

Model Review: Out-of-State Credit (Supplement to Personal Income Tax model)

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Model Purpose For the personal income tax (PIT) model, estimate the revenue impact of out-of-state credit, by estimating the credit amount for each taxpayer.

Data Sources (1) IRS: Individual income tax data for Washington
(2) Oregon Department of Revenue: Personal income tax statistics
(3) IRS: Historical Table 2 for Washington state

Requirements Model Used to Fulfill This is a supplemental analysis, to support development of a model for a personal income tax, as required under ESHB 1109 (2019), Sec. 137(B) (c)(vii).

Questions for Technical Advisory Group We do not have specific questions, but welcome advice and suggestions.

Questions from Technical Advisory Group

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Overview

The personal income tax proposals provide a credit against income tax payments made to other states and jurisdictions. In this section we provide an overview of the calculation.

Before analyzing data for Washington taxpayers, we collected information from the Oregon Department of Revenue reflecting the amount of Oregon income taxes paid by Washington residents and the amount of out-of-state credit claimed. We also gathered information on Idaho tax rates. We will use this information as inputs for our analysis of Washington tax returns data from the IRS.

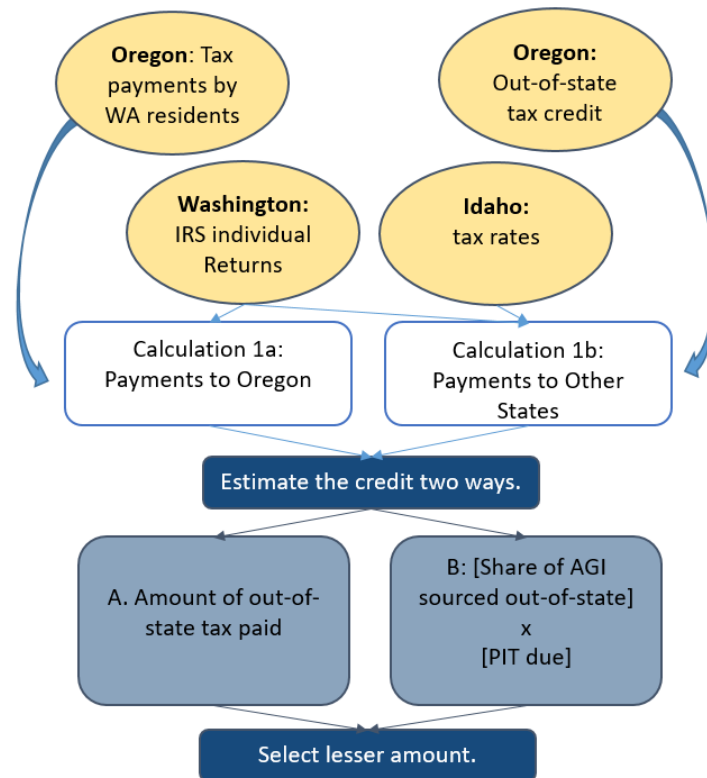


Figure 1. Overview of calculation.

The method consists of two separate calculations, from which the lower credit amount is selected.¹

Calculation 1 requires estimating the amount of out-of-state tax each individual paid (Figure 1).

Using Calculation 2, we find the proportion of an individual's adjusted gross income (AGI) that sourced in other states and multiply it times the Washington tax due.

For years beyond 2017, we will grow the amount of the credit for each individual by applying growth rates published by the Economic and Revenue Forecast Council for Washington wages.

¹ Two calculations are needed to conform with the provisions of 2003 legislation. See *The Out-of-state Tax Credit* below.

Background

Personal income taxes and taxation of nonresidents

Personal income taxes are a major source of state government revenue, accounting for 36 percent of state tax collections nationally in fiscal year (FY) 2017.² Forty-three states, including Oregon and Idaho, levy personal income taxes. Among these, all but two tax wage and salary income. Most states use an individual's AGI, adjusted for state purposes, as the tax base.

Many states, including Oregon and Idaho, tax the income of nonresidents if it is sourced within their state. For instance, Oregon taxes employee compensation and business income if either is derived from services performed within the state. Similarly, rental income and gains from the sale of real estate are taxed, if derived from within Oregon.

Oregon has reciprocal agreements with four other states.

Reciprocal agreements between two states allow a resident of one state to receive income from a different state without having to pay state income taxes there. Oregon has agreements with four states: California, Arizona, Indiana, and Virginia. Oregon residents may claim a nonresident credit on the returns they file in these states, rather than taking an out-of-state credit on their Oregon returns. Thus, an Oregon resident with income sourced in any of these states pays only Oregon tax on this income, rather than paying the other state's tax.

Tax credit amounts are positively associated with tax rates.

The aggregate amount of any tax credit will show a positive association with the tax rate(s) imposed in a taxpayer's state of residence. This is because a credit cannot exceed the amount of gross tax, which of course depends on the tax rate. However, the relationship between a tax rate and the amount of a credit is not straightforward; reducing a tax rate by half would not necessarily half the aggregate credit amount.

This is because a taxpayer's gross tax due acts as a "ceiling" for the credit amount. Thus, a taxpayer with and out-of-state tax under their gross tax amount would see no change in credit amount as a rate is lowered, unless the gross tax amount is lowered below the level of the out-of-state tax. Thus, comparing a proposal with an 8 percent tax rate to one with a 4 percent rate, we expect the credit amount for the latter to be less than for the former. But the difference would be less than 50 percent.

Inflow and outflow of earnings

The US Bureau of Economic Analysis publishes data on the inflow and outflow of earnings for all fifty states. Based on our review of the BEA data and Oregon PIT statistics, we estimate that about \$4.7 billion in Oregon earnings was received by Clark County residents in 2017, while an additional \$2.1 billion in Oregon earnings was received by residents of other Washington counties. In contrast, Washington residents received just 1.2 billion in earnings from other states (Figure 2).

² Scarboro, M. (2017). *State individual income tax rates and brackets for 2017*. The Tax Foundation (<https://taxfoundation.org/state-individual-income-tax-rates-brackets-2017/>)



Figure 2. Estimated inflow of earnings from Oregon, Idaho and other states. Author’s analysis of data from the US Bureau of Economic Analysis and the Oregon Department of Revenue.

Oregon personal income tax and Washington state

Oregon’s PIT tax rates are recognized as among the highest within the United States. The rate structure is progressive, with higher-income taxpayers subject to higher rates. In 2017, effective tax rates range from 0.8 percent for those with the lowest incomes, to 8 percent for those with annual incomes of \$500,000 or more.³

For tax year 2017, the total out-of-state credit allowed for Oregon taxpayers was \$53 million. If Washington taxpayers received the same amount of credit, the total amount would be about \$128 million, after adjusting for the amount of Washington incomes and the number of residents.

But to get a ballpark estimate of the credit, we must also consider the effect of wages and other income flowing from Oregon to Washington. A major source of out-of-state wages for Washington employment is Portland (Oregon), with many Clark County (Washington) residents working in Portland or other Oregon locations. In contrast, Oregon has no large metro area as a neighbor, and one neighboring state, Washington, lacks a personal income tax. For tax year 2017, Washington residents paid \$325 million in personal income taxes to Oregon.

A simple calculation can provide information about the likely order of magnitude for an out-of-state credit. We estimate that if Washington adopted a PIT with the same effective tax rates as Oregon, the out-of-state credit for Washington would equal the sum of \$128 million and \$325 million, or \$453 million. We expect that if proposed rates for a Washington PIT are similar to Oregon’s, then the total credit amount estimated will be measured in hundreds of millions of dollars (Table 1).

³ Author’s calculation, based on summary statistics from the Oregon Department of Revenue.

Table 1. An order-of-magnitude estimate of Washington’s out-of-state credit. Author’s calculation, using 2017 summary statistics from the Oregon Department of Revenue.

Estimated out-of-state credit (\$000,000)		
Payments to Oregon	325	Taxes paid by WA residents to Oregon Corresponds to Oregon credit amount, \$53 million
Payments to other states	128	
Total	453	

The federal out-of-state tax deduction

Under federal income tax rules, taxpayers who itemize deductions may deduct payments made for state and local income taxes, as part of the state and local tax (SALT) deduction. For tax year 2017, there was no limit for the deduction amount, but beginning with tax year 2018, federal tax reforms imposed a \$10,000 limit.

In general, higher-income households are more likely to itemize deductions than households with low or moderate incomes, since for many in the latter group the standard deduction exceeds the itemized amount. Consistent with this pattern, higher-income households in Washington were more likely than others to report an out-of-state income tax deduction. For instance, our analysis of IRS summary statistics for 2017 found that about one in five taxpayers with incomes over \$1 million income deducted out-of-state taxes, compared with about one in 40 taxpayers statewide (Table 2).

Table 2. State and local income tax deduction by income bracket, Washington tax returns, 2017. Source: IRS Statistics of Income, Historic Table 2.

Adjusted Gross Income	All Returns		State / local income tax deduction (SALT)		SALT as percentage of totals	
	Number of Returns	AGI	Number of Returns	Amount	Number of Returns	Amount
Under \$1	44,080	(4,389,975)	0	0	0.0%	0.0%
\$1 under \$10,000	376,450	1,954,398	530	2,168	0.1%	0.1%
\$10,000 under \$25,000	597,400	10,455,741	1,960	4,660	0.3%	0.0%
\$25,000 under \$50,000	836,500	30,547,608	7,750	17,637	0.9%	0.1%
\$50,000 under \$75,000	529,400	32,634,125	11,890	39,555	2.2%	0.1%
\$75,000 under \$100,000	364,070	31,587,676	13,470	58,897	3.7%	0.2%
\$100,000 under \$200,000	585,750	80,016,784	31,450	211,452	5.4%	0.3%
\$200,000 under \$500,000	193,880	55,356,561	15,000	217,020	7.7%	0.4%
\$500,000 under \$1,000,000	28,400	19,073,340	3,400	113,309	12.0%	0.6%
\$1,000,000 or more	12,520	41,119,646	2,620	393,483	20.9%	1.0%
All returns	3,568,430	298,355,904	88,070	1,058,181	2.5%	0.4%

IRS summary statistics can provide us a second way to estimate an order of magnitude for an out-of-state credit. In total, Washington taxpayers reported over \$1 billion in out-of-state tax payments for 2017. But since the majority of households (70 percent)⁴ did not itemize deductions, the true amount of out-of-state payments was greater. On the other hand, the total of out-of-state payments is the *maximum* possible amount for the aggregate credit, as the credit amount depends on tax rates. Thus, our review of IRS summary statistics confirms our order-of-magnitude estimate based on Oregon statistics; the aggregate amount of the credit is likely measured in the hundreds of millions or approximates \$1 billion.

Washington's out-of-state tax credit

While the 2002 study included a credit for taxes paid to other jurisdictions, it provided no description of the credit. Therefore, we rely on 2003 legislation for the details.

In 2003, four bills were introduced on the topic of a personal income tax. All used the following language to provide for an out-of-state credit:⁵

“(1) A resident individual, estate, or trust is allowed a credit against the tax imposed under this title for the amount of any income tax imposed by another state or foreign country, or political subdivision of the state or foreign country, on income taxed under this title, subject to the following conditions, which shall be imposed separately with respect to each taxing jurisdiction:

(a) The credit is allowed only for taxes imposed by the other jurisdiction on net income from sources within that jurisdiction; and

(b) The amount of the credit shall not exceed the smaller of:

(i) The amount of tax paid to the other jurisdiction on net income from sources within the other jurisdiction; or

(ii) The amount of tax due under this title before application of credits allowable by this title, multiplied by a fraction. The numerator of the fraction is the amount of the taxpayer's adjusted gross income subject to tax in the other jurisdiction. The denominator of the fraction is the taxpayer's total adjusted gross income as modified by this title. The fraction shall never be greater than one.

(2) If, in lieu of a credit similar to the credit allowed under subsection (1) of this section, the laws of the other taxing jurisdiction contain a provision exempting a resident of this state from liability for the payment of income taxes on income earned for personal services performed in such jurisdiction, then the director is authorized to enter into a reciprocal agreement with such jurisdiction providing a similar tax exemption on income earned for personal services performed in this state.”

We will model the credit as described above.

Assumptions

As we do throughout the PIT model, we use tax year 2017 individuals as a proxy for individuals in 2018 and beyond. For more information on how we project the amount of personal income and the number of individuals into the future, see the main *Model Review* document for the PIT model (section *Forecast Income*).

⁴ Author's analysis of Historic Table 2 for tax year 2017, IRS Statistics of Income.

⁵ SB 5056 (2003), Sec. 304

We make the following assumptions:

(1) Washington does not enter a reciprocal agreement with Oregon. This assumption supports Calculation 1A (below), in which we assume that Washington residents with Oregon tax payments would claim the credit. Given the sizeable flow of net earnings from Oregon to Washington, coupled with Oregon’s high tax rates, we find this assumption reasonable.

(2) Washington enters a reciprocal agreement with the same states as Oregon regarding taxation of nonresident income. This assumption supports Calculation 1B (below), in which we assume that Washington’s out-of-state credit, in aggregate, would be like Oregon’s. Also see Table 1, *Payments to other states*.

(3) Out-of-state taxes paid by Washington residents are paid only to Oregon, Idaho, and New York. For most out-of-state tax payments not made to Oregon, we assume they were paid to Idaho due to its proximity and the fact that its tax rates are moderate when compared with other states. However, as federal taxable income forms the Idaho tax base, and a significant amount of out-of-state tax payments were reported by those with no federal taxable income, we must select a different state as the assumed recipient of such payments. We select New York for two reasons. First, after Washington, it is the state where the greatest amount of business income was sourced by individual taxpayers in 2017. Second, as New York has relatively high tax rates, selecting it means we will assume higher amounts of a taxpayer’s AGI were sourced out of state, resulting in a higher assumed credit amount.

Data Sources

For more detailed information on data sources, see Appendix B.

IRS Individual Income Tax Data: We will use returns microdata from the individual tax data; this provides information on AGI, location, and for itemizers, the amount of out-of-state tax paid.

IRS Statistics of Income (SOI) – Historic Table 2 for Washington: We have used this table to provide background information as we develop the method for analysis.

Bureau of Economic Analysis: We use summary data in inflow and outflows of earnings for Washington, Idaho and Oregon to provide background information on the magnitude of monetary flows between the states.

Oregon Department of Revenue: We use Oregon summary tables for two purposes:

1. Obtain the amount of Oregon tax paid by nonresidents. The latter is provided with a breakout between Clark County taxpayers and all other Washington taxpayers.
2. Obtain the amount of out-of-state credit received by Oregon residents.

All statistics are reported with breakouts on AGI brackets.

New York Department of Taxation and Finance: We use summary statistics to estimate the amount of out-of-state AGI we estimate for taxpayers assumed to have income sourced in New York.

Preliminary Analyses

In order to estimate the amount of a taxpayer’s income (AGI) sourced in Idaho, we will estimate Idaho taxable incomes based on the Idaho tax amount estimated. As the Idaho taxable amount is the same as the federal taxable amount, we will not concern ourselves with deductions, exemptions, or effective tax rates. Rather, we will translate the Idaho tax amount to the Idaho taxable, and then translate this amount to an Idaho AGI.

Model A: Describe relationship between Idaho tax amount and taxable income

To do this, we will use the Idaho rate tables provided in the Appendix. Based on the rates listed, we will produce linear equations with the tax amount as a function of taxable income. As the rate schedule depends on filing status (single or joint) and tax rates are graduated, we will produce a separate equation for each income bracket and each filing status.

For our estimate, we need a model describing taxable income as a function of the tax amount. We will rearrange each equation to follow this form.

Model B: Describe Washington AGI as a function of taxable income

Since our goal is to estimate the amount of a taxpayer's AGI sourced in Idaho, we will describe the association between federal taxable income and AGI by fitting a regression model, using Washington returns data as the sample data.

Calculate credit amount

For each taxpayer, we will perform two calculations, selecting the lesser of the two credit amounts as the credit amount. Calculation 1 estimates the amount of income tax paid to other states. Calculation 2 estimates the amount of a taxpayer's adjusted gross income (AGI) sourced from another state. For both calculations, we analyze IRS returns data for Washington individual returns in 2017.

Calculation 1: Estimate amount of income tax paid to another state

We will break our estimate of out-of-state tax payments to two parts, estimating an out-of-state tax payment for each taxpayer. In Part 1A, we estimate the amount of Oregon income tax. In Part 1B, we estimate the amount of income tax paid to states other than Oregon.

Credit for Oregon tax payments (Part 1A)

In this step, we select taxpayers who we assume paid tax to Oregon. In aggregate, these taxpayers must match Oregon statistical tables with regards to the number of returns and the amount of Oregon AGI for each income bracket.⁶ To align with Oregon tables, all calculations are stratified on a binary variable, *Clark*, which indicates whether a taxpayer resided in Clark County (Washington) or not.

To this end, we have taken the following steps:

1. Developed a regression model to estimate Oregon AGI as a function of a taxpayer's federally reported AGI.
2. Selected Washington taxpayers to be assumed to pay the Oregon tax, first selecting those who reported paying an out-of-state tax.
3. Starting with Oregon AGI amounts predicted by the model, adjusted taxpayers' Oregon AGIs to align with totals in Oregon statistical tables.

For taxpayers assumed to pay tax in Oregon that do not show an out-of-state tax amount in the IRS data, we will estimate their Oregon tax amount by taking the following steps for each taxpayer:

1. Assign an effective tax rate based on the estimated amount of Oregon AGI, using rates calculated from Oregon summary statistics.⁷
2. Use this rate to calculate the tax amount.
3. Compare preliminary amounts, when aggregated on AGI brackets, with Oregon summary tables, and adjust the tax amount so that our aggregate statistics align with Oregon's.

⁶ See Appendix B (Oregon Department of Revenue, Table A for Clark County and Other Washington counties).

⁷ See Appendix B: Oregon Department of Revenue for detail.

Credit for tax payments to other states (Part 1B)

In Part 1B of the calculation, we will estimate, for each Washington taxpayer, the amount of income tax paid to Idaho, California, and all other states besides Oregon. For the sake of simplicity, we assume all such payments were paid to Idaho or to New York. For an estimate of aggregate target amounts, we use Oregon summary statistics as an input, because we assume Washington's out-of-state credit is like Oregon's.

We will take the following steps, stratifying the analysis on income brackets:

1. Obtain Oregon summary statistics relating to out-of-state credit amounts, stratified on income brackets (Tables 3 & 4).
2. Using Washington returns data, produce a table listing taxpayer counts (columns (a) and (e)). We will assume that the proportions of returns with a credit (col. (f)) equals Oregon's proportions.
3. From Washington returns data, randomly select taxpayers to assign an out-of-state credit, until target counts are hit, first selecting from among taxpayers who reported an out-of-state credit. All returns showing an out-of-state credit must be included, even if preliminary targets are exceeded.
4. Model the mean credit amount (col. (h)) as a function of mean AGI (col. (c)).
5. Model the gross effective tax rate (col. (d)) as a function of mean AGI (col. (c)).
6. For each taxpayer with the credit, assign a preliminary credit amount and an Oregon effective tax rate, using the models.
7. To estimate the amount of income (AGI) coming from Idaho and New York, we will do the following:
 - a. **Idaho**, used for taxpayers reporting a nonzero federal taxable income: We will first assign each taxpayer an Idaho taxable income, which we modeled previously as a function of the tax amount (*Preliminary Analyses*, Model A). Next, we will estimate the federal AGI sourced in Idaho, using the Model B equation.
 - b. **New York**, used for taxpayers reporting no federal taxable income: We will assign each taxpayer a New York AGI, using effective rates we calculate based on income bracket from summary statistics from the New York Department of Taxation and Finance.
8. We will take the remaining steps separately for each tax proposal, as rates vary with proposals.
 - a. Calculate their Washington gross effective tax rate (before credits).
 - b. Calculate the mean between the Washington effective rate and the Oregon effective rate.
 - c. Take the proportion of this mean rate to the Oregon rate. Multiply this time the preliminary credit amount to yield the tentative credit amount.

Calculation 2: Estimate fraction of AGI coming from out-of-state income

In Calculation 2, for each taxpayer, we will compute the proportion of their income sourced out-of-state (using the out-of-state income amount from Calculation 1), and apply this proportion to their gross tax due.

Calculate credit

For each taxpayer, the credit is computed as the lesser of the two values estimated in Calculations 1 and 2.

Forecast credit

For each individual, we need to forecast the amount of the credit to future years. For each individual and forecasted year, we begin with the credit amount for TY2017, and apply growth rates from the Washington Economic and Revenue Forecast Council forecast for wages.⁸

Appendix A: References

Washington legislation

During the 2003 legislative session, four bills were introduced on the topic of a personal income tax:

- Washington State Legislature (2003). *SB 5056: Implementing tax reform.* (<https://app.leg.wa.gov/billsummary?BillNumber=5056&Year=2003&Initiative=false>)
- Washington State Legislature (2003). *SB 5057: Implementing tax reform.* (<https://app.leg.wa.gov/billsummary?BillNumber=5057&Initiative=false&Year=2003>)
- Washington State Legislature (2003). *SB 5449: Implementing tax reform.* (<https://app.leg.wa.gov/billsummary?BillNumber=5449&Initiative=false&Year=2003>)
- Washington State Legislature (2003). *SB 5902: Providing additional funding for the support of the common schools and state institutions of higher education.* (<https://app.leg.wa.gov/billsummary?BillNumber=5902&Initiative=false&Year=2003>)

Appendix B: Data Sources

Below, we list the tables and variables we will use.

IRS - Individual Income Tax Returns

Dataset Name: Individual Master File (IMF) and Individual Return Transaction File (IRTF)

Filer Information

Description	Comment
Filer's Taxpayer Identification Number	
Filer's City	Based on each filer's city, we have assigned a Washington county.
Adjusted Gross Income (AGI)	Calculation 1B is stratified on federal AGI.
Filing Status	Idaho applies different tax rates for single and joint filers.
Federal taxable income	The Idaho taxable amount is the same as the federal taxable.
Out-of-state income tax amount	Used in Calculations 1A and 1B.

Bureau of Economic Analysis

To provide background on the amount of wages Washington residents earn in out-of-state locations, we used data from the Bureau of Economic Analysis (BEA) relating to inflows and outflows of earnings for the states. The table we use is called SAINC91. For more information on this data, see the BEA's webpage at

⁸ An example forecast is found at Washington Economic and Revenue Forecast Council (November 2019). *Washington State Economic and Revenue Forecast* (p. 61). (<https://erfc.wa.gov/sites/default/files/public/documents/publications/nov19pub.pdf>)

https://apps.bea.gov/iTable/index_regional.cfm. To access the data, see the BEA’s Regional Economic Accounts at <https://apps.bea.gov/regional/downloadzip.cfm>.

Oregon Department of Revenue

Oregon’s Department of Revenue posts detailed information on their out-of-state credit and payments by non-residents, at *Oregon personal income tax reports and statistics* (<https://www.oregon.gov/dor/programs/gov-research/Pages/research-personal.aspx>). We will use data from the tables listed below.

Clark County: Total Income and Tax, 2017

Table 3. Clark County (Washington) total income and tax for Oregon personal income tax, 2017.

AGI Level (\$000)	Number of Returns	Net Tax (\$000)	Effective rate for Net Tax
Less than zero	993	1	NA
0-5	11,024	478	0.0%
5-10	5,663	1,158	2.5%
10-15	4,684	1,965	2.8%
15-20	4,006	2,687	3.4%
20-25	3,968	3,745	3.8%
25-30	3,900	4,930	4.2%
30-35	4,043	6,566	4.6%
35-40	3,736	7,381	5.0%
40-45	3,495	8,078	5.3%
45-50	3,307	8,817	5.4%
50-60	5,609	17,776	5.6%
60-70	4,476	17,249	5.8%
70-80	3,500	16,032	5.9%
80-90	2,838	15,138	6.1%
90-100	2,073	12,653	6.3%
100-250	6,098	57,957	6.4%
250-500	473	12,435	7.0%
500 +	253	26,285	8.0%
Total	74,139	221,332	

Other Washington counties: Total Income and Tax, 2017

Table 4. Other Washington counties, total income and tax for Oregon personal income tax, 2017.

AGI Level (\$000)	Number of Returns	Net Tax (\$000)	Effective rate for Net Tax
Less than zero	1,836	8	NA
0-5	11,804	678	3.3%
5-10	5,401	1,212	3.1%
10-15	3,574	1,639	3.7%
15-20	2,855	2,075	4.2%
20-25	2,232	2,257	4.5%
25-30	1,954	2,548	4.7%
30-35	1,700	2,774	5.0%

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35-40	1,509	2,967	5.3%
40-45	1,284	2,960	5.4%
45-50	1,105	2,863	5.5%
50-60	1,802	5,715	5.8%
60-70	1,407	5,440	6.0%
70-80	1,078	5,007	6.2%
80-90	813	4,306	6.2%
90-100	684	4,147	6.4%
100-250	2,360	23,958	7.1%
250-500	368	10,013	7.9%
500 +	231	23,538	7.5%
Total	43,997	104,097	

All taxpayers: Adjusted Gross Income, Effective Rates, and Out-Of-State Credit

Table 5. Oregon personal income tax, adjusted gross income and out-of-state credit, 2017. Amounts are displayed for full-year resident returns.

AGI Level (\$000)	All Taxpayers				All taxpayers with out-of-state credit			
	(a) Number of Returns	(b) Adjusted Gross Income (\$000)	(c) AGI (mean) (\$)	(d) Effective Tax Rate (gross tax)	(e) Number of Returns	(f) Percent of Total (of all returns)	(g) Total (\$000)	(h) Average (\$)
Less than zero	19,391	-1,701,465	*	*	*	*	*	*
0-5	101,772	260,737	2,562	1.4%	129	0.1%	7	54
5-10	114,287	858,350	7,510	3.1%	470	0.4%	32	68
10-15	116,414	1,455,018	12,499	4.1%	601	0.5%	64	107
15-20	114,057	1,993,209	17,476	4.8%	630	0.6%	108	172
20-25	113,562	2,554,529	22,495	5.2%	571	0.5%	134	236
25-30	108,116	2,970,080	27,471	5.5%	582	0.5%	177	304
30-35	97,546	3,164,577	32,442	5.7%	480	0.5%	161	335
35-40	86,029	3,220,773	37,438	5.8%	483	0.6%	175	362
40-45	75,206	3,192,137	42,445	5.8%	505	0.7%	242	479
45-50	67,312	3,193,765	47,447	5.8%	526	0.8%	232	441
50-60	117,429	6,441,384	54,853	5.7%	972	0.8%	527	542
60-70	99,416	6,447,728	64,856	5.7%	978	1.0%	601	615
70-80	85,168	6,376,911	74,874	5.8%	913	1.1%	661	723
80-90	73,104	6,203,926	84,864	5.9%	886	1.2%	665	751
90-100	62,455	5,924,612	94,862	6.0%	861	1.4%	668	776
100-250	282,006	40,734,877	144,447	6.7%	6,162	2.2%	8,059	1,308
250-500	38,263	12,727,248	332,625	7.9%	2,242	5.9%	7,300	3,256
500 +	13,817	17,926,616	1,297,432	8.5%	1,902	13.8%	33,349	17,534
All Taxpayers	1,785,350	123,945,012	69,423	6.7%	19,893	1.1%	53,161	2,672

We will use 2017 Idaho tax rates as an input for estimating payments to Idaho and other states. Rates are shown in the tables below. Rates are posted at <https://tax.idaho.gov/i-1110.cfm#sub7>.

Single Filers

Taxable Income		Tax Amount		
At least	Less than			
1	1,472	0	plus 1.6% of the amount over	0
1,472	2,945	23.56	plus 3.6% of the amount over	1,472
2,945	4,417	76.57	plus 4.1% of the amount over	2,945
4,417	5,890	136.94	plus 5.1% of the amount over	4,417
5,890	7,362	212.03	plus 6.1% of the amount over	5,890
7,362	11,043	301.85	plus 7.1% of the amount over	7,362
11,043		563.21	plus 7.4% of the amount over	11,043

Joint Filers

Taxable Income		Tax Amount		
At least	Less than			
1	2,944	.00	plus 1.6% of the amount over	0
2,944	5,890	47.12	plus 3.6% of the amount over	2,944
5,890	8,834	153.14	plus 4.1% of the amount over	5,890
8,834	11,780	273.88	plus 5.1% of the amount over	8,834
11,780	14,724	424.06	plus 6.1% of the amount over	11,780
14,724	22,086	603.70	plus 7.1% of the amount over	14,724
22,086		1,126.42	plus 7.4% of the amount over	22,086

New York Department of Taxation and Finance

We will use 2017 New York summary statistics as an input for estimating the amount of out-of-state AGI we estimate for taxpayers assumed to have income sourced in New York. The following table is an excerpt from the *Major Items and Income & Deductions* table, found at <https://www.tax.ny.gov/research/stats/statistics/pit-filers-summary-datasets-through-tax-year-2016.htm>.

NY Adjusted Gross Income Range (Fed. Col)	Number of Returns	New York State Amount of NY Adjusted Gross Income	Tax Liability	Effective Rate
\$ 1 - 4,999	212	540,296	1,008	0.2%
\$ 5,000 - 9,999	216	1,152,127	8,716	0.8%
\$ 10,000 - 19,999	320	2,386,674	44,329	1.9%
\$ 20,000 - 29,999	279	3,072,520	69,582	2.3%
\$ 30,000 - 39,999	242	3,024,125	99,267	3.3%
\$ 40,000 - 49,999	179	2,526,928	100,542	4.0%
\$ 50,000 - 59,999	158	1,613,634	93,763	5.8%
\$ 60,000 - 74,999	233	3,906,704	193,019	4.9%
\$ 75,000 - 99,999	322	5,529,596	317,992	5.8%
\$ 100,000 - 199,999	895	22,247,696	1,296,560	5.8%
\$ 200,000 - 249,999	287	11,769,044	717,369	6.1%
\$ 250,000 - 499,999	766	35,791,598	2,295,930	6.4%
\$ 500,000 - 999,999	519	27,061,564	1,967,158	7.3%
\$1,000,000 and Over	689	119,907,012	12,413,126	10.4%
All Income Ranges	5,317	240,529,518	19,618,361	8.2%