## 2016 Compliance Study

A Study of Compliance Rates for Taxpayers Registered with the Washington Department of Revenue and

Reporting on the Combined Excise Tax Return

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## INTRODUCTION AND METHODOLOGY

This study presents the results of the 2016 review of taxpayer compliance with reporting requirements and exclusively focuses on unreported tax by taxpayers registered with the Washington State Department of Revenue (Department).

This study does not include businesses that are unregistered, or are registered, but are not filing tax returns. Unregistered businesses could include those in the "underground economy" or businesses that are simply unaware of registration and reporting requirements. In addition, this study only estimates compliance for businesses and does not include individuals reporting use tax.

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 selected from 2010 to 2013, 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, the Department stratified the sample data by firm size and industry.

Many of the smaller firms randomly selected for audits depict taxpayers generally excluded by the 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 represents taxpayer underpayment of tax liability and a credit assessment represents taxpayer overpayment of tax liability. Additionally, when referring to total tax liability, this represents the noncompliance amount plus the amount of voluntarily reported tax.

The state taxes discussed in this study include:

- Sales tax,
- Use tax,
- Business and occupation (B\&O) tax,
- Public utility tax, and
- Hazardous substance tax.

Other state taxes such as the property tax, real estate excise tax, timber excise tax, leasehold excise tax, litter tax, cigarette taxes, spirits sales and liter taxes, and taxes not administered by the Department of Revenue are not included. Collections of spirits taxes are recent and the Department has very few audits completed that cover this activity. As a result, the random sample did not capture spirits tax activity.

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 2016 study, the Department projected estimates to Calendar Year 2011.

When comparing to previous studies please note the following:

- The Department had a tax amnesty program that had an impact on assessment activity in 2011. Businesses that participated in the amnesty program produced $\$ 345.8$ million in collections, representing multiple years of tax activity. However, a majority of the collections would likely have been collected regardless of the amnesty program.
- Industry groupings have changed from previous studies, and noncompliance rates from previous studies by industry are not comparable to this study.
- A correction occurred in the underlying calculations of size groupings, and results should not be compared to historical reports

All estimates represent the total population of registered taxpayers on at least one of the excise taxes listed above. 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.

Major findings of the study include the following:

- For Calendar Year 2011, the Department estimated $\$ 283.2$ million in total annual excise tax noncompliance for registered taxpayers. This equals 2.5 percent of the total tax liability.
- Use tax had the highest level of noncompliance by tax type at 21.5 percent, with nearly $\$ 86.3$ million in unreported tax.
- The professional, finance, and real estate industries had the largest dollar amount of noncompliance by industry at $\$ 92.2$ million with a rate of noncompliance of 6.1 percent.
- The transportation, utilities, telecom, internet, and broadcasting industries had the highest rate of noncompliance and the second highest dollar amount. The industries' total estimated unreported tax equals $\$ 85.7$ million which equated to 8.0 percent of the industries' total tax liability.

Table 1. Comparison of 2016 to 2010 Compliance Study by Tax Type

|  | 2016 Compliance Study |  | 2010 Compliance Study |  |
| :---: | :---: | :---: | :---: | :---: |
| Type of Tax | Estimated Annual Noncompliance | Noncompliance as a Percent of Total Liability | Estimated Annual Noncompliance | Noncompliance as a Percent of Total Liability |
| Sales | 124,515,419 | 1.8\% | 75,768,923 | 1.0\% |
| Use | 86,323,166 | 21.5\% | 89,058,203 | 23.0\% |
| Business \& Occupation | 63,714,020 | 1.9\% | 67,146,544 | 2.4\% |
| Public Utility | 3,047,353 | 0.8\% | $(1,885,443)$ | -0.6\% |
| Hazardous Substance | 4,705,488 | 2.2\% | 5,490,412 | 4.6\% |
| Other | 877,254 | 0.9\% | $(107,791)$ | -0.1\% |
| Total | 283,182,701 | 2.5\% | 235,470,849 | 2.1\% |

## TOTAL NONCOMPLIANCE

The Department estimated $\$ 283.2$ million in total annual excise tax noncompliance for registered taxpayers. This equals 2.5 percent of the total tax liability.

As shown in Table 2, use tax had the highest rate of noncompliance at 21.5 percent. Sales tax comprised the largest dollar value of unreported tax with $\$ 124.5$ million.

Table 2. Estimated Noncompliance by Tax Type

|  | Estimated <br> Noncompliance | Voluntary <br> Reported Tax | Noncompliance <br> as a Percent of <br> Total Liability |
| :--- | ---: | ---: | ---: |
| Type of Tax | $124,515,419$ | $6,743,158,120$ | $1.8 \%$ |
| Sales | $86,323,166$ | $315,665,845$ | $\mathbf{2 1 . 5 \%}$ |
| Use | $63,714,020$ | $3,210,388,867$ | $1.9 \%$ |
| Business \& Occupation | $3,047,353$ | $395,905,985$ | $0.8 \%$ |
| Public Utility | $\mathbf{4 , 7 0 5 , 4 8 8}$ | $\mathbf{2 0 4 , 6 1 7 , 8 4 2}$ | $2.2 \%$ |
| Hazardous Substance | 877,254 | $\mathbf{9 4 , 6 7 0 , 8 4 2}$ | $0.9 \%$ |
| Other | $\mathbf{2 8 3 , 1 8 2 , 7 0 1}$ | $\mathbf{1 0 , 9 6 4 , 4 0 7 , 5 0 1}$ | $\mathbf{2 . 5 \%}$ |

Figure 1 depicts the relative proportions of debit and credit assessments. Projections from the years sampled show $\$ 523$ million in annual underreported tax and $\$ 240$ million in over reported tax.

Figure 1. Estimated Debit and Credit Assessments Dollars in Millions


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 below, the Department estimated the local share of noncompliance at $\$ 78.2$ million; $\$ 32.0$ million of this represents use tax and the remaining \$46.2 million represents unreported sales tax.

Figure 2. State and Local Sales and Use Tax Noncompliance Dollars in Millions


## NONCOMPLIANCE BY INDUSTRY

In Table 3 each industry grouping represents selected North American Industry Classification System (NAICS) codes. Note that the industry groupings have changed from previous studies, and rates of noncompliance from previous studies by industry are not comparable to this study. This is due to a NAICS update in 2012.

Table 3 details Calendar Year 2011's estimated noncompliance by industry and provides each industry's voluntarily reported tax liability. According to the percentages, the transportation, utilities, telecom, internet, and broadcasting industries group had the highest rate of noncompliance at 8.0 percent. However, the professional, finance, and real estate industries group had the highest dollar amount of noncompliance at $\$ 92.2$ million.

Table 3. Estimated Noncompliance by Industry

| Industry | Estimated Annual Noncompliance | Percentage of Annual Noncompliance | Voluntarily Reported Tax Liability | Noncompliance as a Percent of Total Liability |
| :---: | :---: | :---: | :---: | :---: |
| Construction | 16,367,601 | 5.8\% | 1,187,556,854 | 1.4\% |
| Manufacturing | $(860,011)$ | -0.3\% | 822,387,733 | -0.1\% |
| Professional, Finance, Real Estate | 92,173,467 | 32.5\% | 1,406,735,496 | 6.1\% |
| Retail | 58,698,223 | 20.7\% | 4,572,207,032 | 1.3\% |
| Transportation, Utilities, Telecom, Internet, Broadcasting | 85,666,448 | 30.3\% | 985,961,233 | 8.0\% |
| Wholesaling | 21,275,335 | 7.5\% | 1,022,276,531 | 2.0\% |
| Personal, Health | 3,530,318 | 1.2\% | 865,268,234 | 0.4\% |
| Agriculture, Mining, Public Administration, Other | 6,331,321 | 2.2\% | 102,014,388 | 5.8\% |
| Total | 283,182,701 | 100\% | 10,964,407,501 | 2.5\% |

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 lack of understanding regarding reporting requirements, accounting errors and differences of opinion. Therefore, Tables 4 and 5 provide estimated noncompliance by tax type and industry based on debit assessments only.

Table 4. Estimated Noncompliance by Industry and Tax Type Debit Assessments Only

| Industry | Sales | Use | B\&O | Public Utility | Hazardous <br> Substance | Other | Total <br> Noncompliance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 22,398,293 | 7,629,855 | 2,879,862 | 60,527 | - | 24,259 | 32,992,795 |
| Manufacturing | 1,789,890 | 10,047,186 | 11,573,597 | - | 5,279,014 | 617,155 | 29,306,841 |
| Professional, Finance, Real Estate | 38,053,657 | 32,402,297 | 125,354,606 | 3,818,130 | 20,885 | 125,635 | 199,775,211 |
| Retail <br> Transportation, Utilities, | 48,936,212 | 14,189,629 | 14,889,189 | 7,382 | 599,278 | 268,867 | 78,890,557 |
| Telecom, Internet, Broadcasting | 47,250,243 | 19,101,114 | 29,560,821 | 5,458,343 | 244,911 | 903,988 | 102,519,420 |
| Wholesaling | 3,679,469 | 8,091,593 | 32,457,094 | 424,454 | 1,148,927 | 684,273 | 46,485,810 |
| Personal, Health | 5,874,712 | 11,323,287 | 2,354,465 | 853 | - | 296 | 19,553,614 |
| Agriculture, Mining, Public Administration, Other | 3,191,131 | 5,463,367 | 4,839,629 | 227,221 | - | 7,877 | 13,729,226 |
|  |  |  |  |  |  |  |  |
| All Industries | 171,173,605 | 108,248,328 | 223,909,264 | 9,996,910 | 7,293,016 | 2,632,351 | 523,253,474 |

Sales tax noncompliance occurs most frequently for construction at 67.9 percent or \$22.4 million and retailing at 62.0 percent or $\$ 48.9$ million. Overall noncompliance occurs most frequently for the B\&O tax, with $\$ 223.9$ million in unreported tax. The professional, finance, and real estate industries group had the highest B\&O tax noncompliance dollars.

Table 5. Percent of Estimated Industry Noncompliance by Tax Type
Debit Assessments Only

| Industry | Sales | Use | B\&O | Public <br> Utility | Hazardous <br> Substance | Other | Total <br> Noncompliance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 67.9\% | 23.1\% | 8.7\% | 0.2\% | 0.0\% | 0.1\% | 100\% |
| Manufacturing | 6.1\% | 34.3\% | 39.5\% | 0.0\% | 18.0\% | 2.1\% | 100\% |
| Professional, Finance, Real Estate | 19.0\% | 16.2\% | 62.7\% | 1.9\% | 0.0\% | 0.1\% | 100\% |
| Retail | 62.0\% | 18.0\% | 18.9\% | 0.0\% | 0.8\% | 0.3\% | 100\% |
| Transportation, Utilities, Telecom, Internet, Broadcasting | 46.1\% | 18.6\% | 28.8\% | 5.3\% | 0.2\% | 0.9\% | 100\% |
| Wholesaling | 7.9\% | 17.4\% | 69.8\% | 0.9\% | 2.5\% | 1.5\% | 100\% |
| Personal, Health | 30.0\% | 57.9\% | 12.0\% | 0.0\% | 0.0\% | 0.0\% | 100\% |
| Agriculture, Mining, Public Administration, Other | 23.2\% | 39.8\% | 35.3\% | 1.7\% | 0.0\% | 0.1\% | 100\% |
|  |  |  |  |  |  |  |  |
| All Industries | 32.7\% | 20.7\% | 42.8\% | 1.9\% | 1.4\% | 0.5\% | 100\% |

## NONCOMPLIANCE BY SIZE OF FIRM

Table 6 shows noncompliance by size of firm. Table 6 includes estimated noncompliance, voluntarily reported tax liability, and the average noncompliance amount per firm by size category. Note a correction occurred in the underlying analysis of noncompliance by size of firm, and results should not be compared to historical reports.

Interestingly, noncompliance as a percent of total tax liability fluctuates depending on gross income, and businesses with gross income of less than $\$ 100,000$ had the lowest rate of noncompliance.

When comparing the average noncompliance per firm, the dollar amount generally increases as the firm size increases.

Table 6. Estimated Noncompliance by Size of Firm

| Gross Income <br> (\$ in Thousands) | Estimated <br> Noncompliance | Voluntarily <br> Reported Tax | Noncompliance as a <br> Percent of Total Tax <br> Liability | Average <br> Noncompliance <br> Per Firm |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\$ 100<$ | $2,103,562$ | $215,853,948$ | $1.0 \%$ | $\mathbf{2 6 3}$ |
| $\$ 100-500$ | $25,783,170$ | $640,402,221$ | $3.9 \%$ | 1,343 |
| $\$ 500-1,000$ | $10,405,090$ | $519,669,177$ | $2.0 \%$ | 1,926 |
| $\$ 1,000-5,000$ | $25,350,591$ | $1,573,624,687$ | $1.6 \%$ | 2,315 |
| $\$ 5,000-10,000$ | $34,118,675$ | $776,670,796$ | $4.2 \%$ | 4,814 |
| $\$ 10,000-50,000$ | $81,772,544$ | $2,152,490,437$ | $3.7 \%$ | 13,933 |
| $\$ 50,000$ | $103,649,070$ | $5,085,696,235$ | $2.0 \%$ | 56,524 |
|  |  |  |  |  |
| Total | $\mathbf{2 8 3 , 1 8 2 , 7 0 1}$ | $\mathbf{1 0 , 9 6 4 , 4 0 7 , 5 0 1}$ | $\mathbf{2 . 5 \%}$ | $\mathbf{4 , 8 5 3}$ |

Table 7 and Figure 3 show noncompliance by size and tax type. Estimates are for debit assessments only. Firms with over $\$ 50$ million in gross income comprise the largest amount of debit assessments for sales tax, use tax, and the B\&O tax.

Table 7. Estimated Noncompliance by Size of Firm and Tax Type Debit Assessments Only

| Gross Income (\$ in Thousands) | Sales | Use | B \& 0 | Public Utility | Hazardous Substance | Other | Total <br> Noncompliance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$100< | 1,915,316 | 232,932 | 570,099 | 61,553 | - | - | 2,779,899 |
| \$100-500 | 13,056,682 | 7,668,862 | 6,756,519 | 196,455 | - | 9,252 | 27,687,770 |
| \$500-1,000 | 5,429,116 | 1,539,772 | 5,262,356 | 428,050 | - | 1,195 | 12,660,489 |
| \$1,000-5,000 | 15,206,705 | 10,785,860 | 9,120,030 | 484,672 | - | 138,707 | 35,735,974 |
| \$5,000-10,000 | 16,410,713 | 11,601,821 | 25,210,114 | 3,606,049 | - | 3,725 | 56,832,423 |
| \$10,000-50,000 | 57,383,948 | 25,937,874 | 54,483,382 | 4,260,426 | 108,209 | 987,517 | 143,161,355 |
| >\$50,000 | 61,771,125 | 50,481,208 | 122,506,763 | 959,705 | 7,184,806 | 1,491,956 | 244,395,563 |
|  |  |  |  |  |  |  |  |
| Total | 171,173,605 | 108,248,328 | 223,909,264 | 9,996,910 | 7,293,016 | 2,632,351 | 523,253,474 |

Figure 3. Noncompliance as a Percent of Total Tax Liability


## NONCOMPLIANCE BY AGE OF FIRM

The Department determined a correlation between a firm's age and its size. For the purposes of this study, the Department defined "newer firms" as firms that opened less than two years before the beginning of the sample audit tax reporting period. For example, if a firm selected with an audit period start date of January 1, 2005 and had opened in July of 2003, then they would have been less than two years old at the start of their tax activity audit start date, and defined as a newer firm.

The Department found that new firms are generally small. While older firms may also be small, large firms usually have been established for a number of years. In this study newer firms accounted for 15 percent of total noncompliance among registered taxpayers with older firms accounting for 85 percent.

Table 8. Estimated Noncompliance by Age of Firm

|  |  | Total Voluntarily <br> Reported Tax | Noncompliance as a <br> Percent of Total Tax <br> Liability |  |
| :--- | ---: | ---: | ---: | ---: |
| Age | Noncompliance | Liability | $4.7 \%$ |  |
| Newer | $42,879,565$ | $879,171,153$ | $2.3 \%$ |  |
| Older | $240,303,136$ | $10,085,236,348$ |  |  |
|  |  |  | $\mathbf{2 . 5 \%}$ |  |
| Total | $\mathbf{2 8 3 , 1 8 2 , 7 0 1}$ | $\mathbf{1 0 , 9 6 4 , 4 0 7 , 5 0 1}$ |  |  |

## CONCLUSIONS

For this study the Department estimated $\$ 283.2$ million in total net annual excise tax noncompliance for registered taxpayers, which equated to 2.5 percent of the total tax liability. This increased in comparison to the 2010 study, at 2.1 percent.

Historically, the noncompliance rates have been fairly consistent and range from a low of 1.8 percent in the 2006 study to a high of 2.8 percent in the 1996 study. See table 9 below.

Table 9. Historic Noncompliance Rates

| Year of Study | Noncompliance Rate |
| :---: | :---: |
| 2010 | $2.1 \%$ |
| 2008 | $2.5 \%$ |
| 2006 | $1.8 \%$ |
| 2005 | $2.2 \%$ |
| 2003 | $2.5 \%$ |
| 1996 | $2.8 \%$ |

Sales tax had the largest net dollar amount of noncompliance at $\$ 124.5$ million; however, this only represented 1.8 percent of the total sales tax liability. Use tax had the largest rate of noncompliance at 21.5 percent.

Both the debit and credit assessments increased in the 2016 Compliance Study. In the 2010 study, debit assessments totaled $\$ 325$ million and credit assessments totaled $\$ 90$ million; whereas in the 2016 study, debit assessments equaled $\$ 523$ million and credit assessments equaled $\$ 240$ million.

The transportation, utilities, telecom, internet, and broadcasting industries have the highest rate of noncompliance at 8.0 percent. The largest dollar noncompliance belongs to the professional, finance, and real estate industries at $\$ 92.2$ million.

Noncompliance as a percent of total tax liability fluctuated depending on gross income. The lowest rate of noncompliance occurred in businesses with gross income of less than $\$ 100,000$.

Newer firms in both the 2010 and 2016 studies underreport at a higher rate than the older firms. In the 2016 study, newer firms have a noncompliance rate of 4.7 percent, whereas older firms have a noncompliance rate of 2.3 percent.

For the local share of sales and use tax noncompliance, the Department estimated a total of $\$ 78.2$ million - $\$ 32.0$ million of this represents use tax and the remaining $\$ 46.2$ million represented unreported sales tax.

