVICES - SICS 70-79	2.26%	1.82%	1.63%
PROFESSIONAL SERVICES - SICS 80-89	1.84%	1.88%	1.82%

*Differences in Tax Rates for New and Established Firms*

Age of a firm can also affect tax burden. Table 9-6 shows average tax rates for new and established firms. New businesses pay a higher percentage of gross income in taxes than established businesses. In an industry by industry comparison, average total tax rates vary from 0.93 percent to 2.06 percent for established firms and between 1.2 percent to 2.8 percent for new firms. This is mainly caused by higher property taxes as a percentage of gross income. (See Appendix C-6 for details on average tax rates by industry and tax type.)

**Table 9-6**  
**Effective Tax Rates by New and Established Firms**  
**Calendar Year 2000**

<b>SIC CODES</b>	<b>NEW FIRM</b>	<b>ESTABLISHED FIRM</b>
AG/ FORESTRY/ MINING - SICS 1-14	2.30%	0.93%
CONSTRUCTION - SICS 15-17	2.09%	1.67%
MANUF NONDURABLE - SICS 20-23, 26-31	2.23%	1.58%
MANUF DURABLE - SICS 24,25, 32-39	2.39%	1.67%
TRANS/ COMM/ UTILITIES - SICS 40-49, 90s	2.31%	2.06%
WHOLESALE - SICS 50-51	1.20%	1.02%
RETAIL - SICS 52 - 59	2.99%	1.69%
FINANCE/ INSURANCE/ REAL ESTATE - SICS 60-67	1.60%	1.22%
SERVICES - SICS 70-79	2.80%	2.06%
PROFESSIONAL SERVICES - SICS 80-89	2.57%	1.67%

*Administrative Equity—Equity and Noncompliance*

Noncompliance contributes to inequity because the greater the noncompliance, the greater the tax burden that is shifted to other taxpayers. Washington's overall noncompliance rate is estimated to be 2.8 percent in 1991 and 3.4 percent in 1995.

Noncompliance varies by industry, size of firm, and age of firm. By industry, noncompliance ranges from 1.5 percent for the retail industry, to 5.3 percent for consumer services. The new business noncompliance rate is 6.4 percent, compared to 1.9 percent for established firms. Noncompliance ranges from 19.9 percent for the smallest firm size category to 1.7 percent for the largest firm size category. (More detailed data on noncompliance is included in Appendix C-8.)

*Significant Activities Not Subject to Taxation in Washington*

One source of vertical inequities are activities that are not subject to taxation. Following is a list of activities that are not subject to taxation in Washington State. (More detail is available in Appendix C-9.)

- Rental of real property
- Individual income
- Agricultural production
- Investment income of non-financial businesses
- Food for home consumption

## Perceived Equity

### *Business Tax Perceptions*

The Department of Revenue conducts periodic surveys of business taxpayers on their satisfaction with the administration of Washington's tax system. In the 2001 survey, 8 percent felt the tax system had a negative effect on their ability to conduct business, while 9 percent believed our tax system had a positive effect. The largest group (43 percent) was neutral about our tax system.

### *Household Equity Perceptions*

The states of Minnesota, Georgia, Colorado, and Tennessee conducted surveys of citizens on issues of tax fairness. A common theme from these surveys is that taxpayers consider the retail sales tax to be the most fair in terms of treating taxpayers equally, understanding what is subject to tax and what is not, and based on ability to pay. It seems to be the least objectionable tax to increase when revenues are needed. Another theme from most of the surveys is that a flat rate income tax is perceived as preferable to one that is progressive with graduated rates. A flat income tax is perceived as fair because everybody pays at the same rate. For a more detailed summary, see Appendix C-10.

## Taxation of Externalities

It is considered equitable to tax externalities since the cost of externalities is paid by the public as a whole.

Washington has several taxes that are intended to tax externalities. The most notable category is environmental taxes. A list of these taxes can be found in Appendix C-11.

## Economic Neutrality

A good tax system does not distort economic decisions. Distortions cause a measurable loss in the economic value of production and consumption, which increases the tax burden on the residents of the state. These distortions are manifested in Washington by tax pyramiding (imposing the tax several times as the product moves from firm to firm on its way to the consumer) and other economic inequities for businesses and individuals as follows:

### Conclusions

- Pyramiding of the B&O tax causes non-neutralities.
- The B&O tax pyramids an average of 2.5 times. However, the pyramiding varies considerably between industries.
- Strategies to minimize tax are often inefficient and can be costly to implement. They also increase the complexity and the level of effort necessary to review and fairly enforce Washington's tax. Most of these strategies are designed to reduce the level of taxable income, rather than to avoid tax altogether.
- Some strategies which businesses use to reduce their Washington tax levels include: creating wholly owned subsidiaries to receive a portion of the income in another state, conducting a portion of the manufacturing operation in another state, creating holding companies, and creating a purchasing agent relationship with customers.
- Individuals illegally avoid use tax by making purchases through the Internet, via catalogs of businesses with no taxable nexus in Washington, and making purchases in states with a lower or no sales tax such as Oregon.

### Pyramiding of the B&O Tax

The B&O tax is a gross receipts based tax; the tax is paid on the total value of the good or service. The total value would include the value of any incorporated good or service purchased from another business. To the extent that a business can pass B&O tax to its customer, the B&O tax becomes part of the value of the incorporated good or service. Therefore, pyramiding occurs under the B&O tax because goods and services that are inputs into higher stages of production are taxed multiple times as they move through the production chain.

Since value added is the fundamental measure of economic activity, the difference in effective B&O tax rates and B&O taxes on a value added base is an indicator of the extent of non-neutral tax treatment between industries. Firms have an incentive to vertically integrate in order to escape the pyramiding of the B&O tax.

Another problem with pyramiding is the inequities caused between industries. The B&O tax is estimated to pyramid an average of 2.5 times. However, the pyramiding varies considerably between industries. B&O tax for many services pyramids at about 1.5 times. B&O tax for some types of manufacturers pyramids five or six times. Table 9-7 shows differences in pyramiding by industry.

Pyramiding is measured by comparing effective B&O tax rates on a gross receipts base with effective B&O tax rates on a value added base. Effective tax rates on value added is determined by means of input-output data from the Washington State Implan model. Implan provides state-specific estimates of business-to-business purchases and can be used to attribute taxes to producing sectors according to their sales to businesses. The ratio of the two tax rates is a measure the degree of pyramiding of the B&O tax. Details of the analysis can be found in Appendix C-12.

**Table 9-7**  
**A Measure of Pyramiding of the B&O Tax**

Sectors & SIC Codes	Tax Rate on Value Added	Effective B&O Rate	Pyramiding Index
4 MFG FOOD 20	2.0%	0.3%	6.7
11 MFG PETROLEUM REFINING 29	3.1%	0.5%	6.7
19 MFG AIRCRAFT & PARTS 372	2.6%	0.5%	5.3
12 MFG RUBBER & PLASTICS 30	2.0%	0.5%	4.3
15 MFG PRIMARY METAL 33	2.0%	0.5%	4.1
5 MFG APPAREL & TEXTILES 22-23	2.0%	0.5%	4.1
6 MFG LUMBER & WOOD PROD 24	1.9%	0.5%	4.0
21 MFG PROF & SCIENTIFIC INSTR 38	1.8%	0.5%	4.0
17 MFG IND/COMM/COMP M&E 35	1.9%	0.5%	3.9
7 MFG FURN & FIXTURES 25	1.8%	0.5%	3.7
20 MFG OTHER TRANS EQUIP 37	1.8%	0.5%	3.7
8 MFG PAPER PROD 26	1.7%	0.5%	3.7
14 MFG STONE/CLAY/GLASS 32	1.6%	0.5%	3.4
10 MFG CHEMICAL PROD 28	1.5%	0.5%	3.3
3 CONSTRUCTION 15-17	1.6%	0.5%	3.3
18 MFG ELECT M&E (NOT COMP) 36	1.4%	0.5%	2.8
13 MFG LEATHER ETC 31	1.4%	0.5%	2.8
35 MOVIES/AMUSE/REC 78-79	2.2%	0.8%	2.7
34 SVC MISC REPAIR 76	1.4%	0.5%	2.7
22 MFG MISC MFG IND 39	1.2%	0.4%	2.7
9 MFG PRINT & PUBLISHING 27	1.3%	0.5%	2.6
23 TRANSPORTATION ETC 40-47	1.8%	0.7%	2.5
2 MINING/QUARRY 10-14	1.2%	0.5%	2.4
16 MFG FABRICATED METAL 34	1.1%	0.5%	2.3
29 SVC LODGING 70	1.1%	0.5%	2.2
30 SVC PERSONAL 72	2.0%	1.0%	2.1
1 AG FOR FISHING 1-9	1.4%	0.7%	2.0
33 SVC AUTO REPAIR,SERV&PARK 75	1.0%	0.5%	2.0
24 COMMUNICATIONS 48	1.2%	0.6%	1.9
26 WHOLESALE TRADE 50-51	0.9%	0.5%	1.9
37 LEGAL/ENG/ACCT 81-89	2.1%	1.1%	1.8
32 SVC BUSINESS 73	1.6%	0.9%	1.7
27 RETAIL TRADE 52-59	0.8%	0.5%	1.6
36 SVC MEDICAL & HEALTH 80	2.0%	1.2%	1.6
28 FIRE 60-67	1.5%	1.0%	1.6
25 ELECTRIC,GAS&OTHER UTIL 49	3.2%	2.1%	1.5
31 SVC COMP/DATA/PROC SERVICES 737	1.3%	0.9%	1.4
<b>Statewide</b>	<b>1.5%</b>	<b>0.6%</b>	<b>2.5</b>

## Other Economic Inefficiencies–Business

There is increased evidence in recent years of businesses developing strategies to decrease their tax base in Washington. Strategies to reduce tax liability require extra effort and cost by business to implement and maintain. These strategies are also complex for tax administration agencies to review and enforce. Some examples follow.

- **Intellectual Property**–A Washington corporation with intellectual property creates a subsidiary that is not subject to federal corporate income taxes. The subsidiary moves to a state that does not tax corporate income (e.g. Nevada). The intellectual property rights are transferred to this out-of-state subsidiary which receives the royalty income and pays dividends to the remaining Washington business. Dividends paid by a subsidiary to a parent are exempt.
- **Manufacturing**–Washington manufacturer forms an out-of-state subsidiary to be the primary manufacturer. The out-of-state subsidiary brings its own goods into Washington and contracts with the Washington manufacturer as a processor for hire to finalize the manufacturing process. The Washington manufacturer pays B&O tax on the contract payments it receives as a processor for hire instead of the full value of the goods.
- **Purchasing Agents**–A Washington wholesaler acting as a purchasing agent sets up contracts with its customers. The purchasing agent buys goods from manufacturers and passes them along to the retailers, receiving a commission for the service provided. The purchasing agent pays B&O tax on the commission income only and not on the entire value of the goods sold to the retailers.
- **Real Estate Excise Tax**–Real estate excise tax (REET) is assessed on the transfer of real property or of a controlling interest in an entity owning real property. REET is assessed when at least 50 percent of the interest in an entity owning real property is transferred within a 12-month period. In order to avoid REET on the transfer of controlling interest in an entity owning real property, a person may create several nominal transfers over the 12-month period (totaling less than 50 percent) with the larger transfers achieving controlling interest taking place beyond the 12-month period.
- **Relocations**–In the age of remote commerce and electronic businesses, it is no longer necessary for all portions of a business to be co-located. Businesses are able to relocate parts of their enterprise, especially those that do not deal with tangible personal property, to other states with more favorable tax treatments for that business activity.
- **Sales Tax**–Businesses that purchase large items such as planes or yachts may reduce their sales tax liability by creating separate holding companies. The holding company owns the plane and leases the plane to the original business on a

daily basis a few times a month. Since the holding company has purchased the plane for resale, there is no sales tax due at the time of purchase. The business is only required to pay sales tax on the occasional daily lease payments.

#### Other Economic Inefficiencies—Individuals

Washington individuals change their behavior in two ways because of the sales tax. They shop more on the Internet and through catalogs, and they shop more in Oregon and Idaho than they would if Washington did not have a sales tax. These changes in behavior cause extra effort and/or cost to the individual and are therefore inefficient.

Washington households spent an estimated \$2.3 billion on remote sales in 2001. Out of that total, about 6 percent, or \$147 million, was purchased because Washington has a higher than average sales tax. The avoidance estimate is based on a tax elasticity from Dr. Austan Goolsbee's paper, "In a World without Borders: The Impact of Taxes on Internet Commerce" (*Quarterly Journal of Economics*, Volume 115, Number 2, May 2000).

Washington households purchased an estimated \$808 million in Oregon in 2001 because of the tax differential. These estimates are based on results from *The Effects of Tax Rate Differences on Retail Trade in Washington Border Counties* by Lorrie Jo Brown. For more detail on cross-border and remote sales, see the subchapter on Tax Harmony.

Goods purchased through these means are subject to the Washington use tax at the point of first use in the state. In general, collection of use tax from individuals is very difficult. However, the Department of Revenue does collect use tax from individuals on items that must be licensed and occasionally from those who voluntarily report use tax on items they purchase via the Internet or in other states.

## Economic Vitality

A good tax system should not place business enterprises located within the state at a competitive disadvantage relative to similar enterprises located in other states.

The evaluation of Washington's economic vitality contained in this section is compiled from studies conducted by the Department of Revenue over the past eight years.

### Conclusions

- Overall the analysis shows that Washington's tax structure is comparable with competitor states with some exceptions by type of tax and firm type.
- A comparison of tax burden by tax type shows that for most of the firms, Washington's B&O tax is higher than all or most other states' income taxes.
- Property taxes paid by Washington businesses are about average.
- Low profit margin firms tend to suffer a competitive disadvantage compared to competitor states.
- Despite the fact that many new firms have low or negative profits, new Washington manufacturers have a slightly better competitive position than established manufacturers. This is mainly because industrial insurance rates, which comprise a large percentage of total tax burden for new businesses, are lower in Washington State.
- Most types of firms suffer a competitive disadvantage due to tax burden compared to firms in Oregon.
- Because of the machinery and equipment exemption for manufacturers and the warehousing remittance, Washington's sales tax burden is not high compared to other states for these industries. However, there is not conclusive evidence that any targeted incentive either does or does not cause new job growth in Washington.
- Taxes are not one of the most important factors in firm location. However, taxes do matter in location decisions when other factors are held equal.
- The manufacturing machinery and equipment exemption and the warehousing remittance have been effective in "leveling the playing field" for Washington State taxes compared to competitor states' taxes.
- However, statistical studies of both the manufacturing exemption and R&D incentives are not conclusive about the effectiveness of these incentives in

creating new jobs. There is not conclusive evidence that the incentives either did or did not cause new job growth.

In studies of the impact of taxes on the competitive position of Washington firms, the Department has simulated hypothetical firms for industries with out-of-state competitors. These firms are taxed under the tax systems of Washington State and competitor states. The hypothetical firms represent several different industries, small, large, new and established firms. Each hypothetical firm is created to be typical for the category it represents. In state-to-state comparisons, all aspects of the firm are held constant except for differences in state and local tax liability and the attendant differences in profit margins. In each analysis, tax burdens are compared over a long period of time, either 10 or 20 years. The net present value (NPV) of total taxes paid throughout the period are compared for each hypothetical firm.

#### Tax Rankings for Manufacturers

The following information is from the *Manufacturing Tax Study* by the Washington State Department of Revenue and the Advisory Committee for the Manufacturing Tax Study, December 1994, and has been updated to reflect more recent tax law changes. The analysis, summarized in Table 9-8, covers new and established firms for a period of ten years. The following are other factors of comparison.

Industries included:

- Food Products
- Lumber and Wood Products
- Paper Products
- Printing and Publishing
- Petroleum Products
- Primary Metals
- Electrical Equipment
- Aircraft and Parts
- Instruments
- Software

Comparative states—12, including Washington:

- Alabama
- Arizona
- California
- Colorado
- Florida
- Idaho
- Minnesota
- Montana
- North Carolina
- Oregon
- Texas
- WASHINGTON

Taxes included:

- Gross Receipts
- State Income Tax
- Unemployment Insurance
- Industrial Insurance
- State and Local Property Tax
- State and Local Sales and Use Tax

**Table 9-8**  
**Washington's Tax Burden Rank Out of 12 States**  
**Based on Ten-Year NPV Tax Burdens for Hypothetical**  
**Manufacturing Firms**  
Rank 1=Lowest Tax, Rank 12=Highest Tax

Industry	WA Rank New Firm	WA Rank Established Firm
Computer software	1	1
Food products	4	10
Lumber/wood products	5	5
Paper products	5	5
Printing/publishing	2	1
Petroleum products	3	10
Primary metals	3	6
Electrical equipment	5	3
Aircraft & parts	3	6
Instruments	6	3

Similar analysis was performed for the following industries with similar results: warehousing and distribution, semiconductor manufacturers, biotech, software originators, and high tech call centers. See Appendix C-13 for analysis and results for these industries.

Impact of Different Taxes on the Competitiveness of Washington Firms

The previous analysis shows that taxes differ across states. For certain types of firms, Washington taxes are higher, and for some, taxes are lower than in states that are home to competitor firms. But are the tax differences large enough to affect competitiveness? Table 9-9 shows a comparison of profit margins for some of the hypothetical firms analyzed above. Analysis for other firms is included in Appendix C-14. Since everything about the hypothetical firms is held constant except for taxes, the differences in profit margins are completely attributable to taxes.

**Table 9-9**  
**Comparison of Profit Margins of Hypothetical Firms**  
**Ten-year average NPV profit margins under Washington’s tax system**  
(In parentheses are the lowest tax state and the highest tax state.)

Industry and Firm Type	Profit Margin with WA Taxes	Highest Profit Margin (State)	Lowest Profit Margin (State)
<b>Food Processing:</b>			
New	3.50%	3.51% (N. Carolina)	2.14% (Florida)
Established	1.14%	1.72% (Alabama)	0.91% ( Florida)
<b>Primary Metals:</b>			
New	-2.61%	-1.51% (N. Carolina)	-5.39% (Florida)
Established	0.32%	1.86% (Alabama)	-0.49% (Texas)
<b>Computer Software:</b>			
New	7.69%	7.78% (N. Carolina)	7.00% (California)
Established	3.20%	3.40% (N. Carolina)	2.84% (Florida)

Note that there can be a large difference in profit margins caused by taxes alone. However, many factors cause differences in profit margins. The Department analyzed the impact of these non-tax factors for actual Washington firms for the same industries as the hypothetical firms (*Tax Competitiveness Policy and Ranking of 12 States*, Department of Revenue Research Report, 1995). In this analysis, taxes are the only factor held constant, while everything else that affects profit margins varies. The variance in the profit margins of actual Washington State firms was larger than the variance in profit margins of hypothetical firms. In other words, the variance caused by all other factors is larger than that caused by taxes alone.

#### Tax Incentives and Economic Vitality

One way a state can improve the economic climate for firms is to provide tax incentives. Following is a discussion of existing tax incentives in Washington State and their effectiveness.

There are two major policy purposes of Washington's tax incentives: to improve competitiveness of Washington businesses, and to stimulate the economy by encouraging businesses to locate and stay in Washington State. Table 9-10 outlines Washington's major tax incentive programs and their objectives.

**Table 9-10**  
**Major Washington Tax Incentives**

Program	Objective	Target
M&E Sales/Use Tax Exemption	Level playing field; retention, expansion; family wage jobs	Manufacturing; R&D; testing
R&D B&O Credit	Encourage early stages of research; high wage high-skilled jobs	R&D
R&D Sales/Use Tax Deferral	Encourage research; create jobs; spur manufacturing	R&D
Warehouse/Grain Elevator Sales/Use Tax	Facility location; increase global and regional trade; jobs	Wholesaling, warehousing and distribution
Sales & Use Tax Deferral Rural Counties	Family wage jobs	Manufacturing; R&D; testing
Rural B&O Rural Counties	Family wage jobs	Manufacturing; R&D

Effectiveness of Incentives in Terms of Competitiveness of Washington Firms

The manufacturing machinery and equipment sales tax exemption and the warehouse sales tax remittance have been effective in improving the competitiveness of Washington firms. Analysis using hypothetical firms showed that before these exemptions, Washington's tax system imposed one of the highest tax burdens compared to competitor states. Washington's tax ranking was eleventh or twelfth highest for most manufacturers and in the top half of states for most warehouses. As a result, most of Washington's tax rankings for the industries benefiting from the exemptions are currently among the lowest third of states. (See the table "Tax Burden Rankings for Washington" in Appendix C-13.)

Participation of Firms in Incentive Programs

Three studies were conducted to analyze the impact of incentive programs: *Economic Impacts of the Manufacturer's Sales Tax Exemption* by Rick Peterson, House Finance Committee staff, *High Technology R&D Tax Incentives Study* by the Research Division of the Washington State Department of Revenue and *Warehouse Tax Remittance Study* by Mark Matteson, House Finance Committee staff. The studies provided a profile of the Washington firms that participate in the incentive programs.

The studies show that the industries that enjoy the incentives contribute to Washington's economic vitality by creating jobs. Firms taking the manufacturing/R&D deferral hired 36,000 new employees over the five years of the

deferral program. Firms taking the B&O R&D credit hired 19,500 new employees, and those taking the rural sales and use tax deferral/jobs credit hired 3,800 employees. Firms taking the high technology R&D credit pay high wages and fill 60 percent of new jobs with Washington residents.

### Is There a Connection Between New Jobs and the Incentive Programs?

These studies referenced above analyzed whether there were any ties between the new jobs and the incentives. Would these industries have created the same jobs without the incentives? The studies used econometric analysis to determine whether the tax incentives caused any of the growth in the industries. The studies were unable to find a causal relationship between job growth and the tax incentives.

### Impact of Taxes on Firm Location

A review of the literature on factors that affect firm location decisions show that taxes are not one of the most important factors in firms' location decisions. The most important factors in firms' location decisions are market factors. Other important factors include transportation infrastructure, availability of a skilled labor base, existence of higher education, and availability of land. Although the studies showed that taxes are not one of the most important factors, they did show that taxes do matter on the margin, when other factors are held equal. (See Appendix C-15, "Factors that Influence Business Location.")

Although the Department's hypothetical firm analysis shows Washington's tax ranking to be in the lowest third for many industries, Oregon's tax ranking is lower than Washington's in almost every case. To the extent that location factors in Oregon and Washington are equal, the lower taxes in Oregon could attract businesses away from Washington.

### Impact of Washington Taxes on New Businesses

The hypothetical firm analysis shows that for new manufacturing firms, high B&O taxes are ameliorated by low industrial insurance rates. Therefore, compared to other states, new Washington manufacturers do not face an inordinate tax burden. However, manufacturing is not representative of all new firms. Industrial insurance is not as large a percentage of total tax burden for some other industries. Because of the high B&O tax that some industries face relative to corporate income tax, new businesses in some industries could face an inordinate tax burden in Washington.

Analysis of total effective tax rates shows that new firms tend to have a higher overall effective tax rate than existing firms.

Nonetheless, taxes do not seem to impede the ability to start a new business. According to the Corporation for Enterprise Development's (CFED's) *2001 Development Report Card for the States*, the state of Washington is one of the top

five states for the category “Entrepreneurial Energy.” The report card also shows that Washington has the highest rate of new business starts-ups.

The CFED report card also shows that Washington has the highest number of business closures. To at least some extent, the higher number of firm closures are a result of the higher number of start-ups. There remains a possibility that taxes may be affecting firm closures, but there is no clear evidence.

## Stability

A tax system should be stable so that policy makers can have a dependable source of revenue and taxpayers can have predictable taxes.

### Conclusions

- Washington's tax system is volatile, with a short run elasticity of 1.2.

Stability is the ability of the tax system to provide the revenue necessary to maintain public services notwithstanding fluctuations in economic activity over the business cycle. The short-run elasticity (SRE) is a measure of the stability of the tax system. A tax system of normal stability has an SRE equal to 1.0 and generates short-run fluctuations in revenue comparable in magnitude to contemporaneous fluctuations in economic activity. A more stable tax system has an SRE that is less than 1.0 and will generate fluctuations in revenue that are smaller than contemporaneous fluctuations in economic activity. The converse is true for a less stable tax system with an SRE of greater than 1.0.

Analysis of short-run elasticity for Washington showed an overall elasticity of 1.2. This means that tax revenues are considerably more volatile than the economy; tax revenues grow faster than the economy in good economic times and contract more than the economy in poor economic times. Table 9-11 shows short-run elasticity for the major taxes.

**Table 9-11**

#### **Estimates of Short-Run Elasticities**

<b>Tax Base</b>	<b>Short-Run Elasticity</b>
Sales and Use	1.4
B&O	1.4
Property	0.2
Public Utilities	-0.2
All Taxes	1.2

Sales and use tax is the most volatile revenue source. B&O tax also has an elasticity greater than 1.0.

The SRE relates constant base, constant rate revenues from 1970 to 2000 with personal income for the same period. Rate and base changes are removed from the revenue data so that the inherent volatility of the tax system can be measured. The methodology for measuring the short-run elasticity is a standard double-log regression model. The data was transformed by 1) using the personal income deflator to change the nominal data to real data, 2) taking the log of the variables, and 3) removing the inherent trend from the time series data. Details of the analysis are included in Appendix C-16.

## Adequacy of State Revenues

A good tax system is expected to generate sufficient revenue to pay for established public services without the need for continuous or drastic changes in tax rates or in the tax base.

The demands for public services and revenues available to meet them are analyzed in reference to economic growth. Personal income growth is the best available measure of economic growth and is used here to examine the productivity of Washington's tax system and the demand for public services. Personal income includes all income earned by Washington households: wages, self-employment income, interest, dividends, rent, social security, and other “transfer payments.”

### Conclusions

#### *Revenue Growth*

- General fund revenue, in the absence of legislation, has historically grown about 5 to 10 percent more slowly than personal income.
- Taken together, historical revenue growth, trends in consumer spending habits, and the effects of recent voter-approved tax reduction measures suggest that general fund revenue under Washington’s present tax system is likely to grow 10 to 15 percent more slowly than personal income (or the general economy) in the long run.

#### *Expenditure Growth*

- Policy decisions to impose longer prison sentences for serious crimes, to increase access to health care for poor and low-income families, and to address the special education needs of handicapped and bilingual children are the main reasons why spending growth has moved in tandem with personal income growth.
- Due in large part to rapidly rising health care costs, total state government expenditures will have a tendency to continue growing in tandem with, or even slightly exceeding, personal income growth.
- Increased utilization of health care and special education services also contributed significantly to expenditure growth.

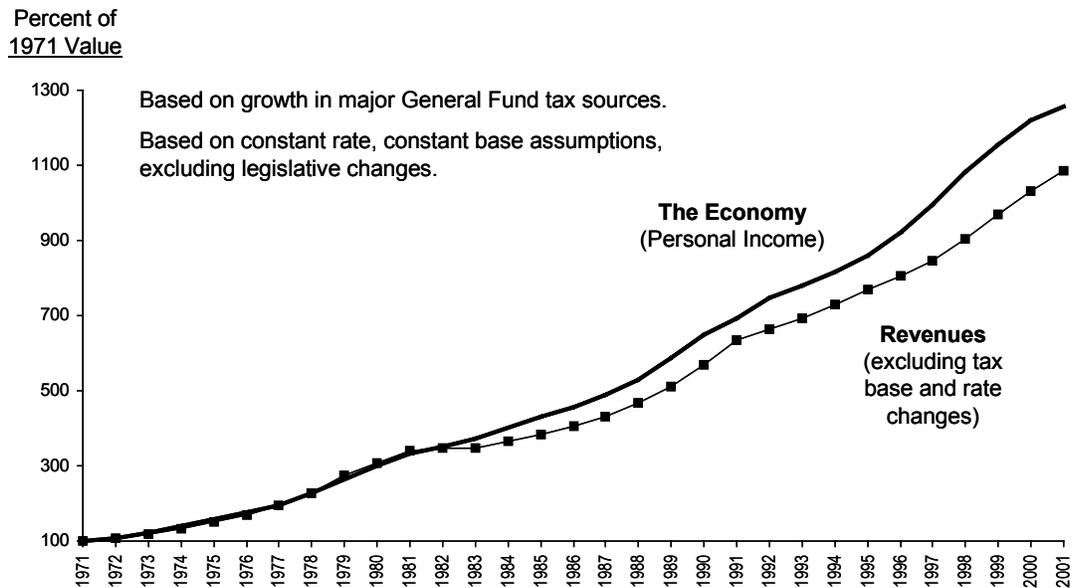
### Revenue Growth Compared with Economic Growth

Excluding legislative changes to general fund taxes, over the past 30 years general fund revenues grew more slowly than total state personal income, as shown in Chart 9-E. Legislative changes are excluded from the analysis because the goal is to measure the inherent productivity of Washington's system of general taxes, i.e., the capacity of the tax system to respond to public demands without raising taxes.

Defined as the rate of revenue growth divided by the rate of personal income growth, revenue elasticity for Washington's general fund taxes measures how responsive the tax system is to changes in personal income.

Over the past 30 years, personal income has grown at an average annual rate of 8.8 percent, while revenues (excluding tax base and rate changes) have increased at an annual rate of 8.3 percent, or 94 percent as fast as personal income. Thus, the long-term revenue elasticity of Washington's general fund taxes, based on 30 years of experience, is 0.94. Other studies find that long-term elasticity is somewhere between 0.9 and slightly under 1.0, with the preponderance of evidence suggesting that it is closer to 0.9. (See Appendix C-21 for detailed analysis.)

**Chart 9-E**



Revenue elasticity appears to be declining and is expected to fall to between 0.85 and 0.90 over the next decade (see Table 9-12). This decline is due to the passage of voter-approved initiatives to reduce taxes and to the erosion of the sales tax base (discussed in the harmony and neutrality subsections of this chapter). Initiatives that have reduced the growth in revenues are as follows:

- Referendum 47 and Initiative 747 reduced allowable growth in state and local property taxes. Due mostly to these voter-approved measures, annual state property tax growth has declined from 7.1 percent in the 1986 to 1997 period to 4.5 percent since 1997.
- Starting with state Fiscal Year 1999, Referendum 49 eliminated the general fund portion of the motor vehicle excise tax (MVET), one of the faster growing sources of general fund revenue.

**Table 9-12**  
**Elasticity Over Past Periods**

	Average Annual Personal Income Growth	Average Annual Revenue Growth*	Elasticity
Past 30 Years	8.8%	8.3%	0.94
Past 20 Years	6.9%	6.0%	0.87
Past 10 Years	6.1%	5.5%	0.91
Forecast	5.9%	5.0%	0.85

\*Average annual revenue growth excludes tax base and rate changes.

Expenditure Growth Compared with Economic Growth

Expenditure elasticity measures how responsive public expenditures are to changes in personal income. Expenditure elasticity is defined as the rate of public spending growth compared with the rate of personal income growth (or spending growth divided by personal income growth).

As shown in Table 9-13, operating expenditures of all state and local governments (including the federal revenues these governments spent), have grown slightly faster than U.S. personal income during both the 1980s and 1990s. For the 20-year period from 1980 to 2000, the expenditure elasticity for all state and local governments was 1.06—that is, spending grew 6 percent faster than income. (See Appendix C-21.)

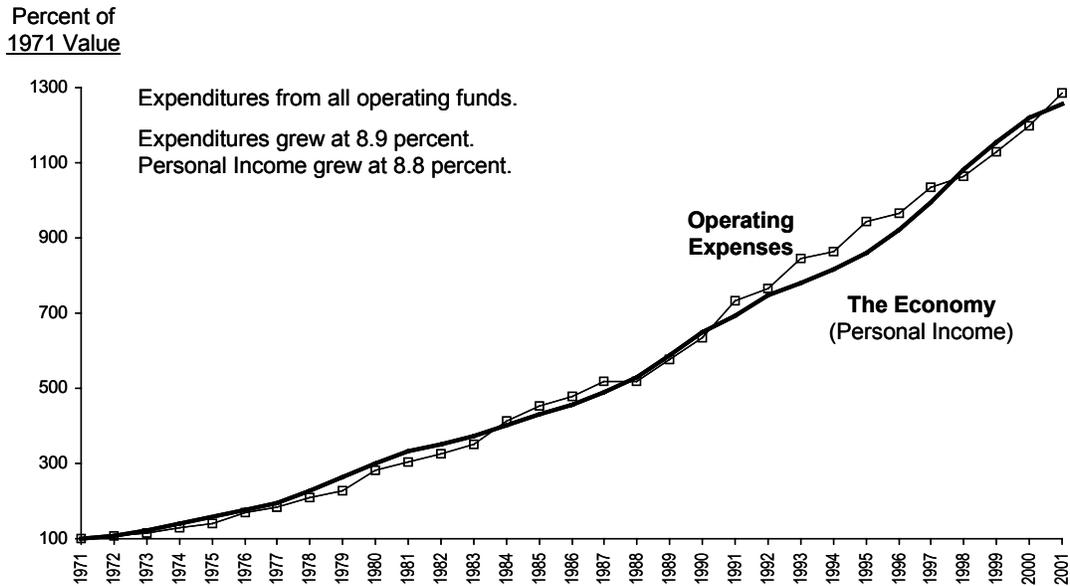
**Table 9-13**  
**State and Local Government Finances**

	Average Annual Percent Change			Implicit Elasticity*		
	1980- 1990	1990- 2000	1980- 2000	1980- 1990	1990- 2000	1980- 2000
Current expenditures	7.9	6.1	7.0	1.0	1.1	1.1
Consumption expenditures	7.7	5.5	6.6	1.0	1.0	1.0
Transfer payments to persons	9.6	7.8	8.7	1.2	1.4	1.3
Other expenditures	12.6	-2.5	4.8	1.6	-0.5	0.7

\*Growth rate relative to personal income growth rate

The result is similar for Washington State government. Over the past 30 years, state government operating expenditures from all funds (including federal revenues spent through the state budget) have grown slightly faster than state personal income. For the 1971- 2001 period covered in Chart 9-F, expenditures grew at an annual average rate of 8.9 percent, while total state personal income grew 8.8 percent per year—an expenditure elasticity of 1.01.

**Chart 9-F**  
**Growth in Personal Income and State Operating Expenses**



Washington’s expenditure limit established in Initiative 601 constrains state spending to “the fiscal growth factor,” inflation plus population growth. (Recent changes to the provisions of Initiative 601 effectively allow spending to grow somewhat faster.) However, inflation and population factors comprise only about 70 percent of personal income growth. They do not address other important budget drivers that explain why government spending has had a tendency to move in tandem with economic growth. Government services are considered “normal goods.” This means that as income rises, demand for government services such as roads and education increase just as demand for consumption goods such as houses and automobiles rise with income. Four types of factors place pressure on public spending to exceed personal income growth:

- Special demographic factors—When specific population budget drivers, like the age 5 to 17 school population, grow much faster than the general population.
- Utilization—When utilization rates for government services increase due to changing social or economic conditions (e.g., the proportion of children needing rehabilitation or protective services).
- Policy—When policymakers choose to expand or enhance a public service (in response to perceived demands).
- Extraordinary inflation—When specific inflation budget drivers, like the price of health services (“health care inflation”), grow much faster than general inflation.

Population growth and expansion of eligibility have played a relatively small part compared with medical services cost growth. Except for a brief period in the mid-1990s, the cost per case of serving poor families in Medicaid and providing insurance to private and public sector employees increased by double digits on an annual basis since the 1980s, triple that of the general price increase in the economy. Rising costs per case in health care go beyond traditional inflation. They include:

- The introduction of new procedures, tests, and expensive technology.
- The introduction of new drugs and advertising to drive the demand for new drugs.
- Increases in utilization of medical services, due especially to an aging population.

The three areas of the budget most responsible for this growth—areas where policy, utilization, or extraordinary inflation accounted for more than 70 percent of spending growth—were health care, corrections, and K-12 special programs.

- In health care, spending rose sharply because of (a) policy choices to expand health insurance coverage for poor and low-income families, (b) higher utilization of medical services due to availability of new tests, procedures, and technology, and (c) rapid price increases (for the same services) above general inflation.
- In corrections, policy changes raising prison sentences for drug and sex offenders resulted in rapidly increasing costs for the state's prison system.
- In K-12 special programs, policy decisions to devote more resources to the special needs of handicapped and bilingual students, together with increased utilization of these services, contributed to rapid spending growth.

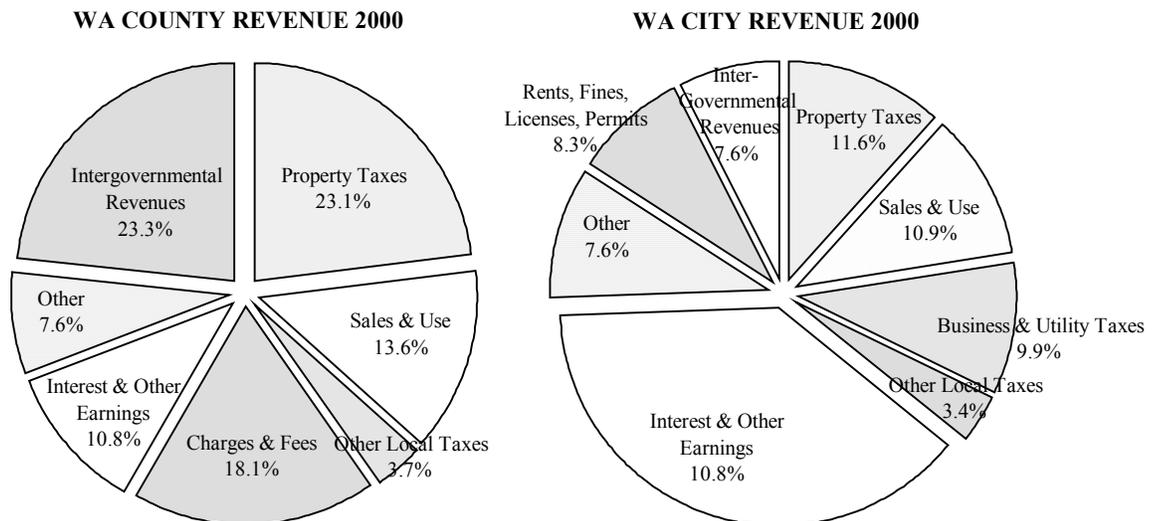
## Adequacy of Local Revenues

Under Washington’s Constitution, state government controls both the tasks assigned to local governments and the authority to impose municipal taxes to help carry out those tasks.

There are two categories of local governments in Washington. Cities and counties are general purpose governments that provide public health and safety protection, public services and facilities such as parks, and utility services like water, sewers and electricity. “Special purpose governments” such as school districts, public utility districts, ports and hospital districts have narrow jobs defined by statute. The revenue sources made available to general purpose governments are broader than for special purpose entities. Cities and counties may impose regular property taxes, special excess property tax levies, various excise taxes and a number of fees and charges for services or commodities rendered to the public. Counties have fewer tax sources available; for example, there is no authority for a county B&O tax. Chart 9-G illustrates the relative percentages for each type of tax for counties and cities.

Taxes must be expressly granted to local governments by the Legislature, and special purpose governments have been allowed fewer tax sources than are available to cities and counties. For example, school districts have no local regular property tax levy—the state collects a portion of the regular property tax and redistributes it among the schools statewide. Water and sewer districts rely solely on user charges for operating costs, and voted excess property tax levies are quite rare among these special purpose districts.

**Chart 9-G**



In 2000, 23 percent of the current expense and road funds in Washington’s counties came from local property tax levies, while 18 percent came from the retail sales tax and other local taxes. In the same year, 12 percent of city general funds came from the property tax and 24 percent came from the retail sales tax and other excise taxes.

However, rural and suburban communities without large commercial sectors rely much more on the property tax to make ends meet.

Remote sales, reductions in the sales tax base such as new deductions and exemptions, and initiatives significantly affect local revenues. Local tax losses due to remote sales are close to \$200 million a year. Since 1970, new sales and use tax exemptions resulted in \$300 million less local tax revenues a year.

The recent “tax revolt” as witnessed in several anti-tax initiatives has severely reduced local revenue and affected the level of service provided by local governments. I-747 and I-695 indirectly reduced state income and therefore reduced the amount of money to assist municipalities. The repeal of the state motor vehicle excise tax eliminated the equalization mechanism that allocated additional revenues to cities and counties without large business taxpayers. I-747 capped the growth in local regular property tax revenues to 1 percent per year. I-695 caused an overall reduction of \$779 million in local revenues during the 1999-01 Biennium, and I-747 is projected to cause local government property tax losses amounting to a reduction of \$119 million in CY 2004.

The state and local tax systems are closely intertwined, and the state government ultimately controls them. Changes to one affect the other and affect the level of services that the state has assigned to municipalities. Further, if the statewide tax structure were materially changed, corresponding adjustments would have to be made in the municipal tax system. For example, if the city B&O tax were eliminated along with the state B&O tax, revenues for cities imposing the local tax would decline by an average of 10 percent. Many cities and counties rely heavily on basic and special retail sales and use taxes, so changes in how the sales tax is imposed or collected by the state could have an effect on those political subdivisions. Finally, many local governments have pledged special excise taxes to repay bonds (e.g., the rural county sales tax, hotel-motel taxes, and sales and motor vehicle taxes for transit). Under state and federal provisions banning government actions that impair contracts, those taxes may not be reduced or eliminated until the bonds are retired—even if the bonds are set to remain outstanding for 25 years.

## Simplicity

Rules, record-keeping and computation requirements should be simple enough that the tax system can be administered at low cost by the tax collection agency without imposing an undue compliance burden on the taxpayer.

### Conclusions

Washington's tax system comports with this principle as follows:

- The cost to the Department of Revenue to administer state and local taxes was 69 cents per \$100 collected which is relatively low compared to personal income tax states. Also, costs to the state are low because retailers act as uncompensated agents of state and local governments by collecting the sales tax.
- Tax sources that are dedicated to fund specific programs are considerably more costly to collect than other taxes.
- Most taxpayers make other uses of information gathered to file the state portion of their state tax return. The exception is coding for local jurisdictions for local sales tax.
- Complexity of local B&O tax also causes problems for Washington businesses. There is a lack of uniformity of local B&O tax definitions and inconsistent rules of apportioning B&O tax.
- Retailers face costs of collecting sales tax, for which they are not compensated.

### Costs of Business Taxpayer Compliance

Businesses pay their taxes to the Department of Revenue either annually, quarterly, or monthly. About 66,500 taxpayers report monthly, about 148,000 quarterly and 140,000 annually. Approximately 250,000 do not report because their income is below the minimum threshold of \$28,000.

Because Washington does not have a personal income tax, it is one of nine states that does not require individuals to file tax returns.

### Reasons for Collecting and Organizing Information

In order to determine tax liability and file tax returns, businesses use some information that is collected for other purposes, such as federal income tax or other business operations. However, some information is collected only for purposes of filing the Washington State Combined Excise Tax Return (CETR). In the 2001 Taxpayer Satisfaction Survey, taxpayers were asked about which information had to be kept solely for the purpose of filing the Washington State CETR. For the three

major types of information required to fill out the CETR, approximately 30 percent of taxpayers determine gross income by tax classification only for purposes of filling out the CETR. Approximately 36 percent collect deduction information only for the CETR, and about 65 percent collect data on local retail sales coding only for the CETR.

Based on the 2001 Taxpayer Satisfaction Survey, taxpayers spend an average of 7 hours and 20 minutes collecting and organizing data for filing the CETR each reporting period. The survey results also indicated that taxpayers spend an average of four hours filling out and filing the tax return. (Detail of the amount of time spent on particular activities related to preparing and filing tax returns are included in Appendix C-17.)

### Local Government Taxes

Thirty-seven Washington cities impose local B&O taxes, which are paid by businesses directly to each of the local governments. However, there is no statutory requirement for uniformity in definitions or classifications of business activities either between cities or with the state B&O tax. Another area that lacks uniform treatment is the apportionment of income from activities that are performed in more than one jurisdiction. In recent years the business community has been increasingly vocal about their concerns of the negative effect of local B&O tax laws on the business climate, citing uniformity and simplicity as major issues. Local governments, in turn, cite concerns about local control over revenue sources.

There have been multiple efforts to develop solutions to these issues. The Association of Washington Cities and five major cities (Seattle, Tacoma, Everett, Bellevue, and Bellingham) developed a model B&O tax ordinance that cities may voluntarily adopt. Several cities have begun the process of adopting the model B&O ordinance. The Association of Washington Businesses and other business representatives have also developed proposals and submitted legislation that would go beyond the provisions of the model ordinance.

The Committee recognizes the areas of dispute and concern for local governments and business groups and the overarching goal of administrative simplicity inherent in this issue. In this proposal the Committee supports and encourages the ongoing work of the cities, business representatives, and legislators who have committed their time and effort to developing a solution to the above-mentioned issues.

### Administrative Costs of Collecting Taxes

In Fiscal Year 2001, the Department spent about 69 cents to collect \$100. One reason for the low cost of collection is that Washington does not have a personal income tax and therefore does not have to process tax returns from individuals.

Some taxes are much more costly to collect than other taxes. Table 9-14 shows estimates of collection costs by tax type for the major taxes. (Costs of all taxes are included in Appendix C-18.)

**Table 9-14**  
**Costs to the Washington State Department of Revenue**  
**of Collecting State Taxes**

<b>Tax Type</b>	<b>Cost Per \$100 of Collections</b>
Retail Sales Tax	\$0.27
Use Tax	\$3.06
Business and Occupation Tax	\$0.75
Public Utility Tax	\$1.18

State and local property taxes are collected both by county treasurers, while valuation functions and other administrative duties are the responsibility of local county assessors and the Department of Revenue. Cost information for the local government portion of these administrative functions is not readily available.

The Washington State Department of Revenue also collects and distributes local sales taxes. Local taxes cost \$1.06 per \$100 to collect.

Dedicated taxes are generally more complex by nature, both for taxpayers and for the administering agency. Consequently, they are more costly to collect. For example, the hazardous substance tax costs \$4.26 for each \$100 of collections. The litter tax costs \$12.94 for each \$100 of collections.

Generally, the cost of collecting taxes correlates with the cost to taxpayers of complying with Washington's tax system; taxes that are difficult for the Department of Revenue to collect are generally difficult for taxpayers to file.

Costs to Retailers of Collecting State and Local Sales Tax

One reason that the cost of collecting retail sales tax is so low is that a large portion of the collection burden falls on retailers. The 1998 DOR study, *Retailers' Cost of Collecting and Remitting Sales Tax*, estimated that the total cost of collecting and remitting sales tax is \$6.47 per \$100 of total state and local sales tax collected for small retailers, \$3.35 per \$100 for medium retailers, and 97 cents per \$100 for large retailers. For purposes of the study, small retailers are defined as those with gross annual Washington sales between \$150,000 and \$400,000, medium retailers with sales between \$400,000 and \$1,500,000, and large retailers with sales over \$1,500,000. The costs include any activity the retailer has to perform related to sales tax collections and remittance that they would not have to do if they were not obligated to collect and remit sales tax. The table in Appendix C-19 details the costs of collections by type of cost.

The costs associated with collecting local sales tax are estimated to be 3.3 percent of total local collections for small retailers, 1.89 percent of total collections for medium retailers, and 0.31 percent of total collections for large retailers.

As of 1998, 26 of the 45 states that have a retail sales tax allow vendors to keep a portion of the sales tax collections as a way of compensating retailers for collecting and remitting sales tax as agents for state and local government. Washington State does not compensate retailers in this way. In some of these states, costs to retailers are substantially higher because retailers must remit sales taxes to each local government separately.

#### Timing of Tax Payments

Taxes are considered to be “lumpy” if the timing of the tax payment and/or the amount of the payment is burdensome to taxpayers. Property taxes, real estate excise taxes, and watercraft taxes are lumpy taxes. Most other taxes are not considered lumpy because they are paid more frequently and in smaller amounts.

## Transparency

Taxes should be transparent, not hidden from taxpayers.

### Conclusions

- Washington has taxes that are not transparent to taxpayers, including B&O tax passed down to consumers and business sales tax passed down to consumers.
- The B&O tax pyramids, causing a higher effective tax rate on value added than is transparent.

### Transparency and Business Taxes

To the extent that business taxes are passed on to households, business taxes are not transparent because they are rolled into the price of goods and not explicitly stated. Washington has several business taxes, the main business tax being the B&O tax. Other business taxes include wholesale level taxes such as the cigarette and tobacco products taxes and liquor taxes. (See Appendix C-20 for a detailed list of non-transparent taxes.)

### Transparency and Sales Tax

Sales tax paid by business and passed down via the costs of goods is also hidden. Sales tax on consumer purchases is somewhat transparent. The sales tax is explicit in each purchase. However, over the span of a year, the summation of tax paid becomes lost; few taxpayers are cognizant of total sales tax paid within a year.

### Pyramiding of the B&O Tax

To the extent the taxes pyramid, they are not transparent. The cumulative tax that is paid over a production process is not explicitly stated. The B&O tax pyramids an average of 2.5 times. This means that on average, the explicitly stated B&O rate is about 40 percent of the actual B&O tax paid on goods and services produced and/or sold in Washington State. (For more detail on pyramiding of the B&O, see the subchapter on neutrality.)

## Home Ownership

This sub-chapter analyses the impact of taxes on the ability to purchase and retain a home.

### Conclusions

- For a sample of typical homes bought under different circumstances and in different counties, taxes range from about 6 percent to 10 percent of the purchase price.
- Property taxes do not play a large role in affordability. Principal and interest on a mortgage have a much greater role in the ability of a household to afford a home. In fact, property taxes play a smaller role in affordability in less affordable counties compared to more affordable counties.
- Almost 50 percent of homeowners pay less than 3 percent of their income in property taxes. About 70 percent of homeowners pay under 4 percent of their income in property taxes.
- About 11 percent of homeowners pay over 6 percent of their income in property tax. About 26 percent of these are senior citizens. Many are low-income working families that have suffered a change in circumstances.
- Washington State has two property tax relief programs for senior and disabled citizens. Most homeowners that have high property taxes as a percentage of income do not qualify for the programs because of age or income.

### Taxes and the Ability to Purchase a Home

Tax liability on the purchase of a home differs depending on whether the home is a new house built on speculation (spec-built), a new custom-built house, or an existing house.

Real estate excise tax is the liability of the seller, but can be paid by the purchaser if taxes have not been paid. REET is due on the transfer of the property on all three types of homes. Because only the land is transferred in the case of the custom-built home, REET is paid only on the value of the land.

Since the purchaser is the final consumer of the goods and services which go into a custom-built home, the purchaser of a custom-built home pays sales tax on the value of all the materials and construction labor in the contract. In the case of spec-built homes, the builder is the final consumer of the goods and services used to build the home. Therefore, the builder pays sales tax on purchases of materials and construction labor from subcontractors.

In reality, taxes are passed on to others in part or in full based on market conditions. For consistency and simplicity, the home buyer is assumed to pay 100 percent of the sales tax and REET. Analysis of taxes on median-priced homes in different jurisdictions shows that taxes range from about 6 percent to 10 percent of the purchase price of a home. (See Appendix C-23 for detailed examples.)

Both retail sales tax rates and real estate excise tax rates vary by jurisdiction. Table 9-15 shows the highest and lowest rates of each of the taxes.

**Table 9-15**  
**Retail Sales Tax and Real Estate Excise Tax Rates**

	<b>Lowest rate</b>	<b>Highest rate</b>
Retail sales tax	7.0%	8.9%
Real estate excise tax	1.28%	2.78%

Taxes and the Ability to Qualify for a Home Loan

Property taxes can play a role in the ability to qualify for a mortgage. The rule of thumb for making mortgage loans is that the mortgage payment plus property taxes on the home plus homeowner insurance should not exceed 28 percent of the purchaser's income. Property taxes constitute 4.6 percent of the median household income based on a median-priced home.

In order to analyze whether property tax affects the ability to qualify for a home loan, the Department compared affordability indices with and without property tax for each Washington county. The affordability index measures whether the median-priced home in each county can be purchased with the median-priced income given the 28 percent rule. Analysis showed that in all but three counties, Kittitas, San Juan and Jefferson, median income households could afford homes which were more expensive than the median-priced homes. In Kittitas, San Juan, and Jefferson counties, median income households could not afford the median-priced home. This result is the same whether property taxes are included or not. Therefore, property taxes do not have a significant impact on the ability to qualify for a home.

This analysis was also done for first-time home buyers. This index compares median income for first-time homebuyers with the qualifying income needed for a house priced at 85 percent of the median price. First-time home buyers are assumed to have median incomes at 70 percent of median county income. Also, lower down payments and higher mortgage rates are assumed. This analysis shows that in 16 counties median income first-time homebuyers cannot afford the median home. In six of these counties, median homebuyers' income is close enough to the amount needed to qualify for the median home that property tax does make a difference in the ability to qualify. The conclusion is that for first-time homebuyers, property tax can make a marginal difference in the ability to qualify for a home. The affordability charts and indices are in Appendix C-24.

## Taxes and the Ability to Retain a Home

### *Property Tax Burdens*

Property tax rates vary from 0.7 percent of a home's market value in San Juan County to 1.48 percent in Garfield County. Property tax rates in Washington counties can be found in Appendix C-25.

In 2000, Washington State ranked twenty-third highest in terms of property taxes as a percent of personal income. Washington's property taxes were \$31.53 per \$1,000 of personal income. Motor vehicle excise tax, considered to be in-lieu of property tax, is included in the Census data from which these calculations are derived. The MVET was eliminated effective in 2000. The U.S. average was \$32.07 in 2000. (See Appendix C-26 for a comparison of property taxes per \$1,000 of personal income for all states.)

Property taxes can impact a homeowner's ability to retain their home under some circumstances, including the following scenarios. Home values rise, but the homeowner's income is fixed. Market conditions cause a sharp increase in home values, greater than increases in salaries. The homeowner's salary decreases dramatically because of job loss, disability, divorce, or other reasons.

Table 9-16 shows the distribution of property tax payments as a percentage of income by income categories. The table shows that almost 50 percent of homeowners pay less than 3 percent of their income in property taxes. About 70 percent of homeowners pay under 4 percent of their income in property taxes. Almost 6 percent of homeowners pay over 8 percent of their income in property taxes, and almost 20 percent pay over 5 percent of their income.

**Table 9-16**  
**Percent of Homeowners by Household Income and Property Tax**  
**as a Percent of Income**  
**Calendar Year 1999**

	Less than 3%	3% to 6%	Over 6%	Total
Income	Percent	Percent	Percent	Percent
Less than \$15,000	1.51%	0.55%	2.05%	4.11%
\$15,000 to \$25,000	2.87	1.86	1.67	6.39
\$25,000 to \$37,500	3.14	6.45	2.93	12.53
\$37,500 to \$50,000	3.62	7.46	1.75	12.83
\$50,000 to \$62,500	5.65	6.92	1.01	13.58
\$62,500 to \$75,000	5.42	5.44	0.52	11.39
\$75,000 to \$100,000	11.20	5.42	0.98	17.59
\$100,000 to \$150,000	9.35	3.34	0.31	13.00
Over \$150,000	6.87	1.66	0.05	8.57
Total	49.62%	39.13%	11.26%	100.00%

Source: Homeowner Property Tax Model 2002

Table 9-17 illustrates the distribution of homeowners by the percentage of income paid in property taxes. The table is also broken into two age groups: homeowners above age 65 and homeowners under age 65.

**Table 9-17**

**Number of Homeowners by Percent of Income Paid in Tax and by Age**

Property Tax as a Percent of Income 2002	Person's Age				All
	Under 65		Over 65		
	Households	Percent	Households	Percent	Households
Less than 3%	654,006	83.12	132,787	16.88	786,793
3% to 6%	483,129	80.04	120,509	19.96	603,638
Over 6%	128,207	73.56	46,087	26.44	174,294
All	1,265,342	80.87	299,383	19.13	1,564,725

Source: Homeowner Property Tax Model 2002

Characteristics of Homeowners with Relatively High Property Taxes

Over 174,000 households have property tax payments equal to or greater than 6 percent of household income. This represents 11 percent of all homeowners. Typical property taxes as a percentage of income range from 1.73 percent of income for households with incomes over \$130,000 to 5.77 percent of income for households with incomes under \$20,000. Therefore, 6 percent is higher than an average or typical property tax burden for any income group.

Of the 174,000 households with relatively high property taxes, 26 percent are over age 65 and 74 percent are under age 65. Although over-age-65 households do not constitute the majority of households with high property taxes, they are a disproportionately high percentage. Over-age-65 homeowners are only 19 percent of all homeowners. Table 9-18 shows characteristics broken down by age of homeowners with relatively high property taxes.

Homeowners with Property Taxes Over 6 Percent That Are Over Age 65

The majority of homeowners age 65 and older with high property taxes as a percentage of income seem to be on a fixed income. Many probably do not receive income other than Social Security. A significant percentage of these homeowners are probably widows and widowers. High growth in the value of their home and/or considerably reduced post-retirement income are the most likely causes for their relatively high property tax burdens.

Homeowners with Property Taxes Over 6 Percent That Are Under Age 65

Either high growth in home values and/or drastic changes in income have caused these homeowners to pay disproportionately high property taxes. Up to 25 percent could have had a sudden change in income due to unemployment or disability. Others may have had reduced income due to divorce. A large percentage of households under age 65 with high property taxes appear to have children (at least 40 percent). In addition to high property taxes, many of these families bear the costs of mortgages and the costs of raising children.

**Table 9-18**  
**Characteristics of Homeowners with Property Tax Payments**  
**Over 6 Percent of Income by Age**  
**(percentages are approximate)**

	<b>Homeowners over 65 with property tax greater than 6% of income</b>	<b>Homeowners under 65 with property tax greater than 6% of income</b>
Percent with income 30K and under	70%	65%
Percent that receive Social Security	95%	20%
Percent that receive either pensions, unemployment insurance or worker's compensation	40%	25%
Percent with only one household member	40%	25%
Percent with more than 2 family members	2%	40%
Percent that own their house free and clear	80%	30%
Percent with houses assessed over \$270,000	45%	45%

Property Tax Relief

The state of Washington has two programs to provide property tax relief for senior and disabled citizens. The first program provides varying levels of exemption for disabled homeowners and senior citizens (age 61 and over) with income under \$30,000. All senior and disabled citizens in the program are exempt from special property tax levies. Those with incomes under \$18,000 are additionally exempt from regular property tax levies on the greater of the first \$50,000 in assessed value or 60 percent of assessed value. Those with incomes between \$18,000 and \$24,000 are additionally exempt from regular property tax levies on the greater of the first \$40,000 in assessed value or 35 percent of assessed value (no greater than \$60,000 in assessed value).

In addition to the tax exemption, the assessed value of participants' properties is frozen from the time that they enter the program.

The other program is a property tax deferral for senior and disabled citizens. All disabled homeowners and seniors (age 60 and over) with incomes under \$34,000 are eligible to defer their property taxes until the house is sold or until time of death. However, since most senior citizens that are eligible for the deferral are also eligible for the exemption, very few opt to take the deferral.

## Harmony with Other States

### Conclusions

- Washington ranked thirty-second in 2000 in terms of state and local tax collections per \$1,000 income.
- Washington's tax system is unique.
- Retail trade and state and local sales tax revenues in the Oregon and Idaho border counties are very sensitive to changes in tax rates.
- Sales and revenues in the 14 counties bordering Oregon and Idaho would increase by an estimated 22 percent if the sales tax differential were eliminated.
- Remote sales caused an estimated state sales tax loss of \$138 million to \$148 million in Calendar Year 2001.
- Washington residents purchase an estimated 6 percent more products remotely per capita compared to average per capita purchases because of Washington's higher sales tax.

### Unique Features of Washington's Tax System

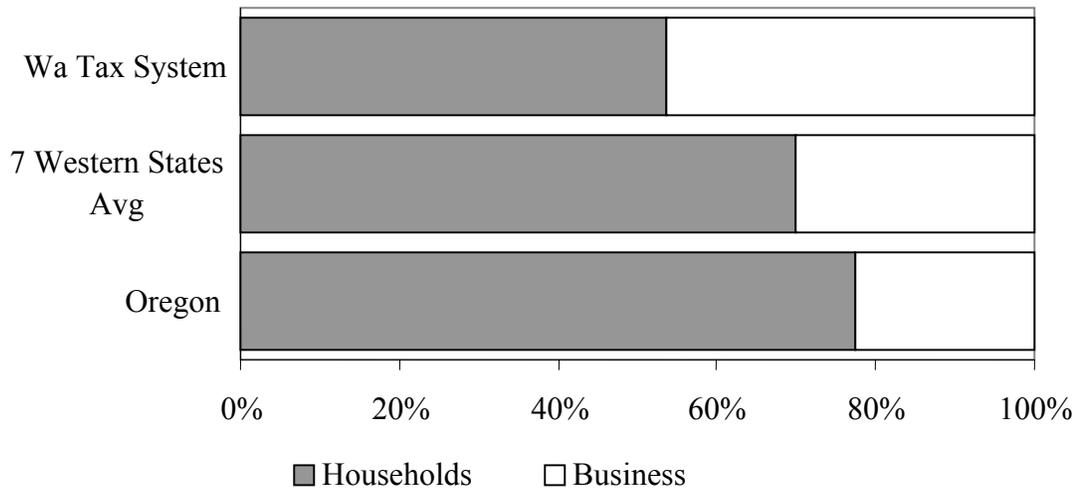
- Washington's relative business tax burden is higher than in any other Western state.
- Washington is one of seven states with no personal income tax and one of six states with no corporate income tax.
- Washington's B&O tax is unique.
- Because of heavy reliance on sales tax, Washington's tax rate is the third highest in the nation, and the sales tax base is broader than average.
- Selective sales taxes are also among the highest in the nation.

See Chapter 3 for more details on how Washington differs from other states.

### Business/Household Share

The share of total state/local taxes paid initially by businesses is high in this state. An annual study performed by the Utah Tax Commission concludes that Washington taxes on businesses are higher than in the other Western states selected for analysis (see Chart 9-H). Conversely, household taxes in Washington are the lowest of these same states.

**Chart 9-H**  
**Household/Business Shares of Major State and Local Taxes**



### Sales Tax Leakage

#### *Border Loss*

Because of the high sales tax rate, Washington suffers from two major sources of tax leakage. The first source is tax evasion along Washington borders. The sales tax differential between Clark and Multnomah counties is the greatest in the country, and this creates significant tax compliance difficulties, harming both in-state retailers and local governments. The second source of leakage is tax avoidance via remote sales.

Residents of Washington jurisdictions that border Oregon and Idaho have an incentive to shop across the border to avoid paying higher sales tax. Washington state and local sales tax varies from 7 percent to 8.9 percent. Idaho has a maximum state and local sales tax of 7 percent. Oregon has no sales tax.

Although goods purchased out of state are subject to use tax, it is nearly impossible to enforce use tax collections from individuals. (The exception is use tax collections on vehicles and vessels. Since these have to be registered, use tax is collected on these purchases.) Many individuals are not even aware of the use tax liability.

The border tax differential causes problems for both Washington retailers and Washington revenues. Washington retailers suffer a competitive disadvantage because of the loss of sales to Oregon and Idaho. State and local governments lose revenues because of the loss of sales. Over the long run, the competitive advantage of locating in Oregon or Idaho increases the retailing sector in those states compared to Washington State. The larger selection of goods offered by the larger retailing sector is an additional draw for Washington residents. This exacerbates the problems for retailers and revenues.

In his paper, "The Border Tax Problem in Metropolitan and Non-metropolitan Areas of Washington" (*Western Tax Review*, Winter 1992), John Beck estimates that elimination of the sales tax differential in Oregon and Idaho would increase taxable retail sales and revenues by an estimated 22 percent in the 14 counties that border Oregon and Idaho.

### *Remote Sales*

Remote sellers are not required to collect retail sales tax from customers unless they have substantial nexus in the state. In 1992, the United States Supreme Court said the sales tax is too burdensome on interstate commerce to require sellers to collect tax for states in which sellers don't have substantial nexus. *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992). Although purchasers are required to pay use tax on their remote purchases, few do.

This sets up a fundamental issue of unfairness between in-state retailers and their competitors selling remotely (e.g., catalog and e-commerce sellers). The in-state sellers must collect sales tax, but their remote competitors may not be required to collect tax on the very same transaction. Additionally, for the multistate sellers who are currently required to collect sales taxes because of their physical presence, the cost of compliance is a significant burden.

State sales tax losses from remote sales are estimated to be \$138 million to \$148 million in CY 2001 and \$152 million to \$185 million in CY 2002. Growth rates in remote sales have been estimated to have been about 25 percent in each of the last couple of years. Such high growth rates could continue for the next several years.

Although all states with sales tax suffer from remote sales leakage, Washington's remote sales are estimated to be higher because of the high sales tax. Based on an elasticity calculated by Austan Goolsbee in his paper *In a World without Borders: The Impact of Taxes on Internet Commerce*, Washington's remote sales are over 6 percent higher per capita because of the higher sales tax in Washington.