



STATE OF WASHINGTON  
DEPARTMENT OF REVENUE

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## DEPARTMENT OF REVENUE COMPLIANCE STUDY

### Executive Summary

This study focuses exclusively on taxpayers registered with the Washington State Department of Revenue. Using the results of a stratified random sample of audits completed between 2003 and 2006, this report estimates taxpayer noncompliance for state taxes included on the Department's combined excise tax return. Drawing on multiple years of sample data required statistically projecting the assessments to a single mid year to account for inflation factors and to create measurable and comparable information. For the 2008 study, we projected the figures to Calendar Year 2004. All estimates represent the total population of registered taxpayers. Additionally, noncompliance figures discussed in this report equal the net of the estimated debit and credit assessments, unless labeled otherwise. Major findings include the following:

- ◆ For Calendar Year 2004 we estimated \$231.1 million in total annual excise tax noncompliance for registered taxpayers. This equals 2.5 percent of the total tax liability. The 95 percent confidence interval for this estimate is 2.46 percent to 2.54 percent.
- ◆ Use tax has the highest level of noncompliance at 25.5 percent, with nearly \$85.9 million in unreported tax.
- ◆ The estimated annual noncompliance for sales tax is \$105.3 million. However, this only represents 1.7 percent of the total sales tax liability.
- ◆ Business and occupation (B&O) tax has the second highest rate of noncompliance at 1.7 percent.
- ◆ For the local share of noncompliance, we estimate \$58.8 million — \$26.4 million of this represents use tax and the remaining \$32.4 million represents unreported sales tax.

- ◆ The retail industry has the largest dollar amount (\$99.3 million) of noncompliance with a rate of noncompliance of 2.6 percent.
- ◆ The business and personal services industry has the highest rate of noncompliance and the second largest dollar amount. The industry's total estimated unreported tax equals \$34.1 million which equates to 4.5 percent of the industry's total tax liability.
- ◆ Rate of noncompliance increases are highest for firms with less than \$500,000 of gross income while noncompliance decreases for firms between \$500,000 and \$10 million of gross business income.
- ◆ Newer firms have a much higher rate of noncompliance than older firms (5.9 percent compared to 2.0 percent, respectively).

**Table 1. 2008 Compliance Study Compared  
To the 2006 Compliance Study  
Noncompliance Estimates by Tax Type**

Type of Tax	2006 Compliance Study		2008 Compliance Study	
	Estimated Noncompliance	Noncompliance as a Percent of Total Tax Liability	Estimated Noncompliance	Noncompliance as a Percent of Total Tax Liability
Sales	\$54,815,603	1.0%	\$105,268,681	1.7%
Use	\$49,613,604	18.1%	\$85,882,930	25.5%
Business & Occupation	\$45,439,535	2.2%	\$40,034,935	1.7%
Public Utility	(\$945,732)	-0.3%	(\$251,529)	-0.9%
Hazardous Substance	(\$550,338)	-1.2%	\$45,258	0.6%
Other	(\$81,880)	-0.2%	\$144,483	0.1%
<b>Total</b>	<b>\$148,290,747</b>	<b>1.8%</b>	<b>\$231,124,757</b>	<b>2.5%</b>

**Table 2. Noncompliance by Industry**

<b>Industry</b>	<b>Estimated Noncompliance</b>	<b>Estimated Noncompliance as a Percent of Total Noncompliance</b>	<b>Voluntarily Reported Tax</b>	<b>Noncompliance as a Percent of Total Tax Liability</b>
Construction	\$34,007,717	14.7%	\$1,200,779,222	2.8%
Manufacturing	\$834,787	0.4%	\$626,269,667	0.1%
Transport/Utility	\$26,452,115	11.4%	\$859,722,595	3.0%
Wholesale	\$15,733,541	6.8%	\$866,404,171	1.8%
Retail	\$99,322,203	43.0%	\$3,701,773,134	2.6%
Fin/Real Estate	\$3,548,971	1.5%	\$446,941,833	0.8%
Business/Personal Services	\$34,127,403	14.8%	\$730,024,044	4.5%
Professional Services	\$16,902,724	7.3%	\$581,296,821	2.8%
Other	\$195,296	0.1%	\$44,356,005	0.4%
<b>Total</b>	<b>\$231,124,757</b>	<b>100.0%</b>	<b>\$9,057,567,492</b>	<b>2.5%</b>

## INTRODUCTION

This study presents the results of the 2008 Compliance Study and exclusively focuses on unreported tax by taxpayers registered with the Washington State Department of Revenue. For the purposes of this study, the terms “unreported tax” and “noncompliance” are used interchangeably.

Using the results of a stratified random sample of audits completed between 2003 and 2006, this report estimates taxpayer noncompliance for state taxes included on the Department's combined excise tax return. To statistically represent the universe of registered Washington taxpayers, we stratified the sample data by firm size and industry. Many of the smaller firms randomly selected for audits depict taxpayers that are excluded by standard audit selection procedures. All of the noncompliance figures provided in this report equal the net of the estimated debit and credit assessments, unless labeled otherwise. A debit assessment means the taxpayer underpaid its tax liability, and a credit assessment means the taxpayer overpaid its tax liability. Additionally, when referring to total tax liability, we mean the noncompliance amount plus the amount of voluntarily reported tax.

The state taxes discussed in this study include sales, use, B&O, public utility, and hazardous substance tax. Figure 2 provides some estimates of noncompliance for local sales and use tax; however, local tax is excluded from all other tables. Other state taxes such as the property tax, real estate excise tax, timber excise tax, leasehold excise tax, litter tax, cigarette taxes and taxes not administered by the Department of Revenue, are not included. Additionally, this report does not attempt to estimate noncompliance for unregistered businesses.

Audits usually cover a number of years, with four years being the most common. Drawing on multiple years of sample data necessitated annualizing the assessments and statistically projecting the figures to a single mid year to account for inflation factors and to create measurable and comparable information. For the 2008 study, we projected the figures to Calendar Year 2004.

All estimates represent the total population of registered taxpayers. In other words, these figures estimate the total noncompliance that the Department of Revenue would discover if the Department performed an audit on each combined excise tax return filed.

## TOTAL NONCOMPLIANCE

**Table 3. Estimated Excise Tax Noncompliance for Registered Taxpayers**

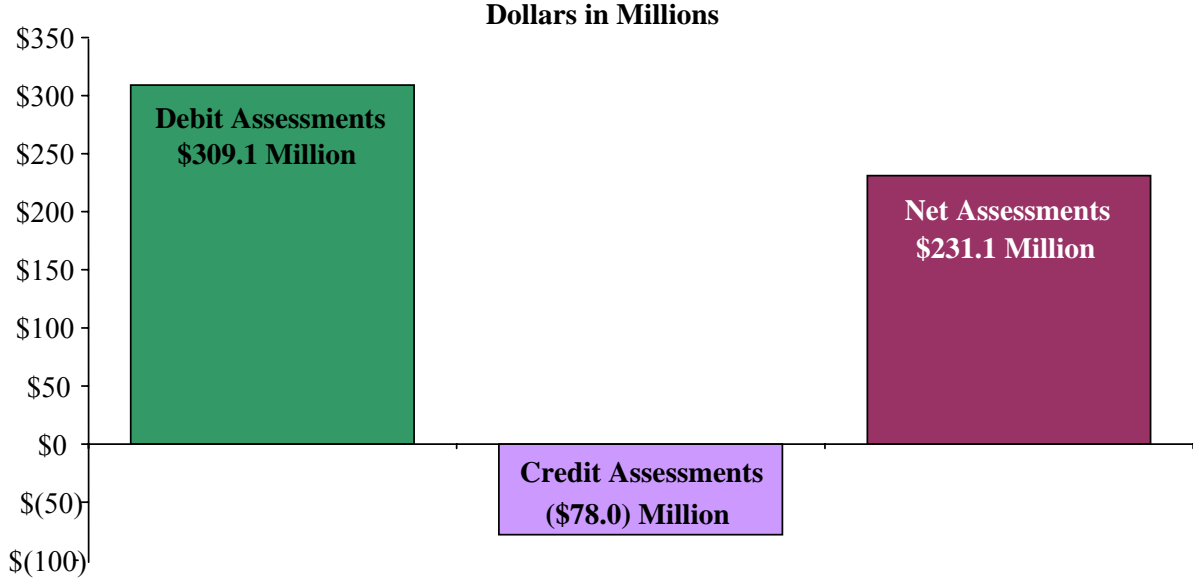
<b>Type of Tax</b>	<b>Estimated Noncompliance</b>	<b>Voluntarily Reported Tax</b>	<b>Noncompliance as a Percent of Total Tax Liability</b>
Sales	\$105,268,681	\$6,073,651,025	1.7%
Use	\$85,882,930	\$250,727,306	25.5%
Business & Occupation	\$40,034,935	\$2,253,787,154	1.7%
Public Utility	(\$251,529)	\$291,400,390	-0.1%
Hazardous Substance	\$45,258	\$80,392,689	0.1%
Other	\$144,483	\$107,608,928	0.1%
<b>Total</b>	<b>\$231,124,757</b>	<b>\$9,057,567,492</b>	<b>2.5%</b>

We estimate \$231.1 million in total annual excise tax noncompliance for registered taxpayers. This equals 2.5 percent of the total tax liability. The 95 percent confidence interval for the noncompliance rate has been estimated to be 2.46 percent to 2.54 percent.

As shown in Table 3, use tax holds the highest rate of noncompliance at 25.5 percent. Although sales tax noncompliance comprises a larger dollar value of unreported tax with \$105.3 million compared to only \$85.8 million of use tax, this amount represents only 1.7 percent of the total sales tax liability. The B&O tax ties for the second highest rate of noncompliance at 1.7 percent.

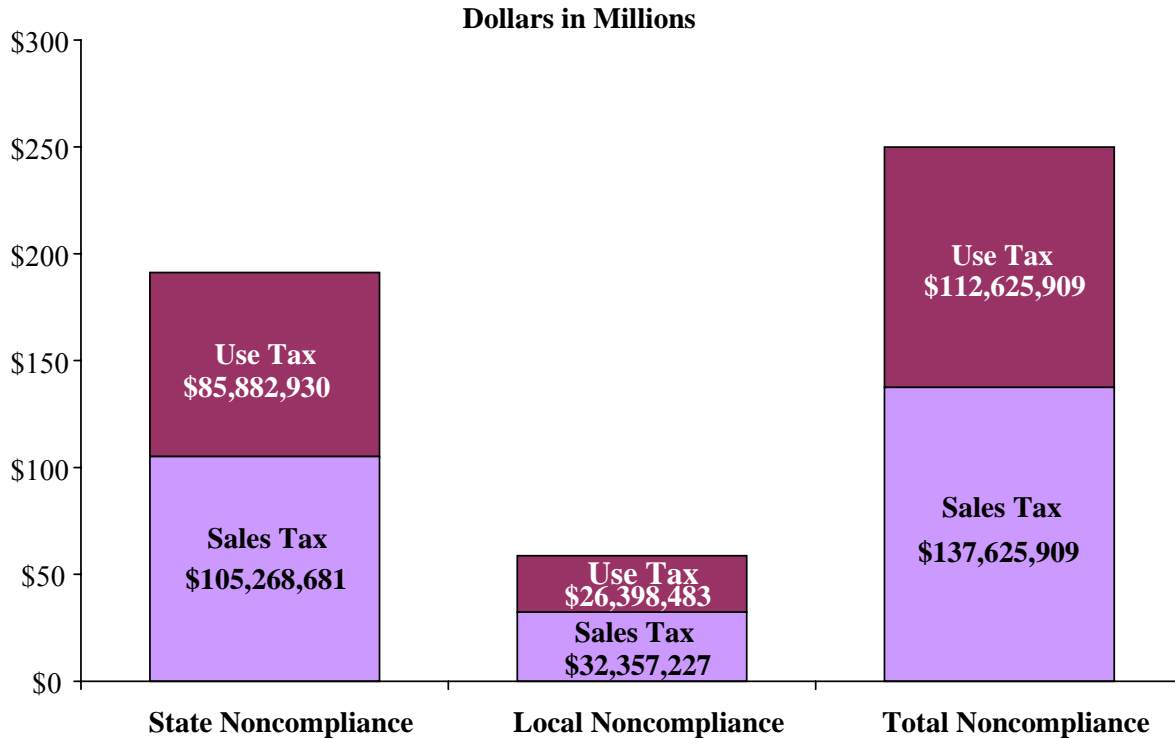
Figure 1 depicts the relative proportions of debit and credit assessments. Projections from the years sampled showed \$309.1 million in annual underreported tax and \$78.0 million in overreported tax.

**Figure 1. Estimated Debit and Credit Assessments**



Although this report focuses on state excise taxes, sales and use tax noncompliance estimates are also subject to local taxation. As seen in Figure 2, we estimate the local share of noncompliance at \$58.8 million per year; \$32.4 million of this represents use tax and the remaining \$26.4 million represents unreported sales tax.

**Figure 2. State and Local Sales and Use Tax Noncompliance**



**NONCOMPLIANCE BY INDUSTRY**

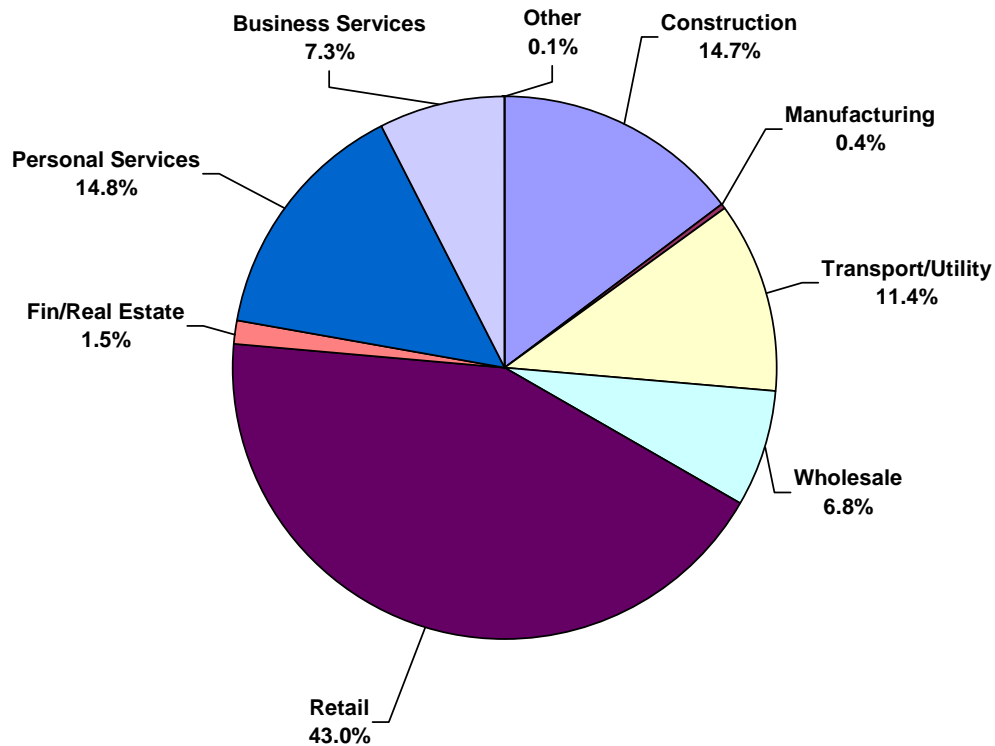
In Table 4 and Figure 3, each industry grouping represents a Standard Industrial Classification (SIC) at the two-digit level. However, we split the service industry into two categories based on SIC range. Business and personal services include personal, business, computer, hotels/motels, and recreational services. Professional services include health, legal, accounting, engineering, and education. The “other” category includes government services and the agriculture and mining industries.

Table 4 details Calendar Year 2004's estimated noncompliance by industry and provides each industry's voluntarily reported tax liability. This table also quantifies noncompliance as a percent of the total tax liability. According to the percentages, the business and personal services industry holds the highest rate of noncompliance with 4.5 percent. However, the retail industry comprises the largest dollar amount of noncompliance at \$99.3 million.

**Table 4. Noncompliance by Industry**

<b>Industry</b>	<b>Estimated Noncompliance</b>	<b>Estimated Noncompliance as a Percent of Total Noncompliance</b>	<b>Voluntarily Reported Tax</b>	<b>Noncompliance as a Percent of Total Tax Liability</b>
Construction	\$34,007,717	14.7%	\$1,200,779,222	2.8%
Manufacturing	\$834,787	0.4%	\$626,269,667	0.1%
Transport/Utility	\$26,452,115	11.4%	\$859,722,595	3.0%
Wholesale	\$15,733,541	6.8%	\$866,404,171	1.8%
Retail	\$99,322,203	43.0%	\$3,701,773,134	2.6%
Fin/Real Estate	\$3,548,971	1.5%	\$446,941,833	0.8%
Personal Services	\$34,127,403	14.8%	\$730,024,044	4.5%
Business Services	\$16,902,724	7.3%	\$581,296,821	2.8%
Other	\$195,296	0.1%	\$44,356,005	0.4%
<b>Total</b>	<b>\$231,124,757</b>	<b>100.0%</b>	<b>\$9,057,567,492</b>	<b>2.5%</b>

**Figure 3. Noncompliance by Industry**



Noncompliance not only includes firms that purposefully avoid paying their full tax liability but also firms that may underpay or overpay their tax liability for a variety of reasons, including ignorance, accounting errors, difference of opinion, and negligence or fraud. Underreporting figures tend to be of the most interest. Therefore, Tables 5 and 6 provide estimates of noncompliance by tax type and industry based on debit assessments only.

**Table 5. Industry Noncompliance by Tax Type  
Debit Assessments Only**

Industry	Sales	Use	B&O	Public Utility	Hazardous Substance	Other	Total Non-Compliance
Construction	\$31,283,530	\$4,252,913	\$3,002,317	\$223,272	\$0	\$245	\$38,766,376
Manufacturing	\$4,237,610	\$4,001,150	\$2,978,591	\$108,447	\$171,708	\$0	\$11,497,505
Transport/Util	\$10,318,378	\$12,333,206	\$10,358,986	\$4,163,411	\$13,653	\$113,043	\$37,300,677
Wholesale	\$7,165,714	\$3,918,865	\$18,413,350	\$234,424	\$605,669	\$440,604	\$30,778,626
Retail	\$55,984,593	\$30,821,888	\$17,733,398	\$8,109	\$167,247	\$148,713	\$104,863,949
Fin/Real Estate	\$1,801,760	\$1,630,558	\$10,489,857	\$0	\$0	\$0	\$13,922,175
Bus/Personal Svcs	\$9,848,922	\$23,418,777	\$8,729,106	\$138,623	\$0	\$0	\$42,135,428
Professional Svcs	\$2,735,214	\$12,607,282	\$14,222,093	\$5,297	\$218	\$0	\$29,571,073
Other	\$637	\$162,947	\$114,061	\$0	\$4,029	\$0	\$281,673
<b>All Industries</b>	<b>\$123,376,357</b>	<b>\$93,147,586</b>	<b>\$86,041,760</b>	<b>\$4,881,583</b>	<b>\$966,622</b>	<b>\$703,574</b>	<b>\$309,117,482</b>

**Table 6. Percent of Industry Noncompliance by Tax Type  
Debit Assessments Only**

Industry	Sales	Use	B&O	Public Utility	Hazardous Substance	Other	Total Non-Compliance
Construction	80.7%	11.0%	7.7%	0.6%	0.0%	0.0%	100%
Manufacturing	36.9%	34.8%	25.9%	0.9%	1.5%	0.0%	100%
Transport/Utility	27.7%	33.1%	27.8%	11.2%	0.0%	0.3%	100%
Wholesale	23.3%	12.7%	59.8%	0.8%	2.0%	1.4%	100%
Retail	53.4%	29.4%	16.9%	0.0%	0.2%	0.1%	100%
Fin/Real Estate	12.9%	11.7%	75.3%	0.0%	0.0%	0.0%	100%
Bus/Personal Services	23.4%	55.6%	20.7%	0.3%	0.0%	0.0%	100%
Professional Services	9.2%	42.6%	48.1%	0.0%	0.0%	0.0%	100%
Other	0.2%	57.8%	40.5%	0.0%	1.4%	0.0%	100%
<b>All Industries</b>	<b>39.9%</b>	<b>30.1%</b>	<b>27.8%</b>	<b>1.6%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>100%</b>

Sales tax noncompliance occurs most frequently for construction at 80.7 percent (\$31.3 million) and retailing at 53.4 percent (\$56.0 million). The B&O tax constitutes the majority of tax not reported. The B&O tax noncompliance level is highest for the finance and real estate industry.



## NONCOMPLIANCE BY SIZE OF FIRM

**Table 7. Noncompliance by Size of Firm**

<b>Annual Gross Business Income (\$ in Thousands)</b>	<b>Estimated Noncompliance</b>	<b>Estimated Noncompliance as a Percent of Total Noncompliance</b>	<b>Voluntarily Reported Tax</b>	<b>Noncompliance as a Percent of Total Tax Liability</b>	<b>Average Noncompliance Per Firm</b>
<\$100	\$26,275,134	11.4%	\$203,605,427	11.4%	\$616
\$100-500	\$44,991,025	19.5%	\$598,900,086	7.0%	\$592
\$500-1,000	\$10,210,699	4.4%	\$490,624,930	2.0%	\$826
\$1,000-5,000	\$8,531,678	3.7%	\$1,414,716,704	0.6%	\$928
\$5,000-10,000	\$3,545,460	1.5%	\$696,749,287	0.5%	\$5,307
\$10,000-50,000	\$22,575,986	9.8%	\$1,925,725,059	1.2%	\$10,365
>\$50,000	\$114,994,774	49.8%	\$3,727,245,999	3.0%	\$81,294
<b>Total</b>	<b>\$231,124,757</b>	<b>100%</b>	<b>\$9,057,567,492</b>	<b>2.5%</b>	<b>\$1,599</b>

Table 7 and Figure 4 show noncompliance by size of firm. Table 7 includes estimated noncompliance, voluntarily reported tax liability, and the average noncompliance amount per firm by category. Figure 4 depicts noncompliance estimates based on size of firm as a percent of the total noncompliance for all firms. Size is measured by annual gross business income (GBI). Although firms with over \$50 million constitute the largest percent of total noncompliance (49.8 percent), the noncompliance estimate for these firms represents only 3.0 percent of the total tax liability. While smaller firms in the \$100,000 to \$500,000 gross business income range comprise nearly 19.5 percent of the total noncompliance, their noncompliance estimate represents 7.0 percent of the total tax liability. Firms with \$500,000 to \$50 million in gross business income have much lower rates of noncompliance than the smallest and largest firms. However, when comparing the average noncompliance per firm, the dollar amount generally increases as the firm size increases.

**Figure 4. Percent of Noncompliance by Size of Firm  
Size Based on Annual Gross Business Income (Dollars in Thousands)**

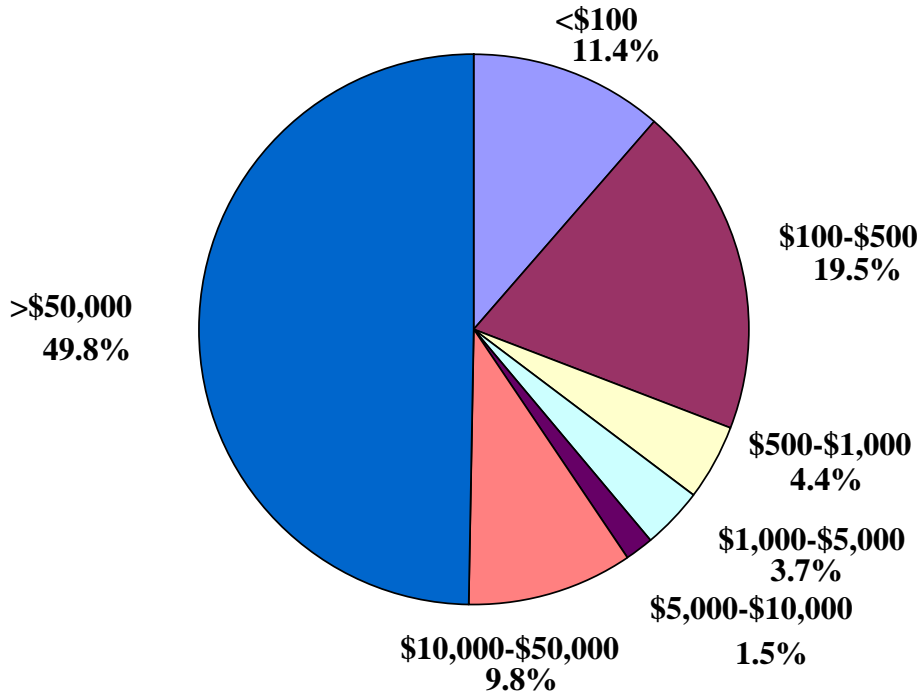


Table 8 shows noncompliance by size and tax type, and Table 9 shows noncompliance by size and tax type as a percent of the total tax type noncompliance. Firms with over \$50 million in gross income comprise the largest amount of noncompliance in the sales tax, the use tax and the B&O tax. The public utility tax shows a net overpayment. The most underreporting occurred in the public utility tax for firms earning between \$10 million and \$50 million in gross income; they underreported \$1.3 million.

**Table 8. Noncompliance by Size of Firm and Tax Type**

Gross Income (\$ Thousands)	Sales	Use	B&O	Public Utility	Hazardous Substance	Other	Total Non- Compliance
<\$100	\$17,130,862	\$2,172,847	\$6,888,142	\$83,283	\$0	\$0	\$26,275,134
\$100-500	\$32,552,046	\$5,073,616	\$6,445,408	\$909,954	\$0	\$0	\$44,991,025
\$500-1,000	\$916,380	\$4,319,118	\$4,738,163	\$237,037	\$0	\$0	\$10,210,699
\$1,000-5,000	\$5,446,374	\$1,735,488	\$1,444,392	(\$98,713)	\$0	\$4,138	\$8,531,678
\$5,000-10,000	\$1,548,221	\$1,538,496	\$430,031	\$27,291	\$162	\$1,260	\$3,545,460
\$10,000-50,000	\$4,565,628	\$11,960,685	\$6,891,688	(\$1,308,647)	\$426,761	\$39,871	\$22,575,986
>\$50,000	\$43,109,171	\$59,082,680	\$13,187,110	(\$101,736)	(\$381,664)	\$99,213	\$114,994,774
<b>Total</b>	<b>\$105,268,681</b>	<b>\$85,882,930</b>	<b>\$40,034,935</b>	<b>(\$251,529)</b>	<b>\$45,258</b>	<b>\$144,483</b>	<b>\$231,124,757</b>

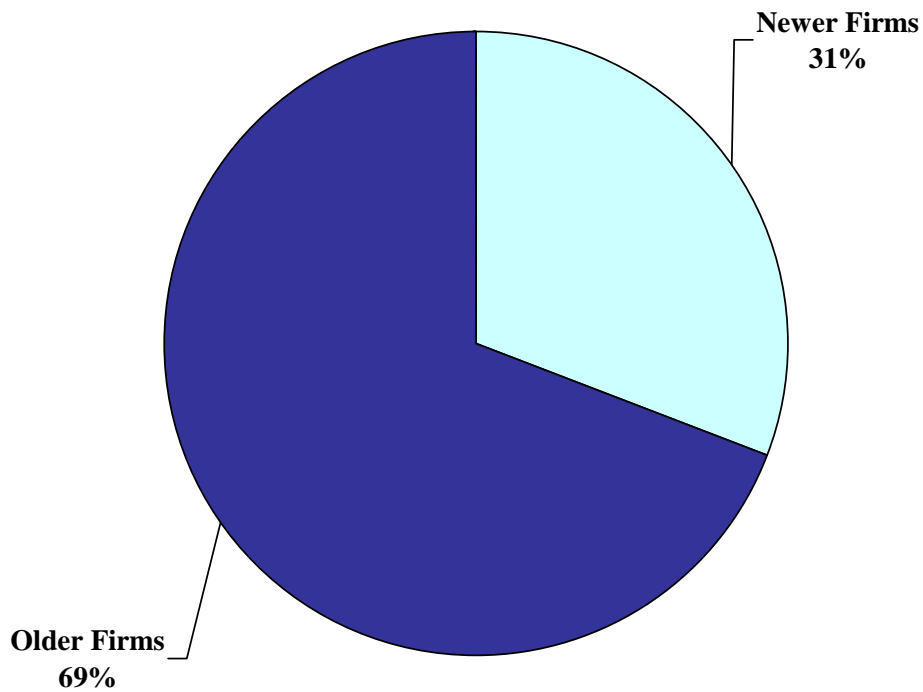
**Table 9. Noncompliance by Size and Tax Type  
As a Percent of the Total Tax Type Noncompliance**

Gross Income (\$ Thousands)	Sales	Use	B&O	Public Utility	Hazardous Substance	Other
<\$100	16.3%	2.5%	17.2%	-33.1%	0.0%	0.0%
\$100-500	30.9%	5.9%	16.1%	-36.18%	0.0%	0.0%
\$500-1,000	0.9%	5.0%	11.8%	-94.2%	0.0%	0.0%
\$1,000-5,000	5.2%	2.0%	3.6%	39.2%	0.0%	2.9%
\$5,000-10,000	1.5%	1.8%	1.1%	-10.8%	0.4%	0.9%
\$10,000-50,000	4.3%	13.9%	17.2%	520.3%	942.9%	27.6%
>\$50,000	41.0%	68.8%	32.9%	40.4%	-843.3%	68.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**NONCOMPLIANCE BY AGE OF FIRM**

We determined a correlation between a firm's age and its size. We found that new firms tend to be small; and while older firms may also be small, large firms usually have been established for a number of years. For the purposes of this study, we defined “newer firms” as firms that opened less than two years before the beginning of the sample audit period. Newer firms accounted for 31 percent of total noncompliance among registered taxpayers (Figure 5) with older firms accounting for 69 percent.

**Figure 5. Net Noncompliance by Age of Firm**



In Calendar Year 2004 newer firms underreported \$71 million, which equates to 5.9 percent of their total tax liability. Older firms underreported \$160.1 million, which represented 2.0 percent of their total tax liability.

**Table 10. Noncompliance by Age of Firm**

	<b>Estimated Noncompliance</b>	<b>Voluntarily Reported Tax</b>	<b>Noncompliance as a Percent of Total Tax Liability</b>
Newer Firms	\$70,985,731	\$1,127,066,791	5.9%
Older Firms	\$160,139,026	\$7,929,943,657	2.0%
<b>All Firms</b>	<b>\$231,124,757</b>	<b>\$9,057,010,448</b>	<b>2.5%</b>

## CONCLUSIONS

For this study we estimated \$231.1 million in total annual excise tax noncompliance for registered taxpayers, which equates to 2.5 percent of the total tax liability. In the 2006 Compliance Study we estimated 1.8 percent noncompliance. This increase in noncompliance was caused by higher levels of noncompliance in sales and use taxes.

As in the previous study, sales tax remained the largest dollar amount of noncompliance (\$105.3 million), while use tax was the leader in the rate of noncompliance (25.5 percent, compared to the sales tax rate of 1.7 percent).

Both the debit and credit assessments increased in the 2008 Compliance Study. In the 2006 study, debit assessments totaled \$216.3 million and credit assessments totaled \$68.0 million; in the 2008 study, debit assessments equaled \$309.1 million and credit assessments equaled \$78.0 million.

The business and personal service and transportation and utility industries have the highest rate of noncompliance. The personal service industry noncompliance rate is 4.5 percent while the transportation and utility industry's rate is 3.0 percent. The largest dollar noncompliance belongs to the retail industry at \$99.3 million.

As in the 2006 study, the 2008 study shows that firms with a gross income greater than \$50 million constitute the largest portion of total noncompliance for all firms. The average noncompliance per firm increases as the firm size increases in both studies.

The newer firms in both the 2006 and 2008 studies underreport at a higher rate than the older firms. In the 2008 study, newer firms have a noncompliance rate of 5.9 percent whereas older firms underreport 2.0 percent. However, the rate for newer firms has declined from a high of 7.8 percent on the 2006 study.