

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

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## Overview

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JLARC staff reviewed 22 tax preferences in 2016, which are organized into 14 reports below. View a more detailed summary of all the preferences [here](#).

The Citizen Commission for Performance Measurement of Tax Preferences also considers preferences based on information provided by the Department of Revenue. View the 2016 expedited preference report [here](#) (PDF).

Seven of this year's reviews identify problems with the accuracy of information reported to DOR on the use of the preferences, particularly sales tax preferences. JLARC staff are working with staff from the Department of Revenue and the legislative fiscal committees to achieve more accurate reporting in future years.

	<b>Estimated Biennial Beneficiary Savings</b>	<b>Legislative Auditor Recommendation</b>	<b>Commissioner Recommendation Available October 2016</b>
<b><u>Clay Targets</u></b>	Unknown	Review and Clarify	
<b><u>Custom Software</u></b>	\$269.3 million	Continue	
<b><u>Customer-Generated Power</u></b> ♦ <b><u>Overview</u></b>	\$55 million	Review and Clarify	
<b><u>Data Center Equipment</u></b> ♦ <b><u>Overview</u></b>	\$111.6 million	Continue	
<b><u>Flavor-Imparting Items</u></b>	Unknown	Review and Clarify	
<b><u>Fuel Used By Mint Growers</u></b>	\$210,000	Allow to Expire	
<b><u>Nonresident Large Private Airplanes</u></b>	\$0	Allow to Expire	
<b><u>Rural Electric Cooperative Finance Organizations</u></b>	Unknown	Modify the Preference	
<b><u>Self-Service Laundry</u></b>	\$11.9 million	Continue	
<b><u>Semiconductor Materials Manufacturing Preferences</u></b> <i>(8 preferences)</i>	Not Disclosable (1); \$3.2 million (1); Not in Use (6)	Review and Clarify (2); Terminate (6)	
<b><u>Solar Energy and Silicon Product Manufacturers Preferences</u></b>	\$1.1 million	Review and Clarify	

<b><u>Syrup Taxes Paid</u></b>	\$10 million	Repeal
◆ <b><u>Overview</u></b>		
<b><u>Timber and Wood Products</u></b> (2 Preferences) ◆ <b><u>Overview</u></b>	\$30.6 million (1); \$978,000 (1)	Review and Clarify (1); Continue (1)
<b><u>Trade-Ins</u></b> ◆ <b><u>Overview</u></b>	\$591.4 million	Review and Clarify

## How We Do Reviews

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### What Is a Tax Preference?

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Tax preferences are defined in statute (RCW [43.136.021](#)) as exemptions, exclusions, or deductions from the base of a state tax; a credit against a state tax; a deferral of a state tax; or a preferential state tax rate. Washington has approximately 600 tax preferences.

### Why a Review of Tax Preferences?

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#### *Legislature Creates a Process to Review Tax Preferences*

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In 2006, the Legislature stated that periodic reviews of tax preferences are needed to determine if their continued existence or modification serves the public interest. The Legislature enacted Engrossed House Bill 1069 to provide for an orderly process for the review of tax preferences (RCW [43.136](#)).

Statute assigns specific roles in the process to two different entities.

- The Citizen Commission for Performance Measurement of Tax Preferences ("The Commission") creates a schedule for reviews, holds public hearings, and comments on the reviews.
- Staff to the Joint Legislative Audit and Review Committee (JLARC) conduct the reviews.

#### *Citizen Commission Sets the Schedule*

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The Legislature directed the Commission to develop a schedule to accomplish an orderly review of most tax preferences over ten years. The Commission is directed to omit certain tax preferences from the schedule, such as those required by constitutional law. The Commission may also exclude preferences from review that the Commission determines are a critical part of the tax structure.

The Commission conducts its reviews based on analysis prepared by JLARC staff. In addition, the Commission may elect to rely on information supplied by the Department of Revenue.

In 2016, JLARC staff completed 22 preference reviews (similar preferences may be combined into one report). The Commission's website includes analysis of preferences completed in previous years: See <http://www.citizen taxpref.wa.gov/>.

### JLARC Staff's Approach to the Tax Preference Reviews

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Statute guides the 11 questions typically covered in the reviews.

#### *Public Policy Objectives:*

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1. What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference? (RCW 43.136.055(b))
2. What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives? (RCW 43.136.055(c))
3. To what extent will continuation of the tax preference contribute to these public policy objectives? (RCW 43.136.055(d))
4. If the public policy objectives are not being fulfilled, what is the feasibility of modifying the tax preference for adjustment of the tax benefits? (RCW 43.136.055(g))

## **Beneficiaries:**

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5. Who are the entities whose state tax liabilities are directly affected by the tax preference? (RCW 43.136.055(a))
6. To what extent is the tax preference providing unintended benefits to entities other than those the Legislature intended? (RCW 43.136.055(e))

## **Revenue and Economic Impacts:**

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7. What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued? (This includes an analysis of the general effects of the tax preference on the overall state economy, including the effects on consumption and expenditures of persons and businesses within the state.) (RCW 43.136.055(h))
8. If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy? (RCW 43.136.055(f))
9. If the tax preference were to be terminated, what would be the effect on the distribution of liability for payment of state taxes? (RCW 43.136.055(i))
10. For those preferences enacted for economic development purposes, what are the economic impacts of the tax preference compared to the economic impacts of government activities funded by the tax? (RCW 43.136.055(j))

## **Other States:**

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11. Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington? (RCW 43.136.055(k))

Depending on the tax preference, certain questions may be excluded. For instance, question #4 relates to modifying a preference if the public policy is not being fulfilled. If the preference is fulfilling its public policy, this question is skipped.

## **JLARC Staff's Analysis Process**

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JLARC staff carefully analyze a variety of evidence in conducting these reviews:

- Legal and public policy history of the tax preferences;
- Beneficiaries of the tax preferences;
- Government and other relevant data pertaining to the utilization of these tax preferences
- Economic and revenue impact of the tax preferences; and
- Other states' laws to identify similar tax preferences.

## **Key: Understanding the Purpose**

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The Legislature now requires that when it creates a new preference, or expands or extends an existing preference, a tax preference performance statement is to be included. The performance statement is to include a statement of legislative purpose as well as metrics to evaluate the effectiveness of the preference. (RCW **82.32.808**).

Since the performance statement requirement was first established in 2013, most of the preferences included in this report were passed before this requirement was established. When a preference's purpose or objective is identified in statute, staff are able to affirmatively state the public policy objective. If not in a tax preference performance statement, the objective may be found in intent statements or in other parts of statute.

However for many preferences the Legislature did not state the public policy objective. In such instances, staff may be able to infer what the implied public policy objective might be. To arrive at this inferred policy objective staff review the following:

- Legislative history, including
  - Final bill reports for any statements on the intent or public policy objectives
  - Bills prior to the final version and legislative action on bills related to the same topic
  - Bill reports and testimony from various versions of the bill
  - Records of floor debate

- Relevant court cases that provide information on the objective.
- Department of Revenue information on the history of tax preferences, including rules, determinations, appeals, audits, and taxpayer communication.
- Press reports during the time of the passage of the bill which may indicate the intention of the preference.
- Other historic documents, such as stakeholder statements, that may address the issue addressed by the tax preference.

JLARC staff also interview the agencies that administer the tax preferences or are knowledgeable of the industries affected by the tax. Agencies may provide data on the value and usage of the tax preference and the beneficiaries. If the beneficiaries of the tax are required to report to other state or federal agencies, JLARC staff will also obtain data from those agencies.

If there is sufficient information in this evidence to *infer* a policy objective, JLARC staff state that in the reviews. In these instances, the purpose may be a more generalized statement than can be made compared to instances that have explicit statutory language.

## About This Year's Reviews

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### Contact

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### Audit Authority

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The Joint Legislative Audit and Review Committee (JLARC) works to make state government operations more efficient and effective. The Committee is comprised of an equal number of House members and Senators, Democrats and Republicans.

JLARC's non-partisan staff auditors, under the direction of the Legislative Auditor, conduct performance audits, program evaluations, sunset reviews, and other analyses assigned by the Legislature and the Committee.

The statutory authority for JLARC, established in **Chapter 44.28 RCW**, requires the Legislative Auditor to ensure that JLARC studies are conducted in accordance with Generally Accepted Government Auditing Standards, as applicable to the scope of the audit. This study was conducted in accordance with those applicable standards. Those standards require auditors to plan and perform audits to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives. The evidence obtained for this JLARC report provides a reasonable basis for the enclosed findings and conclusions, and any exceptions to the application of audit standards have been explicitly disclosed in the body of this report.

## Members: Citizen Commission for Performance Measurement of Tax Preferences

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### ***Voting Members***

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Stephen Miller

Dr. Grant D. Forsyth

Ronald L. Bueing

Diane Lourdes Dick

## ***Non-voting Members***

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John Braun, JLARC Chair

Troy Kelley, State Auditor

## **JLARC Members on Publication Date**

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### **Senators**

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John Braun, *Chair*

Sharon Brown

Annette Cleveland

David Frockt

Bob Hasegawa

Mark Mullet, *Assistant Secretary*

### **Representatives**

Jake Fey

Larry Haler

Christine Kilduff

Drew MacEwen

Ed Orcutt, *Secretary*

Gerry Pollet

Derek Stanford, *Vice Chair*

Drew Stokesbary

## **Scope & Objectives**

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### ***Why a JLARC Study of Tax Preferences?***

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Engrossed House Bill 1069 (2006) established the Citizen Commission for Performance Measurement of Tax Preferences and directed it to develop a schedule for periodic review of the state's tax preferences. The bill directed the staff of the Joint Legislative Audit and Review Committee (JLARC) to conduct the periodic reviews.

### ***Background***

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Tax preferences include: exemptions, exclusions, or deductions from the base of a state tax; credits against a state tax; deferrals of a state tax; or preferential state tax rates. As of the 2015 legislative session, JLARC staff estimate the state has 632 tax preferences.

Recognizing the need to assess the effectiveness of these tax preferences through an orderly process, the Legislature established the Citizen Commission for Performance Measurement of Tax Preferences. One of the Commission's roles is to develop a schedule for the orderly review of all tax preferences at least once every ten years. The ten-year schedule is to be revised annually.

Omitted from review are several categories of tax preferences identified by statute (e.g., tax preferences required by constitutional law). Any tax preference the Commission determines is critical to the structure of the tax system may also be omitted. Additionally, the Commission may recommend an expedited process for any tax preference.

JLARC staff are to review tax preferences according to the schedule developed by the Commission. For each tax preference the Commission selects for a performance review, JLARC staff are to provide a recommendation to either: (1) continue; (2) allow to expire; (3) continue and modify the expiration date; (4) review and clarify; or (5) terminate the preference.

### ***Study Scope***

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The Citizen Commission selected the following tax preferences for a performance review by JLARC staff in 20156

<b>Brief Description and Tax Type</b>		<b>RCW Citation</b>	<b>Year Enacted</b>
1.	Solar Energy and Silicon Product Manufacturers(B&O Tax)	82.04.294	2005
2.	Nonresident Large Private Airplanes (Sales and Use Tax)	82.08.215; 82.12.215	2013
3.	Flavor-Imparting Items (Sales and Use Tax)	82.08.210; 82.12.210	2013
4.	Clay Targets (Sales and Use Tax)	82.08.205; 82.12.205	2013
5.	Rural Electric Cooperative Finance Organizations (B&O Tax)	82.04.43394	2013
6.	Fuel Used by Mint Growers (Sales and Use Tax)	82.08.220; 82.12.220	2013
7.	Data Center Equipment (Sales and Use)	82.08.986; 82.12.986	2010
8.	Semiconductor Materials Manufacturing – Gases and Chemicals (Sales and Use Tax)	82.08.9651; 82.12.9651	2006
9.	Semiconductor Materials Manufacturing – Preferential Rate (B&O Tax)	82.04.2404	2006
10.	Customer-Generated Power (Public Utility Tax)	82.16.130	2005
11.	Timber and Wood Products (B&O Tax)	82.04.260(12)	2006

The Citizen Commission also identified the following additional tax preferences for a performance review by JLARC staff in 2016, if staff resources are available.

<b>Brief Description and Tax Type</b>		<b>RCW Citation</b>	<b>Year Enacted</b>
12..	Trade-Ins(Sales Tax)	82.08.010(1)(a)	1984
13..	Custom Software (Sales and Use Tax)	82.04.050(a)(i)-(ii)	1998
14.	Syrup Taxes Paid (B&O Tax)	82.04.4486	2006
15.	Boarding Homes (B&O Tax)	82.04.2908	2004
16.	Self-Service Laundry Facilities (Sales and Use Tax)	82.04.050(2)(a)	1998
17.	Boarding Home Medicare Income (B&O Tax)	82.04.4437	2004
18.	Electric Power Sold in Rural Areas (Public Utility Tax)	82.16.053	1994
19.	Professional Employer Organization Wages (B&O Tax)	82.04.540	2006
20.	RTA Maintenance Contracts (Sales and Use Tax)	82.04.050(13)	2005

In addition, using the expedited process, the Commission will consider the following tax preferences. The expedited process is primarily based on information published by the Department of Revenue in its most recent statutorily required tax exemption study.

<b>Brief Description and Tax Type</b>		<b>RCW Citation</b>	<b>Year Enacted</b>
1.	Minimum Taxable Threshold (Estate Tax)	83.100.020(1)	2005
2.	Marital Deduction (Estate Tax)	83.100.047	2005
3.	Nonprofit Organization Government Grants (B&O Tax)	82.04.4297	1979
4.	Bad Debts (Sales and Use Tax)	82.08.037; 82.12.037	1982
5.	Public Corporations (Property Tax)	35.21.755	1974
6.	Donations to Nonprofits and Government Grants (Use Tax)	82.12.02595	1995
7.	Conditioned Seed Wholesaling (B&O Tax)	82.04.331	1987
8.	Tribal Lands Used for Government Purposes (Property Tax)	84.36.010(1)	2004
9.	Sellers With Limited Washington Connection (B&O Tax)	82.04.424	2003
10.	Neighborhood Revitalization (Multiple Tax)	82.73.030	2005
11.	Fund-Raising Sales of Magazines (Sales Tax)	82.08.02535	1995
12.	Food and Beverages Consumed On-Site (Litter Tax)	82.19.050(4)	2003
13.	Camps for Disabled Persons (Leasehold Excise Tax)	82.29A.130(13)	1995
14.	Computers for Publishers	82.08.806; 82.12.806	2004
15.	Legal Services for Low-Income Persons (B&O Tax)	82.04.635	2009
16.	Standing Timber (Real Estate Excise Tax)	82.45.195	2007
17.	Federal Small Business Innovation Grants (B&O Tax)	82.04.4261	1994
18.	Salmon Habitat Restoration Grants (B&O Tax)	82.04.4339	2004
19.	Direct Mail Delivery (Sales and Use Tax)	82.08.807; 82.12.807	2005
20.	Parking and Business Improvement Areas (B&O Tax)	82.04.4267	2005
21.	Housing for Youth in Crisis (Sales and Use Tax)	82.08.02915; 82.12.02915	1995
22.	Nonprofit Boarding Homes (B&O Tax)	82.04.4264	2005
23.	Child Care Resource and Referral (B&O Tax)	82.04.3395	1995
24.	Amphitheatre (Leasehold Excise Use Tax)	82.29A.130(18)	2005
25.	Historic Property (Leasehold Excise Tax)	82.29A.130(17)	2005
26.	Federal Small Business Technology Transfer Grants (B&O Tax)	82.04.4262	2004
27.	Treating Chemical Dependency (B&O Tax)	82.04.2906	2003
28.	Direct Mail Delivery (B&O Tax)	82.04.4272	2005
29.	Veteran Widows and Widowers (Property Tax)	84.39.010	2005
30.	Nonprofit Fundraising for Individual Artists (Property Tax)	84.36.650	2003
31.	Catering (Litter Tax)	82.19.050(5)	2005
32.	Liquefied Gasses (Petroleum Products Tax)	82.23A.010(1)	2004
33.	Natural Gas Not Delivered Via Pipeline (Use Tax)	82.12.022(3)	1994
34.	Sellers With Limited Washington Connection (Sales and Use Tax)	82.08.050(11); 82.12.040(5)	2003
35.	Semiconductor Materials Manufacturing After \$1 Billion Investment – Construction Costs (Sales and Use Tax)	82.08.965; 82.12.965	2003
36.	Semiconductor Materials Manufacturing After \$1 Billion Investment – Gases and Chemicals (Sales and Use Tax)	82.08.970; 82.12.970	2003

37.	Semiconductor Materials Manufacturing After \$1 Billion Investment – Machinery and Equipment (Property Tax)	84.36.645	2003
38.	Semiconductor Materials Manufacturing After \$1 Billion Investment – New Jobs Credit (B&O Tax)	82.04.448	2003
39.	Semiconductor Materials Manufacturing After \$1 Billion Investment – Preferential Rate (B&O Tax)	82.04.240(2)	2003
40.	Semiconductor Microchip Manufacturing after \$1 Billion Investment (B&O Tax)	82.04.426	2003
41.	Grocery Distribution Co-ops (B&O Tax)	82.04.298(2)	2001
42.	Job Training Services (B&O Tax)	82.04.4333	1996
43.	Tobacco Settlement Authority (B&O Tax)	82.04.311	2002
44.	Fuel Previously Taxed (Aircraft Fuel Tax)	82.42.020	1967
45.	Fuel Previously Taxed (Fuel Tax)	82.38.030(7)(d); 82.38.032	1923
46.	Hazardous or Toxic Waste (Sold Waste Collection Tax)	82.18.010(3)	1986
47.	Nonprofit Fundraising (Use Tax)	82.12.225	2013
48.	Nonprofit R&D (B&O Tax)	82.04.260(3)	1965
49.	Recycling or Salvage Materials (Solid Waste Collection Tax)	82.18.010(3)	1986

## ***Study Objectives***

In response to the legislative directive, each performance review may answer questions relevant to the tax preference from the following list of questions.

### **Public Policy Objectives:**

1. What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference? (RCW [43.136.055\(b\)](#))
2. What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives? (RCW [43.136.055\(c\)](#))
3. To what extent will continuation of the tax preference contribute to these public policy objectives? (RCW [43.136.055\(d\)](#))
4. If the public policy objectives are not being fulfilled, what is the feasibility of modifying the tax preference for adjustment of the tax benefits? (RCW [43.136.055\(g\)](#))

### **Beneficiaries:**

5. Who are the entities whose state tax liabilities are directly affected by the tax preference? (RCW [43.136.055\(a\)](#))
6. To what extent is the tax preference providing unintended benefits to entities other than those the Legislature intended? (RCW [43.136.055\(e\)](#))

### **Revenue and Economic Impacts:**

7. What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued? (This includes an analysis of the general effects of the tax preference on the overall state economy, including the effects on consumption and expenditures of persons and businesses within the state.) (RCW [43.136.055\(h\)](#))
8. If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy? (RCW [43.136.055\(f\)](#))
9. If the tax preference were to be terminated, what would be the effect on the distribution of liability for payment of state taxes? (RCW [43.136.055\(i\)](#))
10. For those preferences enacted for economic development purposes, what are the economic impacts of the tax preference compared to the economic impact of government activities funded by the tax? (This analysis involves conducting an economic impact study using OFM's input-output model.) (RCW [43.136.055\(j\)](#))

**Other States:**

11. Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington? (RCW [43.136.055\(k\)](#))

***Timeframe for the Study***

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A preliminary audit report will be presented at the July 2016 JLARC meeting and at the August 2016 meeting of the Commission. A final report will be presented to JLARC in January 2017.

# Summary of 2016 Tax Preference Reviews

## Clay Targets

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<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
A sales and use tax exemption for nonprofit gun clubs on their purchases of clay targets when they are used for target shooting activities and when participants pay to participate.  The preference is scheduled to expire July 1, 2017.	<b>Sales &amp; Use</b> RCWs 82.12.205; 83.100.048	Unknown (Range estimated between \$48,000 - \$144,000)

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### Public Policy Objective

The Legislature did not state a public policy objective for this preference. JLARC staff infer the objective was to provide tax relief to nonprofit gun clubs on purchases of clay targets used to provide recreational shooting activities to customers or members for a fee.

The Legislature made two specific intent statements for this preference:

- The Legislature intended the preference to be temporary so the Legislature could assess if the actual fiscal impact reasonably conforms with the Department of Revenue fiscal estimate; and
- The Legislature said it did not intend to establish a broad policy of providing sales and use tax exemptions for business consumables.

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### Recommendations

#### Legislative Auditor's Recommendation

**Review and Clarify:** While the preference is achieving the inferred objective of providing tax relief to nonprofit gun clubs, it is unclear if the actual fiscal impact reasonably conforms to the 2013 fiscal estimate.

**Commissioner Recommendation:** Available in October 2016

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## Custom Software

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**Public Policy Objective**

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When enacting the tax preference in 1998, the Legislature stated the public policy objective is to **make the tax treatment of software clear and certain for developers, programmers, and consumers**. The Legislature found that certainty of tax treatment is essential to the industry and consumers. This preference was enacted prior to the Legislature's requirement to provide a performance statement for each preference.

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**Recommendations**

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**Legislative Auditor's Recommendation**

**Continue:** The Legislature should continue the custom software tax preference because it is achieving the stated public policy objective of making the tax treatment of software clear and certain for developers, programmers, and consumers.

**Commissioner Recommendation:** Available in October 2016

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**Customer-Generated Power ♦ Overview**

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<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
A tax credit to utilities to offset a portion of the public utility taxes they owe on their total annual sales. Utilities are eligible for the credit if they administer a program that provides payments to their customers who produce their own power with renewable energy systems. The tax credit is equal to the amount the utilities pay their customers for the power they generate, regardless of whether they use the power or it flows back into the power grid.  The preference is scheduled to expire June 30, 2021.	<b>Public Utility Tax</b> RCW 82.16.130	\$55 million

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**Public Policy Objective**

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The Legislature stated its intent for this preference was to provide incentives for:

- The greater use of locally created renewable energy technologies; and
  - Supporting and retaining existing local industries, and creating new opportunities for renewable energy industries to develop in Washington.
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**Recommendations**

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**Legislative Auditor's Recommendation**

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>A sales and use tax exemption to qualifying businesses (data center owners) and tenants located in an eligible data center on their purchases of:</p> <ul style="list-style-type: none"> <li>• Original server equipment;</li> <li>• Replacement server equipment;</li> <li>• Server installation labor and repair services;</li> <li>• Power infrastructure, which includes the equipment and fixtures necessary to transform, distribute, and manage the electricity required to operate the server equipment; and</li> <li>• Labor and services required to construct, install, repair, alter, or improve the power infrastructure.</li> </ul> <p>The effective expiration date of the preference is 2026.</p>	<p><b>Sales &amp; Use Tax</b> RCWs 82.08.986, and 82.12.986</p>	<p>\$111.6 million</p>

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### Public Policy Objective

The Legislature established a specific public policy objective for this preference: **to improve industry competitiveness through increased investment in data center construction in rural Washington counties.** The legislation provided metrics for JLARC staff to analyze:

- Investment in data center construction in rural counties;
- Resulting changes to state and local property tax values; and
- Resulting changes to the rural county tax collections.

The Legislature also included this direction: **if a review finds that the rural county tax base is increased as a result of the construction of data centers eligible for the preference, the Legislature intends to extend the expiration date of the preference.**

In addition, the Legislature included a “claw back” mechanism so that beneficiaries of the preference must **create family-wage jobs** or pay back the exempted sales or use taxes.

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### Recommendations

#### Legislative Auditor’s Recommendation

**Continue:** The Legislature should continue the data center sales and use tax exemption because the stated public policy objectives of increased rural property values and rural property taxes from investment in data center construction in rural Washington counties are being achieved.

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>A sales and use tax exemption to restaurant owners on purchases of certain items that impart flavor during the cooking process. The preference only applies to items that are:</p> <ul style="list-style-type: none"> <li>• Completely or mostly consumed by combustion during the cooking process (e.g., wood chips, charcoal); or</li> <li>• Fully made from wood and support the food during cooking (e.g., cedar grilling planks).</li> </ul> <p>The preference is scheduled to expire July 1, 2017.</p>	<p><b>Sales &amp; Use RCWs</b> 82.08.210; 82.12.210</p>	<p>Unknown</p>

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### Public Policy Objective

The Legislature stated the public policy objective for this preference was to provide tax relief to the restaurant industry for specific business inputs that cannot be reused and that are used in the cooking process to impart flavor to food.

The Legislature also stated it intended:

- To provide the preference in a fiscally responsible manner where the actual revenue impact substantially conforms to the 2013 fiscal estimate; and
- For the preference to be temporary so it could assess the actual fiscal impact of the preference and assess if the items exempted were being used in a manner consistent with an ingredient or component that becomes part of the end product sold.

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### Recommendations

#### Legislative Auditor's Recommendation

**Review and Clarify:** While the preference is achieving the stated objective of providing tax relief to restaurant owners, it is unclear if the actual fiscal impact substantially conforms to the 2013 fiscal estimate.

**Commissioner Recommendation:** Available in October 2016

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### Fuel Used by Mint Growers

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>

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## Recommendations

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### Legislative Auditor's Recommendation

1. **Allow to Expire:** As scheduled on July 1, 2017, because it is likely not providing enough of an incentive for mint growers to convert the remaining six stills from diesel fuel to cleaner fuels.
2. If the Legislature wants to create an incentive for the remaining six mint stills to convert to one of the cleaner fuels, it may want to consider different types of tax preferences that can apply to both propane and natural gas.

**Commissioner Recommendation:** Available in October 2016

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## Nonresident Large Private Airplanes

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<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
A sales and use tax exemption for nonresidents on their purchases in Washington of: <ul style="list-style-type: none"><li>• Large private airplanes; and</li><li>• Labor and services performed in Washington to repair, clean, alter, or improve large, private airplanes they own.</li></ul> The preference is scheduled to expire July 1, 2021.	<b>Sales &amp; Use</b> RCWs 82.08.215; 82.12.215	\$0

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### Public Policy Objective

The Legislature stated the public policy objective was to promote the economic development of Washington's aerospace cluster and increase collected tax revenues through promoting a competitive marketplace for storing and modifying unfurnished, noncommercial aircraft.

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## Recommendations

### Legislative Auditor's Recommendation

**Allow to Expire:** If it is still not achieving the stated public policy objectives by the scheduled July 1, 2021, expiration date, the preference should be allowed to expire. Available evidence indicates that the preference has not been used since enacted.

**Commissioner Recommendation:** Available in October 2016

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## Rural Electric Cooperative Finance Organizations

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## Recommendations

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### Legislative Auditor's Recommendation

**Modify the Preference:** As currently structured, there is no guarantee that the savings realized by finance organizations will be passed on to Washington rural electric cooperatives and their customers, as the Legislature intended.

**Commissioner Recommendation:** Available in October 2016

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## Self-Service Laundry

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The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
A sales and use tax exemption for people purchasing services at self-service (coin-operated) laundry facilities.  The preference has no expiration date.	<b>Sales &amp; Use</b> RCW 82.04.050(2) (a)	\$11.9 million

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### Public Policy Objective

The Legislature did not state the public policy objective for this preference. JLARC staff infer two public policy objectives:

- To provide consistent tax treatment for all self-service laundry operations, regardless of where the facility is located, and
  - To help people with lower incomes, who may be more likely to use these facilities.
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## Recommendations

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### Legislative Auditor's Recommendation

**Continue:** It is achieving the inferred public policy objectives of providing consistent tax treatment to all self-service laundry facilities, and helping people with low incomes who may be more likely to use these facilities.

**Commissioner Recommendation:** Available in October 2016

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## Semiconductor Materials Manufacturing Preferences

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<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
For the <b>two preferences in use:</b>		
A <b>reduced business and occupation (B&amp;O) rate</b> for manufacturing semiconductor materials. Beneficiaries pay a rate of 0.275 percent, compared to the general manufacturing rate of 0.484 percent. This preference is scheduled to expire December 1, 2018.	<b>B&amp;O Tax</b> RCW 82.04.2404	Not Disclosable
A <b>sales and use tax exemption</b> for purchases of gases and chemicals used in specific phases of the semiconductor production process. This preference is scheduled to expire December 1, 2018.	<b>Sales and Use Tax</b> RCW 82.08.9651, 82.12.9651	\$3.2 million
For the <b>six Preferences not yet in effect:</b> (Expiration dates contingent on date exemptions are utilized)		
A sales and use tax exemption for the construction of new buildings used for manufacturing semiconductor materials.	<b>Sales and Use Tax</b> RCW 82.08.965, 82.12.965	\$0
A property tax exemption for machinery and equipment used for manufacturing semiconductor materials when located in a building exempted from sales tax.	<b>Property Tax</b> RCW 84.36.645	\$0
A B&O tax credit of \$3,000 for each manufacturing production job located in a building exempted from sales tax.	<b>B&amp;O Tax</b> RCW 82.04.448	\$0
A reduced B&O tax rate for manufacturing semiconductor materials. Beneficiaries would pay a rate of 0.275 percent compared to the general manufacturing rate of 0.484 percent for twelve years after its effective date.	<b>B&amp;O Tax</b> RCW 82.04.240(2)	\$0
A sales and use tax exemption for purchases of gases and chemicals used in the production of semiconductor materials for twelve years after its effective date.	<b>Sales and Use Tax</b> RCW 82.08.970, 82.12.970	\$0
A full B&O tax exemption for manufacturing semiconductor microchips.	<b>B&amp;O Tax</b> RCW 82.04.426	\$0

## Solar Energy and Silicon Product Manufacturers

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>A reduced business and occupation (B&amp;O) tax rate of 0.275 percent to manufacturers of certain kinds of solar energy systems and their components. Without the preference, these manufacturers would pay a B&amp;O tax rate of 0.484 percent.</p> <p>The preference is scheduled to expire June 30, 2017.</p>	<p><b>B&amp;O Tax</b> RCW 82.04.294</p>	<p>\$1.1 million</p>

### Public Policy Objective

The Legislature stated in 2013 that the public policy objective was to maintain and grow jobs in the solar silicon industry.

### Recommendations

#### Legislative Auditor's Recommendation

**Review and Clarify:** The intent statement appears narrower than the types of businesses that qualify for the preference. In clarifying, the Legislature should provide a performance statement and relevant metrics such as a jobs target to measure the preference's effectiveness.

**Commissioner Recommendation:** Available in October 2016

## Syrup Taxes Paid ♦ Overview

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>Businesses that sell soft drinks they make using carbonated beverage syrup may take a credit against their B&amp;O tax for the amount of syrup tax they have paid on their purchases of carbonated beverage syrup.</p> <p>The syrup tax rate is \$1 per gallon of carbonated beverage syrup.</p>	<p><b>B&amp;O</b> RCW 82.04.4486</p>	<p>\$10 million</p>

## Timber and Wood Products ♦ Overview

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
<p>This review covers two tax preferences:</p> <ul style="list-style-type: none"> <li>• A <b>preferential B&amp;O tax rate</b> for various timber industry-related activities including:               <ul style="list-style-type: none"> <li>◦ Extracting timber;</li> <li>◦ Manufacturing or processing for hire timber into timber products or wood products;</li> <li>◦ Manufacturing timber products into other timber products or wood products;</li> <li>◦ Wholesale sales of timber cut by the seller, or certain timber or wood products manufactured by the seller; and</li> <li>◦ Sales of standing timber (but not land) where the timber is cut within 30 months of the sale.</li> </ul> </li> </ul> <p>The applicable B&amp;O tax rate is 0.3424%. This rate is comprised of the preferential B&amp;O tax rate (0.2904%) and a surcharge (0.052%).</p> <p>The preference is scheduled to expire July 1, 2024.</p> <ul style="list-style-type: none"> <li>• A <b>real estate excise tax (REET) exemption</b> for sales of standing timber (but not land) to be cut within 30 months of the sale.</li> </ul> <p>The preference has no expiration date.</p>	<p><b>B&amp;O</b> RCW 82.04.260(12)</p> <p><b>Real Estate Excise</b> RCW 82.45.195</p>	<p><b>Timber and Wood Products Reduced B&amp;O Tax Rate</b> \$30.6 million</p> <p><b>REET Exemption</b> \$978,000</p>

### Public Policy Objective

The Legislature did not state the public policy objective for these preferences.

#### Timber and Wood Products Reduced B&O Tax Rate

JLARC staff infer the public policy objectives were to:

- Reduce the cost of doing business for the timber industry,
- Which would help retain good paying jobs in rural areas, particularly manufacturing jobs; and
- Help the timber industry compete nationally and internationally.

#### Standing Timber REET Exemption

JLARC staff infer the public policy objective was to help Washington's wood products and timber industry adjust to structural changes in the industry resulting from federal tax treatment changes and the stock market.

**R d ti**

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>A reduction in the sales and use tax paid when purchasing an item (e.g., a vehicle or boat) if the person trades in an item of “like kind” to the seller at the time of purchase.</p> <p>The reduction is accomplished by subtracting the value of the trade-in item when determining the price that is used to calculate sales or use tax.</p> <p>The preference has no expiration date.</p>	<p>Sales &amp; Use RCW 82.08.010(1) (a)</p>	<p>\$591.4 million</p>

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### Public Policy Objective

This preference was enacted via Washington’s initiative process rather than legislative action. The initiative language adopted by Washington voters specifically stated the purpose was to reduce the amount on which sales tax is paid by excluding the trade-in value of certain property from the amount that is taxable.

JLARC staff infer two additional objectives:

- Make Washington consistent with other states that allowed a trade-in credit; and
- "Stimulate sales" and "offset any possible loss of revenue" caused by the preference (phrases noted in the 1984 voter’s pamphlet).

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### Recommendations

#### Legislative Auditor’s Recommendation

**Review and Clarify:** While the preference is achieving the inferred objectives of reducing consumers’ taxes and making Washington’s tax treatment consistent with other states, it is not achieving the inferred objective of stimulating enough additional sales to replace lost revenue.

**Commissioner Recommendation:** Available in October 2016

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# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Clay Targets | Sales and Use Tax

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### Summary of this Review

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
A sales and use tax exemption for nonprofit gun clubs on their purchases of clay targets when they are used for target shooting activities and when participants pay to participate.  The preference is scheduled to expire July 1, 2017.	<b>Sales &amp; Use RCWs</b> 82.12.205; 83.100.048	Unknown (Range estimated between \$48,000 - \$144,000)

<b>Public Policy Objective</b>
The Legislature did not state a public policy objective for this preference. JLARC staff infer the objective was to provide tax relief to nonprofit gun clubs on purchases of clay targets used to provide recreational shooting activities to customers or members for a fee.  The Legislature made two specific intent statements for this preference: <ul style="list-style-type: none"><li>• The Legislature intended the preference to be temporary so the Legislature could assess if the actual fiscal impact reasonably conforms with the Department of Revenue fiscal estimate; and</li><li>• The Legislature said it did not intend to establish a broad policy of providing sales and use tax exemptions for business consumables.</li></ul>

<b>Recommendations</b>
<b>Legislative Auditor's Recommendation</b>  <b>Review and Clarify:</b> While the preference is achieving the inferred objective of providing tax relief to nonprofit gun clubs, it is unclear if the actual fiscal impact reasonably conforms to the 2013 fiscal estimate.  <b>Commissioner Recommendation:</b> Available in October 2016

### Details on this Preference

#### What is the Preference?

Nonprofit gun clubs do not pay sales or use tax on their purchases of clay targets when

- The targets are used for target shooting at the clubs; and
- Club members and others pay a fee for this activity.

The preference only applies to clay targets purchased by *nonprofit gun clubs*. Nonprofit gun clubs must be registered as nonprofit corporations with the Secretary of State's Office, governed by a Board of Directors, and meet other legally mandated criteria.

The preference took effect October 1, 2013, and is scheduled to expire July 1, 2017.

#### Legal History

The Department of Revenue (DOR) audited several gun clubs that charged for the opportunity to shoot clay targets. In the course of these audits, DOR discovered that some nonprofit gun clubs had not paid sales tax on purchases of clay targets they used to provide target shooting activities to members and others.

DOR’s position was that gun clubs were required to pay sales or use tax on these purchases. DOR’s long-standing interpretation of statute was that businesses must pay sales or use tax on any consumables or supplies used to provide services.

For example, janitorial businesses must pay sales tax on cleaning supplies they consume or use in providing retail cleaning services. It was DOR's position that gun clubs were required to pay tax on the clay targets “consumed” in that activity.

## 2013

DOR began working directly with legislators and stakeholders to develop a gun club tax guide to educate gun clubs about the taxability of their activities. Representatives of some nonprofit gun clubs asked DOR to delay publishing the gun club tax guide while they sought legislation to exempt clay target sales for nonprofit gun clubs.

Late in the legislative session, the Legislature enacted this tax preference.

Following the enactment of this preference, gun club representatives again asked DOR to withhold publishing the gun club tax guide. As of July 2016, DOR has not published the guide.

## Other Relevant Background

### Nonprofits Taxed Like For-Profit Gun Clubs, with One Exception

Nonprofit gun clubs provide several different activities to members and others, charge membership fees and dues, charge for the opportunity to shoot, and make retail sales of goods. The following exhibit shows how these various activities are taxed in comparison with for-profit gun clubs.

#### Nonprofit Gun Clubs Taxed Like For-Profit Gun Clubs, with One Exception (This Preference)

Gun Club Activity	Activity Subject to Sales Tax?	
	For-Profit Gun Clubs	Nonprofit Gun Clubs
<b>Income</b> from membership fees and dues	No	No
<b>Sales of goods</b> (e.g., ammunition, clothing)	Yes	Yes
<b>Charges to participate</b> in recreational activities (e.g., target shooting)	Yes	Yes
<b>Purchases of goods</b> used by club to provide target shooting	Yes	<b>No, for clay targets only.</b> Scheduled to expire July 1, 2017

Source: JLARC staff analysis of Department of Revenue gun club guide draft, March 2013, RCW 82.04.050(15)(a)(xvi), effective 1/01/2016.

## Public Policy Objectives

### What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?

The Legislature did not explicitly state the public policy objective for this preference. JLARC staff infer the objective was to **provide tax relief to nonprofit gun clubs** on purchases of clay targets used to provide recreational shooting activities to members and others for a fee.

While not identifying a specific public policy objective, the Legislature did make two specific statements about its intent for this preference:

- The Legislature said it intends for this preference to be **temporary** in order for the Legislature to assess whether the **actual fiscal impact** of the preference **reasonably conforms with the DOR fiscal estimate**; and
- The Legislature said it is not its intent to establish a broad policy of providing sales and use tax exemptions for business consumables used by businesses in the provision of services to customers.

The Legislature made these two statements in an intent section rather than in a tax preference performance statement.

## Are Objectives Being Met?

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### What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?

The tax preference is meeting the inferred objective of providing tax relief to at least some nonprofit gun clubs. Less than a third of nonprofit gun clubs are reporting using the preference. It is not clear whether the actual use of the preference conforms to the fiscal estimate.

The Legislature has been successful in meeting its own objective of not providing broad exemptions for business consumables.

#### Provide Tax Relief

The Department of Revenue (DOR) estimates there are 36 nonprofit gun clubs in Washington, all of which are eligible to use the preference. From Fiscal Year 2014 through the first six months of Fiscal Year 2016, 11 nonprofit gun clubs reported using this preference. It is possible that more gun clubs are taking the preference but not filling out a Buyer’s Sales and Use Tax Preference Addendum ("Buyer Addendum"). It is also possible that some gun clubs do not use clay targets, but instead use only stationary targets.

#### Reasonably Conform to 2013 Fiscal Estimate

It is not clear whether the actual fiscal impact of this tax preference conforms to DOR’s 2013 fiscal estimate. With less than a third of eligible gun clubs reporting, the actual use has almost reached the DOR estimate.

Two sources of information should be available to compare actual impacts to the 2013 estimate:

1. The businesses selling clay targets to nonprofit gun clubs would report these tax-exempt sales on DOR tax returns; and
2. The nonprofit gun clubs buying clay targets would file a Buyer Addendum detailing their tax-exempt purchases.

However, in this case, the number of businesses selling clay targets is too small to allow disclosure, and the Buyer Addendum information from the nonprofit gun clubs appears to be under-reported. (See the tab on Reporting Issues for more detail.)

In addition, the Legislature has not expressly defined what it means by “reasonably conforms.”

The exhibit below provides information about DOR’s 2013 fiscal estimate for the preference. As noted in the section above about providing tax relief, less than a third of nonprofit gun clubs report using the preference. The exhibit shows the amounts these clubs are reporting. The actual amount used by the remaining two-thirds of the nonprofit gun clubs (if they use clay targets) is unknown.

### It is Unclear Whether the Actual Fiscal Impact of the Preference for Nonprofit Gun Clubs Conforms to DOR’s Fiscal Estimate

Fiscal Year	DOR’s Fiscal Estimate	Actual Amount Reported by Less than 1/3 of Nonprofit Gun Clubs (# out of 36 reporting)	Actual Amount Used by Remaining 2/3 of Nonprofit Gun Clubs
2014 (partial year)	\$14,000	\$10,300 (9 out of 36 reporting)	Unknown

2015	\$22,000	\$21,000 (11 out of 36 reporting)	Unknown
2016 (1 <sup>st</sup> ½ year)	\$12,000 for ½ year	\$11,800 for ½ year (11 out of 36 reporting)	Unknown

Partial Fiscal Year 2014 is from 10/01/2013 to 6/30/2014.

Source: JLARC staff analysis of fiscal estimate detail for ESSB 5882, 2013; JLARC staff analysis of Department of Revenue Buyer Addendum and tax return deduction data, Oct 2013 – Dec 2015.

### **Not Establishing a Broad Policy of Exemption for Business Consumables**

Accomplishing this objective is up to the Legislature. As of March 2015, the Legislature is accomplishing its intent by not enacting additional sales and use tax preferences for business consumables used by businesses in the provision of services to customers.

### **To what extent will continuation of the tax preference contribute to these public policy objectives?**

Continuing the preference beyond the current July 1, 2017, expiration date would continue to provide tax relief to nonprofit gun clubs. Less than a third of the clubs are reporting using the preference.

It is not clear how continuing the preference would contribute to the Legislature's stated intent for impacts to conform to the DOR fiscal estimate, since the actual beneficiary savings is unknown.

## **Beneficiaries**

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### **Who are the entities whose state tax liabilities are directly affected by the tax preference?**

#### **Direct Beneficiaries**

The direct beneficiaries of the tax preference are nonprofit gun clubs that buy clay targets for people to shoot at their clubs. The Department of Revenue data estimates there are 36 nonprofit gun clubs in Washington, all of which are eligible for the preference. For Fiscal Year 2014 through the first six months of Fiscal Year 2016, 11 clubs reported using this preference. It is unclear why less than a third of the eligible clubs report using the preference. It is possible more clubs are taking the preference but not filing a Buyer Addendum.

#### **Indirect Beneficiaries**

To the extent that nonprofit gun clubs pass their tax savings on, indirect beneficiaries are members and customers who shoot clay targets for a fee at the clubs.

## **Reporting Issues**

### **Two Reporting Issues**

Two reporting issues complicate publishing an estimate of beneficiary savings for this preference:

- Information reported by companies that sell clay targets to the nonprofit gun clubs is not disclosable; and
- Information provided by nonprofit gun clubs using a Buyer Addendum appears to be under-reported.

#### **Information from Businesses Selling Clay Targets Not Disclosable**

Fewer than three businesses reported selling tax-exempt clay targets. The Department of Revenue's (DOR) taxpayer confidentiality policy prohibits disclosure of tax return data if it is comprised of fewer than three taxpayers. JLARC staff contacted the businesses to request specific authorization to disclose the tax return data, but the businesses did not respond. Thus, JLARC staff are prohibited from disclosing actual Fiscal Year 2014 and 2015 tax return information from sellers to estimate beneficiary savings for this preference.

#### **Information Provided by Nonprofit Gun Clubs Appears Under-Reported**

Buyers using sales and use tax exemptions enacted after August 2013 must complete a Buyer Addendum detailing their tax-exempt purchases if:

- They are required to register with the Department of Revenue (DOR);
- They are required to file monthly or quarterly tax returns with DOR; and
- The tax benefit to the buyer is \$1,000 or more per calendar year.

Of the 36 nonprofit gun clubs that may be eligible to take this preference, less than a third have filed a Buyer Addendum in any fiscal year. From Fiscal Year 2014 through the first six months of Fiscal Year 2016, 11 nonprofit gun clubs reported using this preference. It is not clear why more of the gun clubs did not file a Buyer Addendum. JLARC staff identified two possible explanations:

- The reporting instructions DOR mailed to nonprofit gun clubs in August 2013 did not include instructions directing the gun clubs to complete a Buyer Addendum. DOR added that detail to the reporting instructions in November 2013, over a month after the preference took effect. Some nonprofit gun clubs may be unaware of the requirement to complete the Buyer Addendum.
- Some nonprofit gun clubs are not required to file a Buyer Addendum. For instance, some may save less than \$1,000 in a calendar year from the preference.

## Revenue and Economic Impacts

### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

JLARC staff estimate that direct beneficiaries of the preference saved between \$21,000 and \$63,000 in Fiscal Year 2015, and will save between \$48,000 and \$144,000 in the 2015-17 Biennium. The precise amount of beneficiary savings for the preference is unknown.

- The lower end of the ranges presented in the exhibit are based on the information provided by the 11 nonprofit gun clubs that filed a Buyer Addendum. This represents less than a third of the nonprofit gun clubs likely eligible to use the preference.
- The upper range of the estimate assumes that another 25 nonprofit gun clubs use the preference at the same level as the 11 clubs that reported.

See the tab on **Reporting Issues** for more information on the challenges associated with this estimate.

### Range of Estimated 2015-17 Direct Beneficiary Savings for Clay Targets for Nonprofit Gun Clubs Sales and Use Tax Exemption

Fiscal Year	Range of Estimated Beneficiary Savings	Actual Beneficiary Savings
2014 (Oct 1, 2013 – June 30, 2014)	\$10,300 - \$31,000	Unknown
2015	\$21,000 - \$63,000	Unknown
2016	\$23,500 - \$71,000	Unknown
2017	\$24,500 - \$73,000	Unknown
2015-17 Biennium	\$48,000 - \$144,000	Unknown

Source: JLARC staff analysis of DOR Buyer Addendum detail October 2013 – December 2015. JLARC staff estimate of Buyer Addendum data expanded to all nonprofit gun clubs. Growth estimated using 6-year average growth (2012-2017) for

## **If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

If the tax preference were terminated, nonprofit gun clubs that provide recreational target shooting services to members and others for a fee would pay sales or use tax on their purchases of clay targets used in providing shooting services. The nonprofit gun clubs could either increase their shooting fees or memberships fees or choose to absorb the additional costs.

## **Other States with Similar Preference?**

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### **Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?**

In states that impose sales tax, JLARC staff identified three states with specific sales tax exemptions for certain gun or shooting clubs activities or purchases:

- **Idaho** - exempts nonprofit shooting ranges from charging sales tax on customer shooting fees
- **Kansas** - exempts clay targets purchased by any gun club or shooting range from sales tax
- **Wisconsin** - exempts admission fees to nonprofit gun clubs from sales tax if the gun club provides safety classes to 25 or more people in a calendar year

In addition, South Carolina imposes a 5 percent special admissions tax on hunting and shooting clubs, but does not charge sales tax on their fees.

## **Applicable Statutes**

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### **Intent Statement**

Intent—2013 2nd sp.s. c 13: "The legislature intends for the tax preferences in sections 402 and 403 of this act to be temporary in order for the legislature to assess the actual fiscal impact of the tax preferences to ensure that they reasonably conform with the fiscal estimate provided in the legislation's fiscal note. It is not the legislature's intent to establish a broad policy of providing sales and use tax exemptions for business consumables used by businesses in the provision of services to customers." [2013 2nd sp.s. c 13 § 401.]

### **RCW 82.08.205**

#### **Exemptions—Clay targets. (Expires July 1, 2017.)**

(1) The tax levied by RCW 82.08.020 does not apply to sales of clay targets purchased by a nonprofit gun club for use in providing the activity of clay target shooting for a fee.

(2) The exemption is available only when the buyer provides the seller with an exemption certificate in a form and manner prescribed by the department. The seller must retain a copy of the certificate for the seller's files. For sellers who electronically file their taxes, the department must provide a separate tax reporting line for exemption amounts claimed under this section.

(3) This section expires July 1, 2017.

[2013 2nd sp.s. c 13 § 402.]

### **RCW 82.12.205**

#### **Clay targets. (Expires July 1, 2017.)**

(1) The provisions of this chapter do not apply with respect to the use by a nonprofit gun club of clay targets that are provided while conducting the activity of clay target shooting for a fee.

(2) This section expires July 1, 2017.

[2013 2nd sp.s. c 13 § 403.]

## **Recommendations**

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### **Legislative Auditor Recommendation**

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#### **Legislative Auditor Recommendation**

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The Legislature should review and clarify the sales and use tax exemption for clay targets for nonprofit gun clubs because while the preference is meeting the inferred objective of providing tax relief to nonprofit gun clubs, it is unclear if the actual fiscal impact reasonably conforms to the 2013 fiscal estimate.

The preference is scheduled to expire on July 1, 2017.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislative action.

### **Letter from Commission Chair**

Available December 2016.

### **Commissioners' Recommendation**

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Available December 2016.

### **Agency Response**

If applicable, will be available December 2016.

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# Customer-Generated Power

JULY 2016

Stated Objectives	Results
Increase use of WA renewable energy technology	Achieved
Support WA renewable energy industry	Achieved, but growth concentrated in solar and a few businesses

## Credit creates incentive to install renewable energy systems

A different program (net metering) pays customers for power sold to the system.



**Customer installs system, generates power**

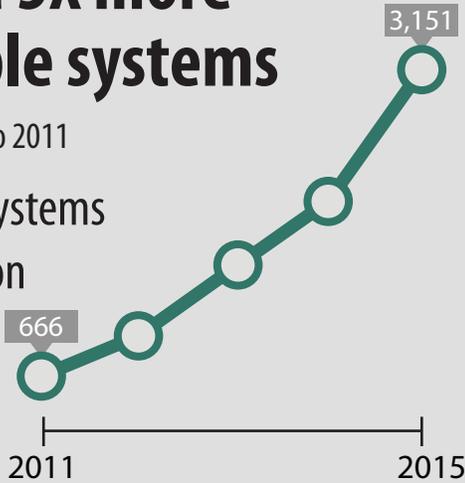
**Utility pays customer based on the power generated**

**State gives utility a tax credit equal to its payments to customers, up to a limit set in law.**

## Consumers installed 5X more renewable systems

in 2015 compared to 2011

79% of new systems are Washington made



## 99.6% of new systems are solar, and made by a few businesses

**4** Businesses with parts certified as "Made in WA" since 2010

**3** Still offering "Made in WA" elements in 2016

## Utilities are reaching the limits set by state for providing incentives



**16 utilities – serving 71% of WA utility customers – reached the statutory limit**

6 reduced payments, 10 closed program to new participants

**RECOMMENDATION: The Legislature should review and clarify the preference,** including targets for how much power capacity and the number of systems it hopes to create, whether targets may be impacted by caps on utilities' use of the credit, and which local industries it wants to support.

For more information, contact:

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The complete report is at [citizentaxpref.wa.gov](http://citizentaxpref.wa.gov).

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Customer Generated Power | Public Utility Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
<p>A tax credit to utilities to offset a portion of the public utility taxes they owe on their total annual sales. Utilities are eligible for the credit if they administer a program that provides payments to their customers who produce their own power with renewable energy systems. The tax credit is equal to the amount the utilities pay their customers for the power they generate, regardless of whether they use the power or it flows back into the power grid.</p> <p>The preference is scheduled to expire June 30, 2021.</p>	<p><b>Public Utility Tax</b> RCW 82.16.130</p>	<p>\$55 million</p>

Public Policy Objective
<p>The Legislature stated its intent for this preference was to provide incentives for:</p> <ul style="list-style-type: none"> <li>• The greater use of locally created renewable energy technologies; and</li> <li>• Supporting and retaining existing local industries, and creating new opportunities for renewable energy industries to develop in Washington.</li> </ul>

Recommendations
<p><b>Legislative Auditor’s Recommendation</b></p> <p><b>Review and Clarify:</b> While there has been growth in locally made systems and associated opportunities for businesses, this growth is concentrated in a small number of solar energy system manufacturers. As part of the clarification, the Legislature should include targets for how many new local renewable energy systems it hopes to create and how much power capacity it hopes to generate through the use of this preference, as well as which local industries it would like to support.</p> <p><b>Commissioner Recommendation:</b> Available in October 2016</p>

### Details on this Preference

#### What is the Preference?

The Legislature intended for this preference to provide an incentive for greater use of locally created renewable energy technologies. It also expressed intent to support and retain existing local industries and create new opportunities for renewable energy industries to develop in Washington.

The preference provides a tax credit to utilities to offset a portion of the public utility taxes (PUT) they owe on their total annual sales. Utilities are eligible for the credit if they administer a program that **provides payments** to their customers who produce their own power with renewable energy systems. The tax credit is equal to the amount the utilities pay their customers for the power they generate, regardless of whether they use the power or it flows back into the power grid.

There are several restrictions or caps on the amount of credit the utilities can receive:

- Overall, each utility may claim an annual credit up to 0.5 percent of its taxable power sales or \$100,000, whichever is greater. The credit cannot exceed the amount of tax owed by the utility, and cannot be refunded.
- There are also caps for two specific types of projects.

- Payments to utility-owned community solar projects may only account for 25 percent of a utility’s total allowed credit. A utility-owned community solar project is a solar energy system that is owned by the utility but voluntarily funded by the utility’s ratepayers.
- Payments to company-owned community solar projects may only account for 5 percent of a utility’s total allowed credit. A company-owned solar project is a solar energy system that is owned by a limited liability company, cooperative, or mutual corporation.

If requests for payment from customers exceed the amount of funds available for the credit, the utilities must reduce the amount they pay their customers proportionately.

The table below illustrates how these caps would operate on different sized utilities:

**Limits for Credit Amounts Depend on Taxable Power Sales**

Utility	Annual taxable power sales	Total allowable tax credit	Specific tax credit cap: utility-owned community solar projects	Specific tax credit cap: company-owned community solar projects
Utility A	\$5,000,000	\$100,000	\$25,000	\$5,000
Utility B	\$50,000,000	\$250,000	\$62,500	\$12,500
Utility C	\$500,000,000	\$2,500,000	\$625,000	\$125,000

Source: WAC 458-20-273.

The right of utilities to earn tax credits expires June 30, 2020. This is the last date for customers to benefit from the preference. Credits may not be claimed by the utilities after June 30, 2021.

**Payments to Customers and Community Project Participants Vary based on Amount and Type of Power Generated**

The Legislature established rates for utilities to pay their customers, and these rates vary by the type of renewable energy system and whether it is made in Washington. Eligible customers create their own power using wind, solar or certain anaerobic digesters. The digesters are systems that process manure from livestock into biogas.

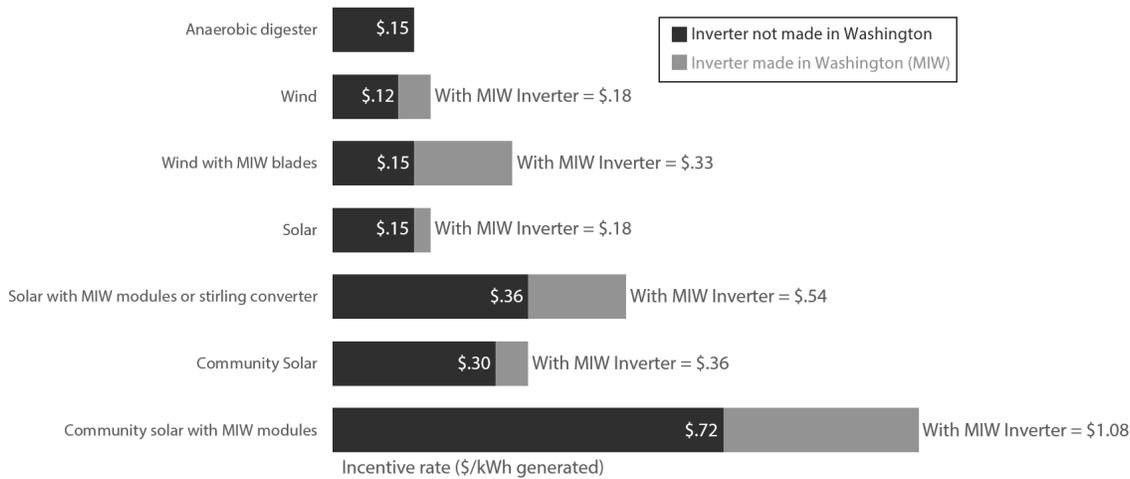
Customers are also eligible for payment if they are part of a community solar energy project. These projects may be owned by utilities or companies, or they may be owned by individuals, households, or nonprofit organizations. For utility and company-owned projects, their respective ratepayers or company owners receive a portion of the payments made to the project from the utility. Community solar projects use solar energy to generate up to 75 kilowatts of power.

There are **higher payment rates for solar energy** than for other types of energy sources. There are also higher rates for certain system components that are certified as Made in Washington (MIW) by the Department of Revenue. These include:

- For solar energy systems, solar modules or stirling converters.
- For wind systems, the blades.
- For both solar and wind systems, the inverters. Inverters are devices that convert electricity to a form that is compatible with homes, offices and the electric grid.

Utility payments to individual customers and community solar project participants are limited to \$5,000 per year.

**Incentive rates per kilowatt-hour vary by type of system and whether it is locally made**



Source: JLARC staff analysis of WAC 458-20-273.

## Legal History

### 2005

The Legislature enacted two bills to encourage in-state production and use of renewable energy systems: one lowered the costs to consumers, and the other lowered the costs of manufacturing systems. The bill that lowered the costs to consumers is the focus of this review.

The Legislature created this credit for utilities and provided a cap on the amount of the credit equal to 0.25 percent of the utility's taxable power sales or \$25,000, whichever is greater. The Legislature also limited the amount utilities could pay each customer to \$2,000 per year.

The credit is intended to offset payments the utility makes to customers who generate their own renewable energy. To qualify for the payments, customers must receive certification from the Department of Revenue (DOR). The certification indicates that their systems meet specified requirements and identifies if they contain parts made in Washington.

The bill also included a provision requiring DOR to report back to the Legislature by 2009 on the number of solar energy system manufacturing companies in the state, any change in the number of companies in the state, and the effect on job creation and the number of jobs created for Washington residents. The Legislature did not include targets for how many renewable energy systems, businesses or jobs it intended to create with the credit.

The bill included a 2015 expiration date for utilities to earn the credit, and a 2016 deadline for using it.

The other bill passed by the Legislature provided a reduced B&O tax rate for businesses manufacturing solar energy systems. JLARC staff is reviewing [this tax preference in 2016](#).

### 2009

The Legislature made significant changes, including:

- Raising the maximum allowable annual payment to customers who generate their own renewable energy from \$2,000 to \$5,000;
- Increasing the cap for the public utility tax credit from the greater of 0.25 percent of the utility's taxable power sales or \$25,000 to the greater of 1 percent of the firm's taxable power sales or \$100,000; and
- Extending the last day for earning credits from 2015 to 2020.

The preference was also expanded to include community solar projects. Community solar projects were granted the highest base rate of \$0.30 per kilowatt hour (kWh), and could constitute up to 25 percent of a utility's total allowable credit.

The same year, DOR issued its report to the Legislature on the usage of the program, finding that both the number of participants in the program and the number of employees in the renewable energy sector had increased since the program's inception.

### 2010

The Legislature expanded the preference to include additional community solar projects. The expansion was for projects owned by certain kinds of companies. Company-owned community solar projects could constitute up to 5 percent of a utility's total allowable credit.

At the same time, the Legislature placed limitations on all types of community solar projects, specifying that only systems with a capacity up to 75kW could qualify.

The bill reduced the maximum allowable credit for each utility from 1 percent of the utility's taxable power sales to 0.5 percent of the utility's taxable power sales.

## **Other Relevant Background**

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### **Other Tax Incentives Available for Renewable Energy**

Other preferences available for renewable energy generation include:

- **Sales and use tax exemptions** for machinery and equipment used to generate up to ten kilowatts of electricity using solar energy. The exemption also includes labor and services for installing the equipment. This preference was enacted in 2009 and expanded in 2013 to include small solar heat systems. It is scheduled to expire in 2018.
- A **remittance**, or refund, of 75 percent of the **sales tax** paid for purchases of machinery and equipment used to generate electricity using fuel cells, wind, sun (except those eligible for the full exemption discussed above), biomass energy, tidal or wave energy, geothermal resources, anaerobic digestion, technology that converts energy from exhaust, or landfill gas as the principal source of power. The remittance also includes labor and services for installing the machinery. It applies to systems with at least one kilowatt of capacity. The preference is scheduled to expire in 2020. JLARC staff reviewed the preference in 2011.

## **Public Policy Objectives**

### **What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

The Legislature stated its intent for this preference was to provide incentives for:

1. The greater use of locally created renewable energy technologies; and
2. Supporting and retaining existing local industries, and creating new opportunities for renewable energy industries to develop in Washington.

This preference was enacted prior to the Legislature's requirement to provide a performance statement for each preference.

### **Are Objectives Being Met?**

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#### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

The number of renewable energy systems certified by the Department of Revenue (DOR) each year and the number of systems with Made in Washington components has increased. However, this growth is largely due to solar technologies with no increase in wind or anaerobic digesters.

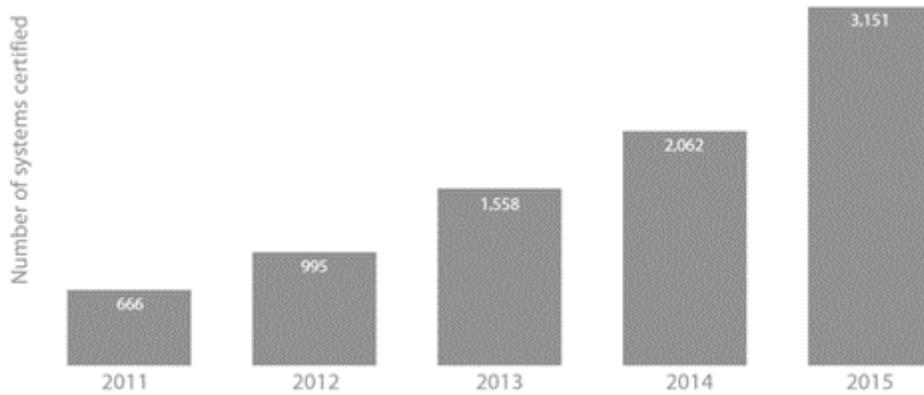
In addition, since the credit began, four businesses have had their products certified as Made in Washington and one of those has discontinued its production.

##### **1. Greater use of locally created renewable energy technologies**

There has been an increase in the use of some types of locally created renewable energy technologies since the preference began.

The number of renewable energy systems installed annually by utility customers and community solar project participants has increased nearly five times in the last five years, from 666 in 2011 to 3,151 in 2015. In addition, the average capacity of systems has increased, meaning more power is generated from each system. For residential systems, the average capacity size increased from 4.5 kilowatts in 2011 to 7.1 kilowatts in 2015.

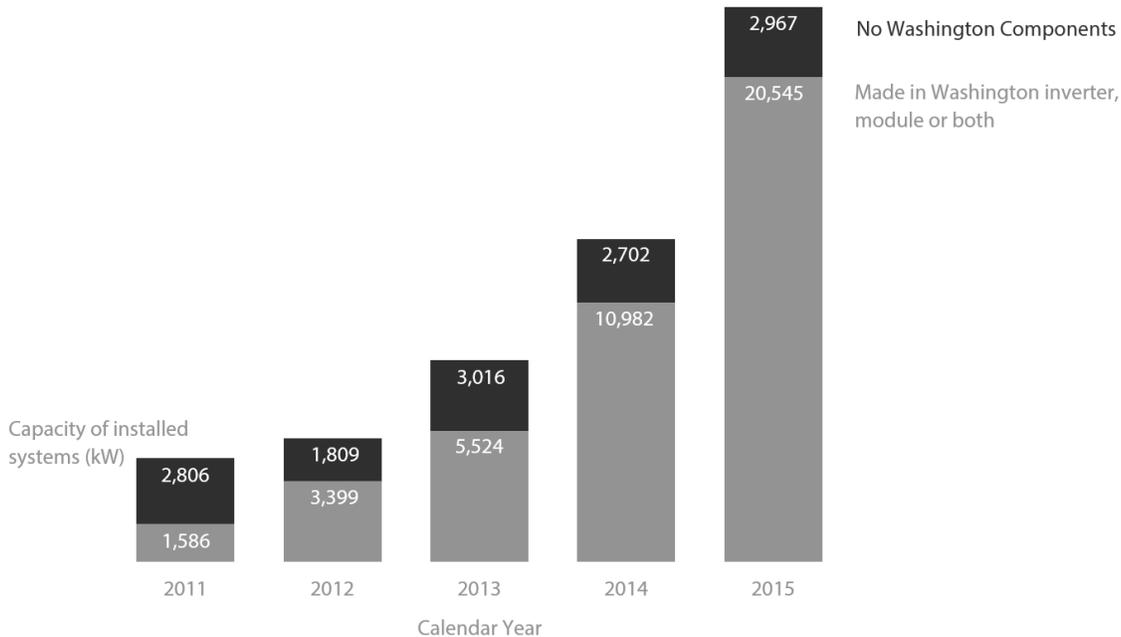
**The number of renewable systems installed annually has increased each year since 2011**



Source: JLARC staff analysis of DOR system certification application data.

The portion of systems that DOR has certified as “Made in Washington” has also increased each year since 2011. From 2011 through 2015, program participants have installed 55,360 kW (55 megawatts) of capacity. Over three quarters (76 percent) of that capacity is in systems containing components that are certified as Made in Washington. In addition, 79% of the number of systems contain components that are certified as Made in Washington.

**Systems that are made in Washington make up an increasing share of the total capacity installed each year since 2011**



Source: JLARC staff analysis of DOR system certification application data.

The Legislature did not specify a target for the number of renewable energy systems it intends to create or for the amount of energy these systems should produce.

**Growth in solar, but no increase in wind or anaerobic digester certifications**

The increase in use of locally created renewable energy technologies is attributable to photovoltaic solar modules. These are devices that convert light directly into electricity using semiconductor material. Wind generation systems currently account for only 0.5 percent of systems installed and 0.4 percent of capacity. Unlike solar energy systems, the number of new wind system certifications has not increased over the time period that the preference has been in effect.

From 2011 through 2015, DOR has certified 195 kW of wind energy system capacity. No manufacturers have produced blades certified as Made in Washington. Customers using wind energy systems receive a lower payment rate from the utilities as well as a smaller benefit from buying Made in Washington certified components.

**New certifications of solar energy systems have grown while wind has declined**

Type of System	2011	2012	2013	2014	2015
Wind	20	8	7	0	1
Solar	646	987	1551	2062	3150

Source: JLARC staff analysis of certification application data from DOR.

Since 2011 there have been no new certifications of anaerobic digesters through the program.

## **2. Support and retain existing local industries and create new opportunities for renewable energy industries to develop in Washington.**

While the number of new locally made renewable energy system certifications has increased, it is unclear what type or amount of industry growth is expected.

The number of new system installations with Made in Washington components has grown steadily, from 316 in 2011 to 2,813 in 2015. This growth has provided expanded opportunities to Washington businesses in the renewable energy industry.

However, these opportunities have been almost entirely in solar energy systems, and concentrated in a small number of businesses.

Since the preference was enacted, four businesses have had their products certified as Made in Washington by the Department of Revenue.

- In 2010, Silicon Energy LLC became the first solar module manufacturer to make Made in Washington certified modules. It has since discontinued its Made in Washington modules.
- In 2011, Itek Energy gained certification for its solar modules and OutBack Power gained certification for its inverters.
- In 2012, Samson Solar gained certification for its inverters.

No new manufacturers have gained certification since 2012, and there are no certified businesses for wind energy systems.

## **To what extent will continuation of the tax preference contribute to these public policy objectives?**

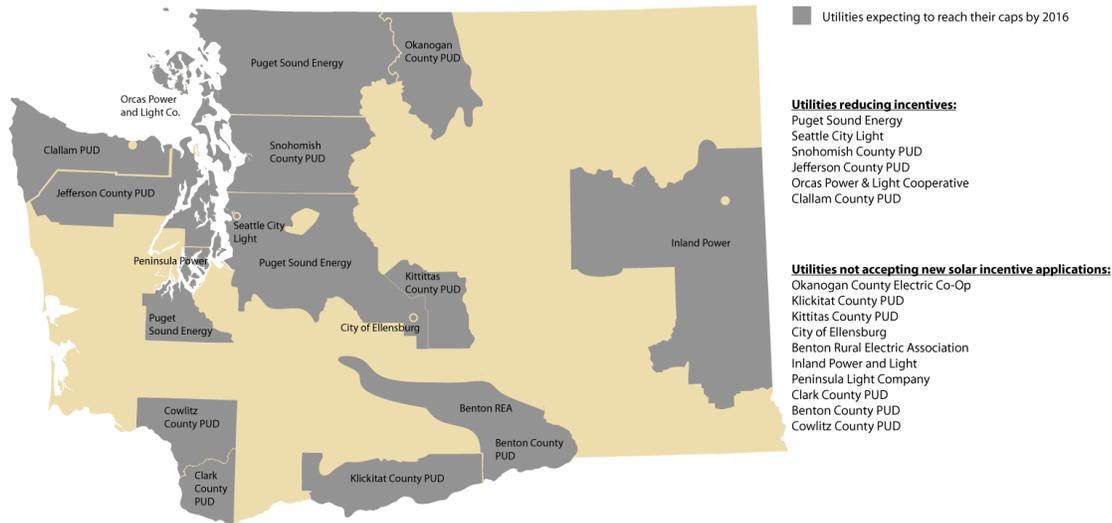
Continuation of the preference would mean utilities could continue to receive tax credits for payments they make to customers producing renewable energy. However, it is not clear to what extent these credits would continue to encourage new installations of renewable energy technology.

Utilities may claim up to \$100,000 or 0.5 percent (whichever is greater) of their taxable sales of power each year as a credit. As of June 2016, the WSU Energy Extension Program reports that 16 of the 39 utilities receiving credits have announced to customers that they have already reached their caps or expect to within the next year. These utilities include four of the five largest in Washington, and serve approximately 71 percent of Washington utility customers. Of these 16 utilities,

- Ten utilities have closed their programs to new applicants to preserve the incentive rate for existing participants. In these service areas, continuation of the program is not likely to contribute to the public policy objectives.
- Six other utilities are proportionally reducing the amount of the incentive to each customer and continuing to allow new applicants. Some utilities expect to reduce payment rates to customers up to 33 percent for Fiscal Year 2016.

The exhibit below shows the service areas of utilities that expect to reach their caps in 2016.

## **Ten utilities have closed programs to new participants and six utilities will make reduced payments to qualifying customers**



Note: some service areas shown may overlap with other utilities.

Source: JLARC staff analysis of information provided by the WSU Extension Energy Program and utility documents.

It is unknown what effect these reductions will have on new renewable energy system installations as the program continues.

## **If the public policy objectives are not being fulfilled, what is the feasibility of modifying the tax preference for adjustment of the tax benefits?**

It is possible there could be other approaches to encouraging the use of locally created renewable energy technology.

Based on the capacity installed from 2011 through 2015, the average incentive rate is about 45 cents per kilowatt hour of electricity generated by customers using their own renewable energy systems. This rate may vary in the future depending on what types of systems are installed and the number of customers affected by reduced payment rates from utilities nearing their cap.

It is difficult to determine if there is a less expensive alternative for encouraging the production of renewable energy because any incentive program will depend on varying factors, such as how long the incentive program will be in effect, how long the renewable energy systems will be in place, and how many consumers will purchase renewable energy regardless of the incentives offered.

## **Beneficiaries**

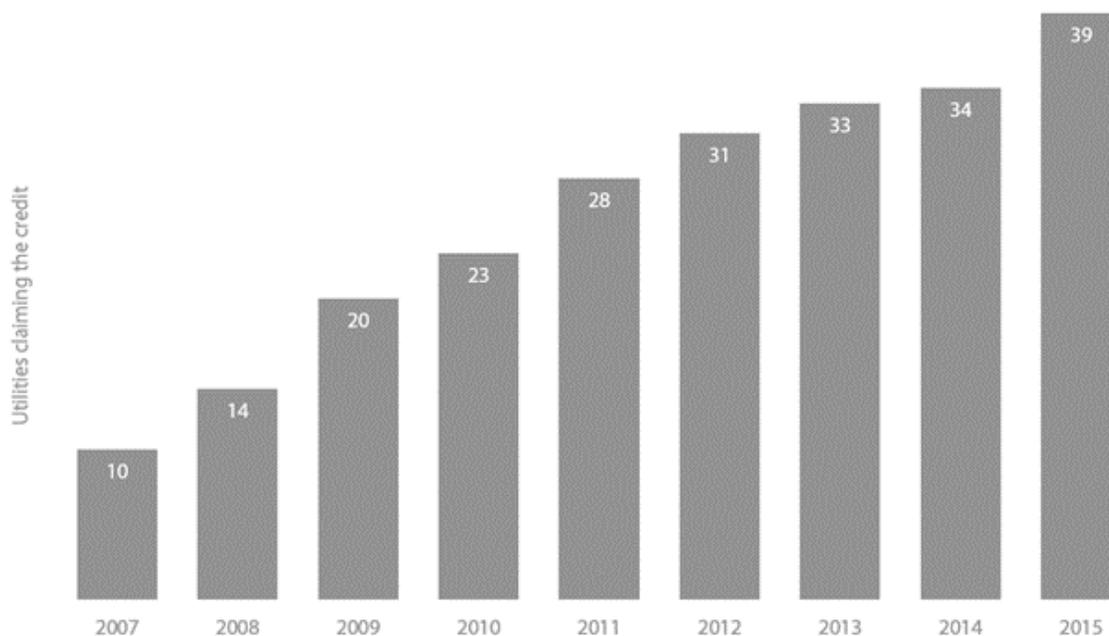
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### **Who are the entities whose state tax liabilities are directly affected by the tax preference?**

#### **Direct Beneficiaries**

The direct beneficiaries of the preference are utilities that claim the tax credit. In 2015 there were 39 utilities out of approximately 60 statewide that claimed the preference. That number has increased each year since the program began. Three utilities are investor-owned, 12 are member-owned (such as mutuals and cooperatives) and 24 are public (such as cities and public utility districts).

### **The number of utilities applying for the credit has increased each year since the preference began**



Source: JLARC staff analysis of DOR tax return data.

### Indirect Beneficiaries

The indirect beneficiaries of the preference are participants in the programs administered by the utilities. Participants receive payments from utilities based on the amount of power their renewable energy systems generate, regardless of whether they use the power or it flows back into the grid. Since 2011, the Department of Revenue (DOR) has certified 8,432 systems with a total capacity of 55,360 kW.

To the extent the preference increases the purchase of Washington-made technologies, the manufacturers of these technologies are also indirect beneficiaries. There are currently three businesses selling products that are certified Made in Washington by DOR.

While the statute did not mention installation work, there are a number of workers in Washington installing solar energy systems who may be indirect beneficiaries. The Solar Foundation estimates in its 2015 solar jobs census that Washington has 1,429 solar installation jobs.

### Revenue and Economic Impacts

#### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

The actual credit claimed by utilities in Fiscal Year 2015 was \$8 million. JLARC staff estimate direct beneficiaries will save \$55 million in the 2017-2019 Biennium. The amount claimed has increased by at least 78 percent each year since the credit was enacted. Estimates show the growth will slow as utilities reach their caps over the next several years.

#### Estimated 2017-2019 Beneficiary Savings for Customer Generated Power Public Utility Tax Credit

Fiscal Year	Estimated Credit amount
2014*	\$4,000,000
2015*	\$8,000,000
2016	\$14,000,000
2017	\$22,000,000
2018	\$27,000,000
2019	\$28,000,000

\*Note: 2014 and 2015 are actuals.  
Source: Tax return data from DOR.

## **If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

If the tax preference were eliminated, utilities would likely cancel their payment programs. The utilities would not incur any losses because the credit they receive is used to cover the cost of payments that would likely cease. Existing participants would no longer receive incentive payments for the renewable energy power they produce. It is unknown the effect this would have on new installations or the local renewable energy technology industry. The preference is currently scheduled to expire in 2020.

## **Other States**

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### **Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?**

No other state offers a tax credit for utilities to encourage utility customers to buy locally created renewable energy technology.

Other states may use different approaches to incentivize these activities. For instance, since 2014, Minnesota has a Made in Minnesota Solar Incentive Program administered by the state's Department of Commerce. The program has an annual budget of \$15 million per year. Applicants are selected by lottery each year and the winners receive payments for each kilowatt-hour produced. Each participant may receive the payments for ten years.

Incentive rates are set by the Department annually and vary by manufacturer. The table below shows the incentive rates for 2016. Residential systems receive the highest rate for each product, and commercial for-profit entities receive the lowest rate.

### **The Made in Minnesota Solar Incentive Program Offers Highest Rates to Residential Systems and Varies by Model of Solar Module**

Manufacturer	Commercial For Profit <40kW	NonProfit/Government <40kW	Residential <10kW
Silicon Energy	\$.23/kWh	\$.25/kWh	\$.30/kWh
tenKsolar	\$.13/kWh	\$.15/kWh	\$.23/kWh
Hiliene	\$.13/kWh	\$.15/kWh	\$.23/kWh
Itek Energy	\$.18/kWh	\$.20/kWh	\$.27/kWh

Source: Minnesota Department of Commerce 2016 incentive rates.

The Minnesota program is restricted to customers of three investor-owned utilities. The Minnesota Department of Commerce reports that its new projects selected in 2016 represent 5.7 Megawatts of capacity, for a total of 38 Megawatts of solar capacity statewide.

## **Applicable Statutes**

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### **Intent Statement**

**Findings—Intent—2005 c 300:** "The legislature finds that the use of renewable energy resources generated from local sources such as solar and wind power benefit our state by reducing the load on the state's electric energy grid, by providing nonpolluting sources of electricity generation, and by the creation of jobs for local industries that develop and sell renewable energy products and technologies.

The legislature finds that Washington state has become a national and international leader in the technologies related to the solar electric markets. The state can support these industries by providing incentives for the purchase of locally made renewable energy products. Locally made renewable technologies benefit and protect the state's environment. The

legislature also finds that the state's economy can be enhanced through the creation of incentives to develop additional renewable energy industries in the state.

The legislature intends to provide incentives for the greater use of locally created renewable energy technologies, support and retain existing local industries, and create new opportunities for renewable energy industries to develop in Washington state." [ 2005 c 300 § 1.]

## **RCW 82.16.130**

### **Renewable energy system cost recovery—Light/power business tax credit.**

(1) A light and power business shall be allowed a credit against taxes due under this chapter in an amount equal to investment cost recovery incentive payments made in any fiscal year under RCW 82.16.120. The credit shall be taken in a form and manner as required by the department. The credit under this section for the fiscal year may not exceed one-half percent of the businesses' taxable power sales due under RCW 82.16.020(1)(b) or one hundred thousand dollars, whichever is greater. Incentive payments to participants in a utility-owned community solar project as defined in RCW 82.16.110(2)(a)(ii) may only account for up to twenty-five percent of the total allowable credit. Incentive payments to participants in a company-owned community solar project as defined in RCW 82.16.110(2)(a)(iii) may only account for up to five percent of the total allowable credit. The credit may not exceed the tax that would otherwise be due under this chapter. Refunds shall not be granted in the place of credits. Expenditures not used to earn a credit in one fiscal year may not be used to earn a credit in subsequent years.

(2) For any business that has claimed credit for amounts that exceed the correct amount of the incentive payable under RCW 82.16.120, the amount of tax against which credit was claimed for the excess payments shall be immediately due and payable. The department shall assess interest but not penalties on the taxes against which the credit was claimed. Interest shall be assessed at the rate provided for delinquent excise taxes under chapter 82.32 RCW, retroactively to the date the credit was claimed, and shall accrue until the taxes against which the credit was claimed are repaid.

(3) The right to earn tax credits under this section expires June 30, 2020. Credits may not be claimed after June 30, 2021.

[ 2010 c 202 § 3; 2009 c 469 § 506; 2005 c 300 § 4.]

## **RCW 82.16.120**

### **Renewable energy system cost recovery—Application to light/power business—Certification—Limitations.**

(1)(a) Any individual, business, local governmental entity, not in the light and power business or in the gas distribution business, or a participant in a community solar project may apply to the light and power business serving the situs of the system, each fiscal year beginning on July 1, 2005, for an investment cost recovery incentive for each kilowatt-hour from a customer-generated electricity renewable energy system.

(b) In the case of a community solar project as defined in RCW 82.16.110(2)(a)(i), the administrator must apply for the investment cost recovery incentive on behalf of each of the other owners.

(c) In the case of a community solar project as defined in RCW 82.16.110(2)(a)(iii), the company owning the community solar project must apply for the investment cost recovery incentive on behalf of each member of the company.

(2)(a) Before submitting for the first time the application for the incentive allowed under subsection (4) of this section, the applicant must submit to the department of revenue and to the climate and rural energy development center at the Washington State University, established under RCW 28B.30.642, a certification in a form and manner prescribed by the department that includes, but is not limited to, the following information:

(i) The name and address of the applicant and location of the renewable energy system.

(A) If the applicant is an administrator of a community solar project as defined in RCW 82.16.110(2)(a)(i), the certification must also include the name and address of each of the owners of the community solar project.

(B) If the applicant is a company that owns a community solar project as defined in RCW 82.16.110(2)(a)(iii), the certification must also include the name and address of each member of the company;

(ii) The applicant's tax registration number;

(iii) That the electricity produced by the applicant meets the definition of "customer-generated electricity" and that the renewable energy system produces electricity with:

(A) Any solar inverters and solar modules manufactured in Washington state;

- (B) A wind generator powered by blades manufactured in Washington state;
  - (C) A solar inverter manufactured in Washington state;
  - (D) A solar module manufactured in Washington state;
  - (E) A stirling converter manufactured in Washington state; or
  - (F) Solar or wind equipment manufactured outside of Washington state;
- (iv) That the electricity can be transformed or transmitted for entry into or operation in parallel with electricity transmission and distribution systems; and
- (v) The date that the renewable energy system received its final electrical permit from the applicable local jurisdiction.
- (b) Within thirty days of receipt of the certification the department of revenue must notify the applicant by mail, or electronically as provided in RCW 82.32.135, whether the renewable energy system qualifies for an incentive under this section. The department may consult with the climate and rural energy development center to determine eligibility for the incentive. System certifications and the information contained therein are subject to disclosure under RCW 82.32.330(3)(l).
- (3)(a) By August 1st of each year application for the incentive must be made to the light and power business serving the situs of the system by certification in a form and manner prescribed by the department that includes, but is not limited to, the following information:
- (i) The name and address of the applicant and location of the renewable energy system.
- (A) If the applicant is an administrator of a community solar project as defined in RCW 82.16.110(2)(a)(i), the application must also include the name and address of each of the owners of the community solar project.
- (B) If the applicant is a company that owns a community solar project as defined in RCW 82.16.110(2)(a)(iii), the application must also include the name and address of each member of the company;
- (ii) The applicant's tax registration number;
  - (iii) The date of the notification from the department of revenue stating that the renewable energy system is eligible for the incentives under this section; and
  - (iv) A statement of the amount of kilowatt-hours generated by the renewable energy system in the prior fiscal year.
- (b) Within sixty days of receipt of the incentive certification the light and power business serving the situs of the system must notify the applicant in writing whether the incentive payment will be authorized or denied. The business may consult with the climate and rural energy development center to determine eligibility for the incentive payment. Incentive certifications and the information contained therein are subject to disclosure under RCW 82.32.330(3)(l).
- (c)(i) Persons, administrators of community solar projects, and companies receiving incentive payments must keep and preserve, for a period of five years, suitable records as may be necessary to determine the amount of incentive applied for and received. Such records must be open for examination at any time upon notice by the light and power business that made the payment or by the department. If upon examination of any records or from other information obtained by the business or department it appears that an incentive has been paid in an amount that exceeds the correct amount of incentive payable, the business may assess against the person for the amount found to have been paid in excess of the correct amount of incentive payable and must add thereto interest on the amount. Interest is assessed in the manner that the department assesses interest upon delinquent tax under RCW 82.32.050.
- (ii) If it appears that the amount of incentive paid is less than the correct amount of incentive payable the business may authorize additional payment.
- (4) Except for community solar projects, the investment cost recovery incentive may be paid fifteen cents per economic development kilowatt-hour unless requests exceed the amount authorized for credit to the participating light and power business. For community solar projects, the investment cost recovery incentive may be paid thirty cents per economic development kilowatt-hour unless requests exceed the amount authorized for credit to the participating light and power business. For the purposes of this section, the rate paid for the investment cost recovery incentive may be multiplied by the following factors:
- (a) For customer-generated electricity produced using solar modules manufactured in Washington state or a solar stirling converter manufactured in Washington state, two and four-tenths;
  - (b) For customer-generated electricity produced using a solar or a wind generator equipped with an inverter manufactured in Washington state, one and two-tenths;
  - (c) For customer-generated electricity produced using an anaerobic digester, or by other solar equipment or using a wind generator equipped with blades manufactured in Washington state, one; and

- (d) For all other customer-generated electricity produced by wind, eight-tenths.
- (5)(a) No individual, household, business, or local governmental entity is eligible for incentives provided under subsection (4) of this section for more than five thousand dollars per year.
- (b) Except as provided in (c) through (e) of this subsection (5), each applicant in a community solar project is eligible for up to five thousand dollars per year.
- (c) Where the applicant is an administrator of a community solar project as defined in RCW 82.16.110(2)(a)(i), each owner is eligible for an incentive but only in proportion to the ownership share of the project, up to five thousand dollars per year.
- (d) Where the applicant is a company owning a community solar project that has applied for an investment cost recovery incentive on behalf of its members, each member of the company is eligible for an incentive that would otherwise belong to the company but only in proportion to each ownership share of the company, up to five thousand dollars per year. The company itself is not eligible for incentives under this section.
- (e) In the case of a utility-owned community solar project, each ratepayer that contributes to the project is eligible for an incentive in proportion to the contribution, up to five thousand dollars per year.
- (6) If requests for the investment cost recovery incentive exceed the amount of funds available for credit to the participating light and power business, the incentive payments must be reduced proportionately.
- (7) The climate and rural energy development center at Washington State University energy program may establish guidelines and standards for technologies that are identified as Washington manufactured and therefore most beneficial to the state's environment.
- (8) The environmental attributes of the renewable energy system belong to the applicant, and do not transfer to the state or the light and power business upon receipt of the investment cost recovery incentive.
- (9) No incentive may be paid under this section for kilowatt-hours generated before July 1, 2005, or after June 30, 2020.
- [ 2011 c 179 § 3. Prior: 2010 c 202 § 2; 2010 c 106 § 103; 2009 c 469 § 505; 2007 c 111 § 101; 2005 c 300 § 3.]

## **RCW 82.16.110**

### **Renewable energy system cost recovery—Definitions.**

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

- (1) "Administrator" means an owner and assignee of a community solar project as defined in subsection (2)(a)(i) of this section that is responsible for applying for the investment cost recovery incentive on behalf of the other owners and performing such administrative tasks on behalf of the other owners as may be necessary, such as receiving investment cost recovery incentive payments, and allocating and paying appropriate amounts of such payments to the other owners.
- (2)(a) "Community solar project" means:
- (i) A solar energy system that is capable of generating up to seventy-five kilowatts of electricity and is owned by local individuals, households, nonprofit organizations, or nonutility businesses that is placed on the property owned by a cooperating local governmental entity that is not in the light and power business or in the gas distribution business;
  - (ii) A utility-owned solar energy system that is capable of generating up to seventy-five kilowatts of electricity and that is voluntarily funded by the utility's ratepayers where, in exchange for their financial support, the utility gives contributors a payment or credit on their utility bill for the value of the electricity produced by the project; or
  - (iii) A solar energy system, placed on the property owned by a cooperating local governmental entity that is not in the light and power business or in the gas distribution business, that is capable of generating up to seventy-five kilowatts of electricity, and that is owned by a company whose members are each eligible for an investment cost recovery incentive for the same customer-generated electricity as provided in RCW 82.16.120.
- (b) For the purposes of "community solar project" as defined in (a) of this subsection:
- (i) "Company" means an entity that is:
    - (A)(I) A limited liability company;
    - (II) A cooperative formed under chapter 23.86 RCW; or
    - (III) A mutual corporation or association formed under chapter 24.06 RCW; and
  - (B) Not a "utility" as defined in this subsection (2)(b); and

(ii) "Nonprofit organization" means an organization exempt from taxation under 26 U.S.C. Sec. 501(c)(3) of the federal internal revenue code of 1986, as amended, as of January 1, 2009; and

(iii) "Utility" means a light and power business, an electric cooperative, or a mutual corporation that provides electricity service.

(3) "Customer-generated electricity" means a community solar project or the alternating current electricity that is generated from a renewable energy system located in Washington and installed on an individual's, businesses', or local government's real property that is also provided electricity generated by a light and power business. Except for community solar projects, a system located on a leasehold interest does not qualify under this definition. Except for utility-owned community solar projects, "customer-generated electricity" does not include electricity generated by a light and power business with greater than one thousand megawatt hours of annual sales or a gas distribution business.

(4) "Economic development kilowatt-hour" means the actual kilowatt-hour measurement of customer-generated electricity multiplied by the appropriate economic development factor.

(5) "Local governmental entity" means any unit of local government of this state including, but not limited to, counties, cities, towns, municipal corporations, quasi-municipal corporations, special purpose districts, and school districts.

(6) "Photovoltaic cell" means a device that converts light directly into electricity without moving parts.

(7) "Renewable energy system" means a solar energy system, an anaerobic digester as defined in RCW 82.08.900, or a wind generator used for producing electricity.

(8) "Solar energy system" means any device or combination of devices or elements that rely upon direct sunlight as an energy source for use in the generation of electricity.

(9) "Solar inverter" means the device used to convert direct current to alternating current in a solar energy system.

(10) "Solar module" means the smallest nondivisible self-contained physical structure housing interconnected photovoltaic cells and providing a single direct current electrical output.

(11) "Stirling converter" means a device that produces electricity by converting heat from a solar source utilizing a stirling engine.

[ 2011 c 179 § 2. Prior: 2010 c 202 § 1; 2010 c 106 § 225; 2009 c 469 § 504; 2005 c 300 § 2.]

## Recommendations

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### Legislative Auditor Recommendation

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### Legislative Auditor Recommendation

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**The Legislature should review and clarify the preference because while there has been growth in locally made systems and associated opportunities for businesses, this growth is concentrated in a small number of solar energy system manufacturers. As part of the clarification, the Legislature should include targets for how many new local renewable energy systems it hopes to create and how much power capacity it hopes to generate through the use of this preference, as well as which local industries it would like to support.**

- The number of renewable energy systems certified and the amount of Washington made components used in new systems has increased. These increases are primarily due to solar energy systems. New wind systems have declined since 2011 and no new anaerobic digester systems have been installed since 2011.
- Four Washington businesses have had their products certified as Made in Washington since the preference began and one of those businesses has since discontinued its production.
- At least 14 of the 39 utilities using the tax credit have reached their caps or expect to within the next year. It is unclear what the impact of this will be on new renewable energy system installations.
- It is unclear why there are different rates for different technologies or why the preference includes only some of the renewable energy technologies included in other preferences.

Utilities can no longer earn tax credits after June 30, 2020. Credits may not be claimed after June 30, 2021.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on Legislative action.

## Letter from Commission Chair

Available December 2016.

## **Commissioners' Recommendation**

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Available December 2016.

## **Agency Response**

If applicable, available December 2016.

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# Data Center Equipment

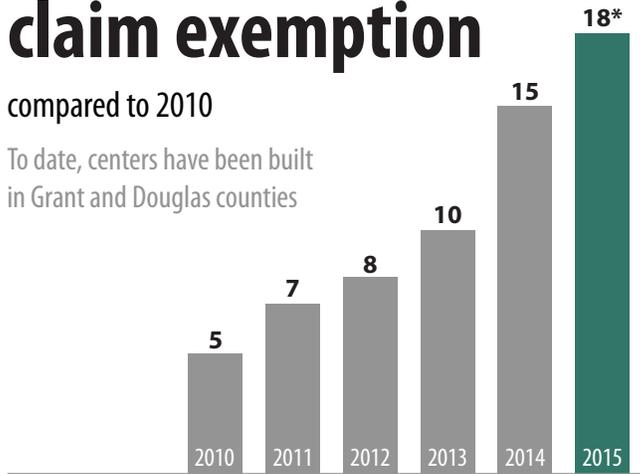
JULY 2016

Stated Objectives	Results
Improve industry competitiveness through increased investment, resulting in increased property taxes paid on data centers in rural counties	Achieved
Create family-wage jobs	Too soon to tell

## More businesses invest in data centers and claim exemption

compared to 2010

To date, centers have been built in Grant and Douglas counties

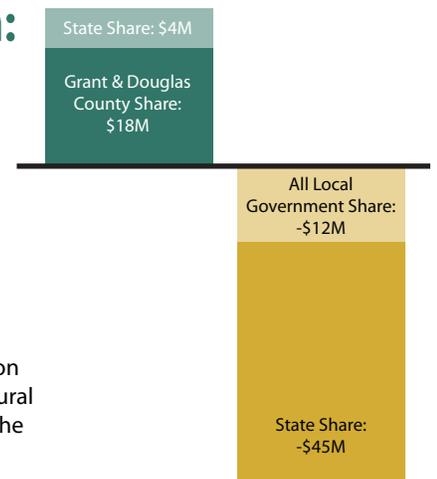


\* Potential, estimated by JLARC staff based on exemption certificates issued. Source: JLARC Staff Analysis of DOR – Tax Incentive Public Disclosure Reports.

## Gain in property tax paid is less than sales tax losses

**Property tax gain:**  
**\$22M** (2016)

Businesses pay property taxes on data centers in rural counties.



**Sales tax loss:**  
**-\$57M** (2016)

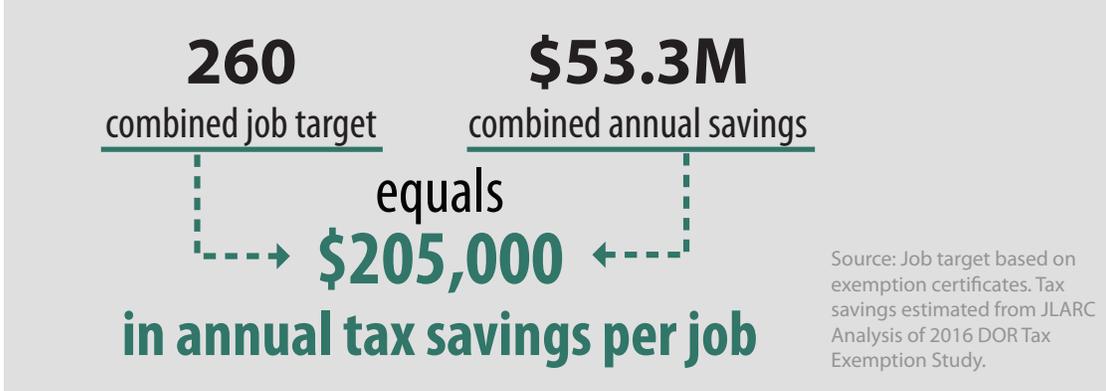
Businesses do not pay sales taxes on certain equipment purchases for rural data centers, regardless of where the purchase is made.

Source: JLARC Staff Analysis of DOR tax exemption study, property tax data

## Too soon to know if job target will be met

Actual job data is unavailable until late 2016.

Businesses that do not meet job targets must pay back previous years' tax savings



Source: Job target based on exemption certificates. Tax savings estimated from JLARC Analysis of 2016 DOR Tax Exemption Study.

**RECOMMENDATION: The Legislature should continue the data center sales and use tax exemption because it is achieving the stated public policy objective.** The rural county tax base has increased as a result of the construction of data centers eligible for the tax preference.

For more information, contact:

Keenan Konopaski, Washington State Legislative Auditor • (360) 786-5187 • keenan.konopaski@leg.wa.gov

The complete report is at [citizentaxpref.wa.gov](http://citizentaxpref.wa.gov).

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Data Center Equipment | Sales and Use

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### Summary of this Review

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>A sales and use tax exemption to qualifying businesses (data center owners) and tenants located in an eligible data center on their purchases of:</p> <ul style="list-style-type: none"> <li>• Original server equipment;</li> <li>• Replacement server equipment;</li> <li>• Server installation labor and repair services;</li> <li>• Power infrastructure, which includes the equipment and fixtures necessary to transform, distribute, and manage the electricity required to operate the server equipment; and</li> <li>• Labor and services required to construct, install, repair, alter, or improve the power infrastructure.</li> </ul> <p>The effective expiration date of the preference is 2026.</p>	<p><b>Sales &amp; Use Tax RCWs</b> 82.08.986, and 82.12.986</p>	<p>\$111.6 million</p>

<b>Public Policy Objective</b>
<p>The Legislature established a specific public policy objective for this preference: <b>to improve industry competitiveness through increased investment in data center construction in rural Washington counties.</b> The legislation provided metrics for JLARC staff to analyze:</p> <ul style="list-style-type: none"> <li>• Investment in data center construction in rural counties;</li> <li>• Resulting changes to state and local property tax values; and</li> <li>• Resulting changes to the rural county tax collections.</li> </ul> <p>The Legislature also included this direction: <b>if a review finds that the rural county tax base is increased as a result of the construction of data centers eligible for the preference, the Legislature intends to extend the expiration date of the preference.</b></p> <p>In addition, the Legislature included a “claw back” mechanism so that beneficiaries of the preference must <b>create family-wage jobs</b> or pay back the exempted sales or use taxes.</p>

<b>Recommendations</b>
<p><b>Legislative Auditor’s Recommendation</b></p> <p><b>Continue:</b> The Legislature should continue the data center sales and use tax exemption because the stated public policy objectives of increased rural property values and rural property taxes from investment in data center construction in rural Washington counties are being achieved.</p> <p>It is too early to tell whether data center businesses will comply with their job creation requirements.</p> <p><b>Commissioner Recommendation:</b> Available in October 2016</p>

### Details on this Preference

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## What is the Preference?

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The Legislature established this preference to improve industry competitiveness through increased investment in data centers in rural Washington counties.

Data centers are buildings constructed or refurbished to house working computer servers, with features including uninterruptible power supplies, sophisticated fire suppression and prevention systems, and enhanced physical security.

Qualifying businesses (data center owners) and tenants located in an eligible data center do not have to pay sales or use tax on their purchases of:

- Original server equipment;
- Replacement server equipment;
- Server installation labor and repair services;
- Power infrastructure, which includes the equipment and fixtures necessary to transform, distribute, and manage the electricity required to operate the server equipment; and
- Labor and services required to construct, install, repair, alter, or improve the power infrastructure.

In order for a computer data center to be **eligible**, it must:

- Be in a rural county;
- Meet certain minimum size requirements; and
- Be under construction by certain dates.

In order to **receive** the exemption, the data center owner or tenant must:

- Apply for and receive an exemption certificate from the Department of Revenue (DOR);
- Buy original servers and have replacement servers and power infrastructure installed and in use by certain dates;
- Create at least a minimum number of family-wage jobs; and
- File reports with DOR.

The data center owner or tenant may only use the exemption for a specified period of time, with the time period defined either by an end date set in statute or a certain number of years.

The sections below provide more detail on the requirements for the data centers and the owners and tenants, including the window of time these businesses have to use the sales and use tax exemption.

### Eligibility Requirements for Data Centers

In order to be eligible, a data center must be in a rural county, of a certain size, and under construction by certain dates.

#### In a Rural County

The data center must be in a rural county, which the Legislature defined as a county with a population density of less than 100 persons per square mile or a county smaller than 225 square miles. All Washington counties meet this definition except Benton, Clark, King, Kitsap, Pierce, Snohomish, Spokane, and Thurston counties.

#### Of a Certain Size

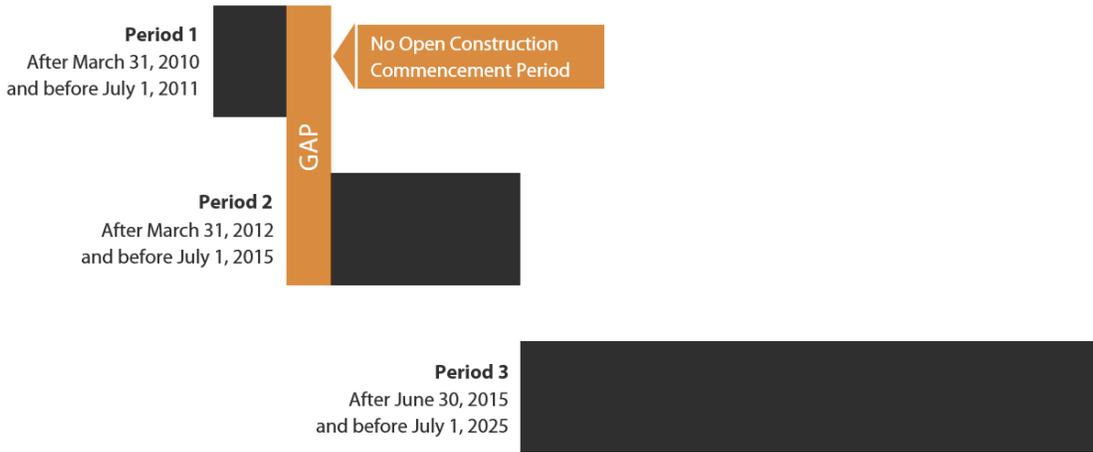
The data center must be at least 100,000 square feet and have at least 20,000 square feet dedicated to housing working servers. The space must not have been previously dedicated for server use.

#### Under Construction by Certain Dates

The Legislature created the preference in 2010 and then passed bills in 2012 and 2015 extending the dates for the preference. In each of these three bills, the Legislature established a time period within which construction of a data center has to begin in order for the owner or tenant to receive the preference. There are three time periods established in the three bills.

Note that there is a gap between the end of the first time period and the beginning of the second. A data center that began construction during that nine-month gap is not eligible for the preference.

**To Be Eligible for the Preference, Construction on the Data Center Must Begin During One of Three Designated Time Periods**



JLARC staff analysis of RCW 82.08.986.

**Requirements for Data Center Owners or Tenants to Receive the Preference**

In order to receive the preference, an owner or tenant must acquire an exemption certificate from DOR, have servers and power infrastructure installed and in use by certain dates, meet job creation requirements, and file reports with DOR.

**Acquire Exemption Certificate from DOR**

To claim the exemption, data center owners or tenants must apply to the Department of Revenue for an exemption certificate.

In 2015, the Legislature capped the number of new data centers that may qualify for the preference at 12. The Legislature directed DOR to make the exemption available on a first-in-time basis based on the date the Department receives applications. An exemption certificate expires two years after the date of issuance if construction of the data center has not begun. Applicants must provide the building permit number for the data center and the date the building permit was issued. Applicants must also identify the square footage of the facility dedicated to housing servers or, in the case of tenants, the amount of server space leased.

An owner or tenant may not use this tax preference if the business is already using a different tax preference for its computer data center that allows a tax deferral for investment projects in distressed areas.

**Have Servers and Power Infrastructure Installed by Certain Dates**

Depending on the construction time period, the business may make use of the exemption for only a specified period of time.

**The End Date for Use of the Exemption Varies by Construction Commencement Period, and by Business and Equipment Type**

Construction Commencement Period	Data Center Owner, Original Server Equipment	Data Center Owner, Replacement Server Equipment	Tenant, Original Server Equipment	Tenant, Replacement Server Equipment	Data Center Owner, Power Infrastructure
Period 1 (4/2010-6/2011)	January 1, 2026*	April 1, 2018	January 1, 2026*	April 1, 2024	January 1, 2026*
Period 2 (4/2012-6/2015)	January 1, 2026*	April 1, 2024	January 1, 2026*	April 1, 2024	January 1, 2026*

<b>Period 3 (7/2015-6/2025)</b>	12 years from Date of COO	12 years from Date of COO	January 1, 2026*	12 years from Date of COO	January 1, 2026*
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\*Per RCW 82.32.805, the expiration date is the first day of the calendar year subsequent to the calendar year ten years from the effective date of the tax preference. The effective date of the most recent expansion of the preference was July 1, 2015. COO indicates the data center owner or tenant receiving a Certificate of Occupancy. Source: DOR Memo: Duration of Data Center Exemptions, March 11, 2016.

### **Create at Least a Minimum Number of Family-Wage Jobs**

Within six years after receiving the exemption certificate from DOR, businesses claiming the exemption must establish that net employment at the eligible data center has increased by a minimum of 35 family-wage jobs, or by three family-wage jobs for each 20,000 square feet of space newly dedicated to housing servers.

Statute defines a family-wage job as:

- A new permanent position requiring 40 hours per week or equivalent;
- Receiving a wage at least 150 percent of the per capita personal income for the county in which the data center is located; and
- Including health care coverage.

For tenants of a data center, the job creation requirement applies to the server space occupied by the tenant.

Statute includes a “claw back” provision related to the job creation requirement. A data center owner or tenant that does not meet the job creation requirement must pay the previously exempted sales and use taxes.

### **File Reports with DOR**

An owner or tenant claiming the preference must file reports stating beneficiary savings, the purchases that are exempt from sales tax, employment at the facility benefiting from the tax preference, and the wages paid and benefits offered to employees. This information is reported in the Annual Survey, the Annual Report, and a Buyer Addendum with the Department of Revenue.

## **Legal History**

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### **2007**

Companies such as Microsoft, Yahoo, Intuit, and Ask.com located data centers in Grant County. In December, the Attorney General issued an opinion agreeing with DOR’s interpretation that data centers are not allowed to claim a sales tax preference for manufacturers because the companies’ data centers did not produce a product which is sold to the companies’ customers. Yahoo and Microsoft responded by ceasing construction on their data centers.

### **2008**

The Legislature considered a Governor-request bill for a sales and use tax remittance for the state share of the tax paid on replacement computer server equipment and labor and service charges for installation. The prime sponsor and others framed the bill as an economic development opportunity that extends the “new economy” to Eastern Washington. The bill did not pass.

### **2010**

The Legislature passed a bill requested by DOR to create this sales and use tax exemption for eligible server equipment and power infrastructure for eligible computer data centers. One month later, the Legislature amended the preference to also apply to lessees and defined “family wage jobs.”

The Legislature required businesses to commence construction on eligible projects between April 1, 2010, and July 1, 2011 to be eligible for the preference. It also established end dates for original equipment, replacement equipment, and power infrastructure.

### **2011**

Legislation to extend the tax preference was introduced but did not pass. The first construction commencement window ended July 1, 2011.

## 2012

The Legislature extended the preference by adding a second construction commencement period to cover April 1, 2012 to July 1, 2015, and extending the expiration dates.

## 2015

The Legislature again extended the preference by adding a third construction commencement period from July 1, 2015 to July 1, 2025.

The bill established a cap of eight for the number of eligible computer data centers commencing construction between June 30, 2015, and June 30, 2019; and a cap of 12 commencing construction between July 1, 2015, and July 1, 2025. The bill clarified that tenants of qualified data centers do not constitute additional data centers under the cap.

The amendment also extended the data center replacement equipment end date to 12 years after the certificate of occupancy.

## Other Relevant Background

### Energy and Water are Important Factors in Data Center Location Selection

Data center firms identify a number of factors that influence location decisions, such as energy costs and access to water.

The importance of energy costs is illustrated by power consumption of data centers nationwide. In 2013, data centers consumed an estimated 91 billion kilowatt-hours of electricity, approximately 2.4 percent of total U.S. consumption.

With the idling of Alcoa's aluminum smelters in Washington, data centers are expected to become the state's most power-consuming industry. To ensure stability in supply and pricing, data center firms can enter into purchasing agreements with utilities.

Data center cooling systems require large amounts of water – a 15-megawatt data center is estimated to consume 80-130 million gallons of water per year – and access to and cost of this resource is a factor as well. Finally, data centers require access to telecommunications infrastructure.

### Quincy Ranked Among Low-Cost Markets for Data Centers

In addition to the availability of energy and water, there are other cost factors that may drive data center location decisions.

In December 2015, the research division of global real estate firm CBRE released a report comparing how data center cost factors rank across 30 U.S. markets. According to this report, on average, IT hardware and facility construction represent the majority of total data center project costs. Power costs and net state and local taxes are the next largest components, while combined land acquisition and labor costs account for the balance.

Based on these factors, CBRE ranked Quincy, in Grant County, among low-cost markets for data centers. Quincy is home to the majority of the beneficiaries claiming the preference. In its analysis, CBRE assumed before-tax IT-hardware costs to be constant across markets, while the other factors varied.

CBRE noted the availability of inexpensive renewable electricity supplied by two hydroelectric dams contributed to Quincy's ranking as the lowest-cost power market in the United States, at 7 percent of total project cost. In terms of taxes, Quincy ranked near the national average, with sales taxes, real estate taxes, personal property taxes, and available incentives, representing an estimated 9 percent of total project cost. The tax figure includes the impact of this tax preference.

Although land represents the smallest expense component of data center projects, Quincy ranks on the low end of the markets evaluated, with land acquisition representing 0.5 percent of total project costs.

### Quincy Ranks Favorably as a Low-Cost Market for Data Centers

Category	Percentage of Total Costs	
	National Average	Quincy
IT Hardware	36%	41%
Construction	35%	38%
Power	13%	7%

Taxes (incl. incentives)	9%	9%
Staffing	5%	6%
Land	2%	0.5%

Numbers may not add up due to rounding.  
Source: CBRE, 2015.

## Public Policy Objectives

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### What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?

In 2015, the Legislature established a specific public policy objective for this preference: **to improve industry competitiveness through increased investment in data center construction**. In addition, the Legislature included a “claw back” mechanism so that beneficiaries of the preference must **create family-wage jobs** or pay back the exempted sales or use taxes.

#### Improve Industry Competitiveness through Increased Investment in Data Centers

The 2015 Legislature included a tax preference performance statement for this preference. The Legislature declared that the public policy objective is to improve industry competitiveness through increased investment in data center construction in rural Washington counties.

The legislation provided metrics for JLARC staff to analyze:

- Investment in data center construction in rural counties;
- Resulting changes to state and local property tax values; and
- Resulting changes to the rural county tax collections.

The Legislature also included this direction: **if a review finds that the rural county tax base is increased as a result of the construction of data centers eligible for the preference, the Legislature intends to extend the expiration date of the preference.**

#### Create Family-Wage Jobs

The 2015 legislation requires data center owners and tenants to create at least a minimum number of family-wage jobs in order to receive the sales and use tax exemption. Within six years after receiving the exemption certificate from the Department of Revenue, the businesses must establish that net employment at the data center has increased by a minimum of 35 family-wage jobs or by three family-wage jobs for each 20,000 square feet of space newly dedicated to housing servers.

The legislation also has requirements for wage levels and benefits. In order to qualify as a “family wage job,” data center employees must receive a wage at least 150 percent of the per capita personal income for the county in which the data center is located. The beneficiaries claiming the tax exemption have data centers in Grant and Douglas Counties, and based on data from the Bureau of Economic Analysis (BEA), family wage jobs in these counties would earn annual wages of approximately \$51,600 and \$49,900, respectively. Family wage jobs must also include health care coverage.

The Legislature included a “claw back” provision related to the job creation requirement. A data center owner or tenant that does not meet the job creation requirements must pay the previously exempted sales and use taxes.

## Are Objectives Being Met?

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### What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?

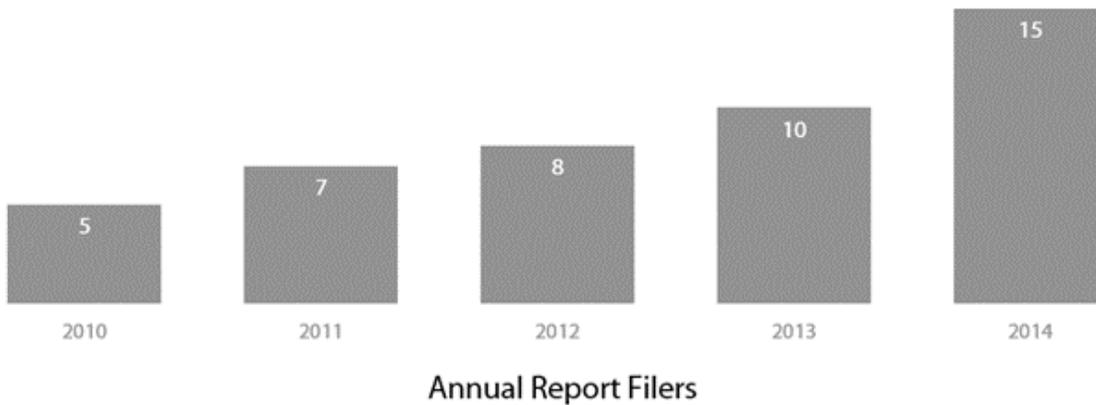
The objective for increased investment in data centers in rural counties is being met. Businesses are investing in data centers in Grant and Douglas counties.

It is too early to assess whether businesses will comply with the job creation requirements.

#### Improve Industry Competitiveness through Increased Investment in Data Centers

Owners and tenants are investing in data centers in rural counties. The number of businesses claiming the preference has grown from five in 2010 to 15 in 2014. Qualifying data centers reported dedicating nearly 1.24 million square feet of data center space to housing servers.

### The Number of Beneficiaries Claiming the Tax Preference Has Grown



Source: JLARC Staff Analysis of DOR – Tax Incentive Public Disclosure Reports.

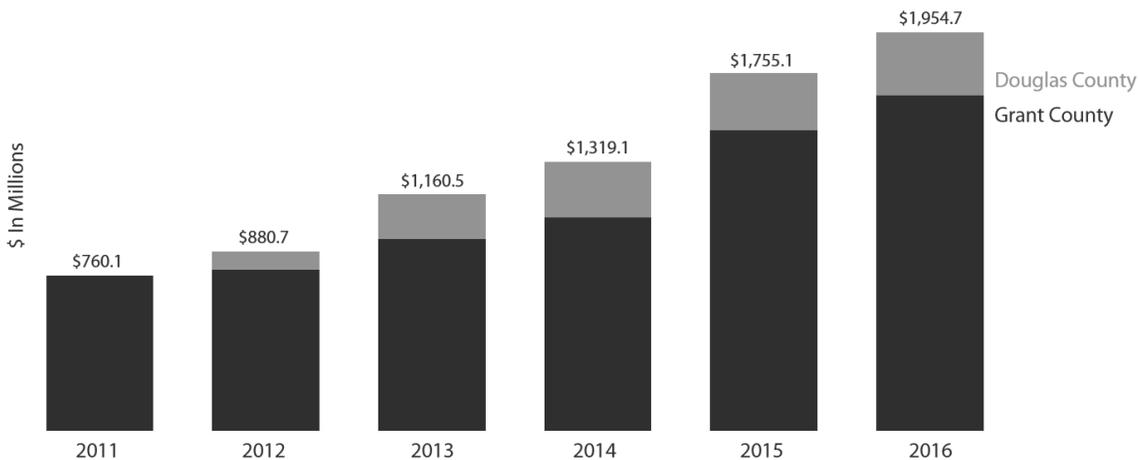
### The Number of Businesses Investing in Data Centers in Rural Counties Is Growing

The Department of Revenue (DOR) reports that, as of February 2016, it has issued exemption certificates to 18 businesses, including two since July 2015. In addition, the same business may invest in more than one data center. Fifteen of these businesses have filed Annual Reports with DOR for 2014, the most recent year for which Annual Report data is available.

### Investments Increase Property Tax Values and Expand Rural County Tax Collections

Data from the Grant and Douglas County Assessor’s offices indicates investment in data centers has increased real and personal property tax value in rural counties. Investment in data center properties has added nearly \$1.2 billion to assessed tax values since 2011.

### Investment in data centers has added nearly \$1.2 billion to rural county property tax values since 2011

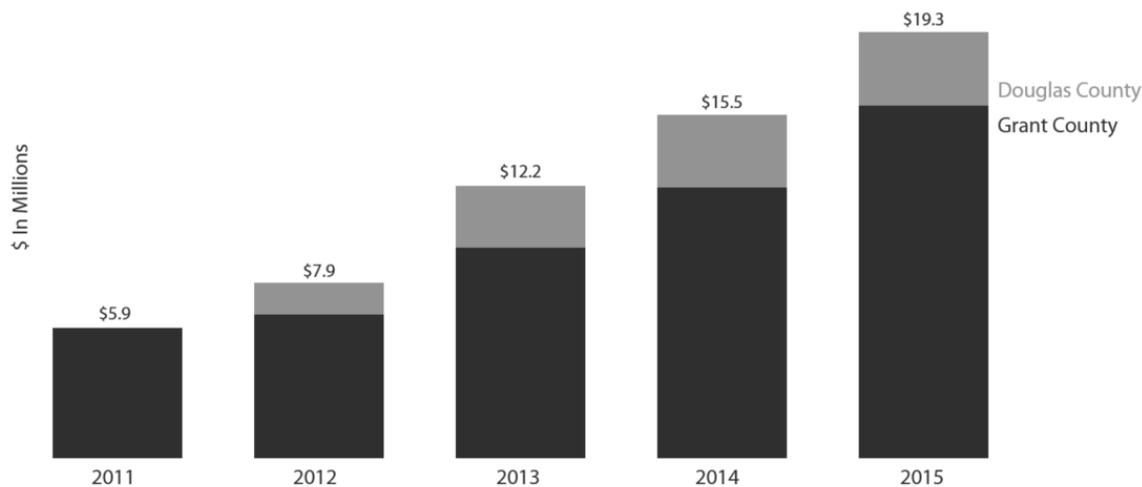


2011 data not available for Douglas County.

Source: JLARC Staff Analysis of Grant and Douglas County Assessor’s Office Data.

The increase in data center property value corresponds with an increase in property taxes paid on these properties. Property taxes paid on data center properties grew more than \$13 million between 2011 and 2015.

### Property taxes paid on data centers increased by more than \$13 million between 2011 and 2015



2011 data not available for Douglas County.  
 Source: JLARC Staff Analysis of Grant and Douglas County Assessor’s Data.

### Create Family-Wage Jobs

JLARC staff estimate that, based on the applications for exemption certificates issued through September 2015, data centers claiming the preference would be required to create 260 jobs. Job creation targets are determined by a formula; beneficiaries must create the lesser of 35 family-wage jobs or three family-wage jobs per 20,000 square feet dedicated to housing servers.

Given the estimated five-year average beneficiary savings of \$53.3 million per year, this number of jobs equates to an annual cost of \$205,000 per job. It is too early to conclude whether businesses have complied with the job creation requirements.

The businesses have six years from the date DOR issues an exemption certificate to meet the requirements. The earliest that any business will reach the six-year deadline is May 2016.

DOR reports it is developing a process to examine the job, wage, and benefit information for beneficiaries as the six-year deadlines approach to see if each business has met its obligation to create family-wage jobs.

However, DOR considers the date on which the exemption certificates are issued to be confidential information, meaning the date on which a beneficiary must meet its job creation requirement cannot be disclosed.

Data from Annual Reports submitted by some of the beneficiaries allows for some additional limited analysis of job creation at beneficiary data centers. Data from 13 Annual Reports showed between 70 and 127 family-wage jobs, as estimated based on BEA data. The estimated job creation targets for these 13 beneficiaries is 111 jobs.

### To what extent will continuation of the tax preference contribute to these public policy objectives?

To the extent that the tax preference influences data centers to locate in rural Washington, continuation of the tax preference will contribute to the public policy objective of increasing investment in data center construction in rural counties. During the years that the tax preference has been available, the taxpayers that have claimed the preference have added to real and personal property tax rolls.

However, in addition to tax incentives, several other factors may affect data center location such as the cost of power and water availability. It is unclear to what extent the non-tax-incentive factors alone make Washington a favorable location for data centers.

## Beneficiaries

### Who are the entities whose state tax liabilities are directly affected by the tax preference?

#### Direct Beneficiaries

Owners and tenants of data centers – buyers of eligible server equipment and eligible power infrastructure for computer data centers – are the direct beneficiaries of the tax preferences.

Through 2014, 15 firms have submitted Annual Reports to DOR as having claimed the tax preference. Eight of these are listed as qualifying businesses (data center owners), while the remaining seven are tenants. Twelve beneficiaries are in Grant County – nine in Quincy and three in Moses Lake. Another three beneficiaries are in East Wenatchee in Douglas County.

- The Boeing Company
- Microsoft Corporation
- Costco Wholesale Corporation
- Dell Marketing, LP
- Amdocs, Inc.
- VMWare, Inc.
- Akamai Technologies, Inc.
- Blackrock Financial Management, Inc.
- Intergate Quincy, LLC
- RS Titan, LLC
- RS Titan Lotus, LLC
- Vantage Data Centers Management Company, LLC
- Code 42 Software, Inc.
- Sony Pictures Imageworks, Inv.

## Indirect Beneficiaries

Various indirect beneficiaries likely exist, ranging from sellers of eligible equipment to businesses that install and service the equipment. It is also possible that there are indirect beneficiaries of any direct, indirect, and induced effects of the presence and operation of computer data centers in rural Washington counties. These include other property owners in the counties that could see their property tax assessments decline, as well as sellers of resources used by data centers.

## Data Reporting Issues

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### Reporting Issues Complicate Evaluating Beneficiary Savings and Compliance

The data center sales and use tax exemption is subject to various reporting requirements. In addition to both the Annual Report and the Annual Survey, data centers claiming the preference must submit a Buyer Addendum for any exempted purchases of data center equipment and power infrastructure. However, despite these requirements, several reporting issues complicate the estimate of beneficiary savings and make it more difficult to see if businesses are meeting their job creation requirements.

- There is not a specific line for businesses to report sales that are exempt from sales and use tax due to the exemption. Without this explicit reporting, it is not possible to determine the beneficiary savings directly. Some data center businesses may be reporting deductions on the “other deductions” line, but this data is likely incomplete.
- Buyer Addendum data could improve estimates of beneficiary savings, but only six months of Buyer Addendum filings are available, and only nine of the 15 data center businesses reported exempted purchases in this period.
- The requirement that beneficiaries submit Annual Surveys, in which beneficiaries report the amount of the preference, first took effect on July 1, 2015. As such, as of April 30, 2016, no Annual Survey data is available, and the data is not expected to be available until December 2016. The Annual Survey will facilitate accurate reporting of beneficiary savings.
- Annual Report data, which includes information concerning employment and wage levels, is limited in its ability to inform analysis of job creation at data centers for several reasons.
  - The most recent available Annual Reports are from 2014, and employment data is likely to have changed in the intervening months.
  - The Annual Reports through 2014 do not include data centers that began claiming the preference after 2014, and so the data does not represent all beneficiaries.
  - The Annual Reports do not include contracted employment, which statute provides may count toward the employment target.
  - Beneficiaries that hold multiple exemption certificates report employment data in one combined report, further complicating using the data to gauge whether job creation targets may be met.
  - Wage information is reported in wage bands, and it is not specific enough to show whether a data center job pays wages that meet the statutory definition of “family wage.”

## Revenue and Economic Impacts

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### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

Direct beneficiaries saved an estimated \$34.8 million in Fiscal Year 2015 and will save an estimated \$111.6 million in the 2017-19 Biennium.

### Estimated 2017-19 Direct Beneficiary Savings for Data Center Sales and Use Tax Exemption

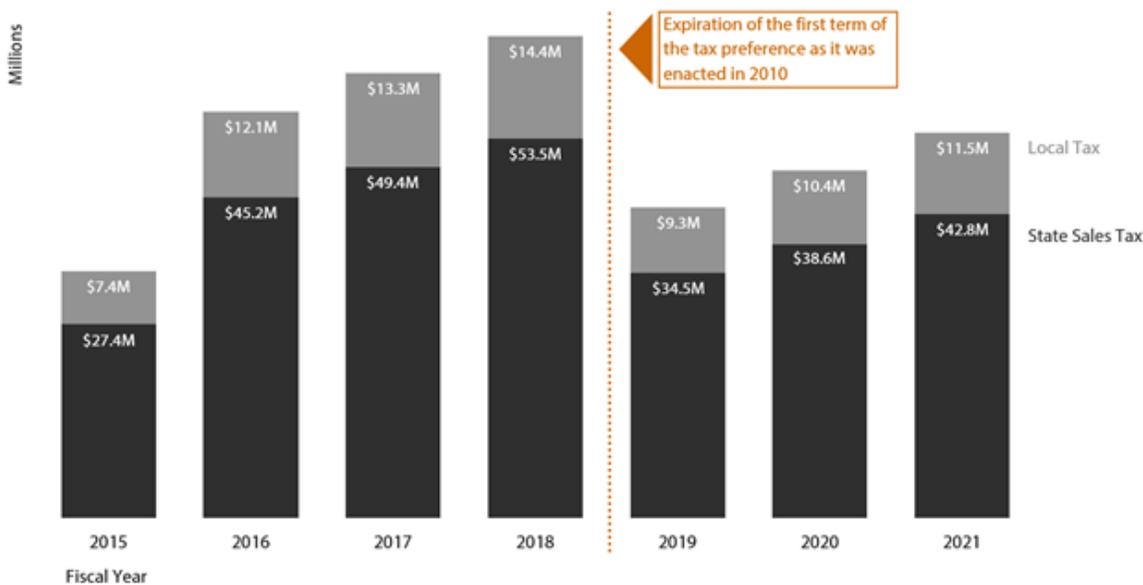
Fiscal Year	Estimated State Sales and Use Tax	Estimated Local Sales Tax	Total Estimated Beneficiary Savings
2015	\$27,400,000	\$7,400,000	\$34,800,000
2016	\$45,200,000	\$12,100,000	\$57,400,000
2017	\$49,400,000	\$13,300,000	\$62,600,000
2018	\$53,500,000	\$14,400,000	\$67,900,000
2019	\$34,500,000	\$9,300,000	\$43,700,000
<b>2017-19 Biennium</b>	<b>\$88,000,000</b>	<b>\$23,600,000</b>	<b>\$111,600,000</b>

Source: JLARC Analysis of 2016 DOR Tax Exemption Study.

The savings estimate is based on the square footage of existing data centers that qualified under the preference as written before the 2015 extension and on the estimated impact of new data centers claiming the preference after the 2015 extension. It also uses assumptions from DOR on the number of servers purchased, replacement cycles and data center growth.

JLARC staff estimate that the data center businesses that have been granted an exemption certificate will have a combined job creation requirement of 260 jobs, based on the square footage of each facility dedicated to housing servers. The average estimated total beneficiary savings for fiscal years 2015-2019 is \$53.3 million, which represents a cost of \$205,000 per job that must be created.

### Estimated Beneficiary Savings after FY 2018 Reflect Expiration of the First Period of the Preference



Source: JLARC Analysis of 2016 DOR Tax Exemption Study.

The reduction in the estimated beneficiary savings in Fiscal Year 2019 results from the expiration of the first term of the tax preference as it was enacted in 2010. The beneficiary savings may resume growing after 2019 until the 2024 expiration date of the 2012 extension of the preference. This growth is illustrated in the out-year estimate of beneficiary savings. The 2015 extension of the tax preference imposed a cap on the number of data centers that may claim the preference, and it is possible that this cap may also limit growth in the beneficiary savings.

### Statewide Sales Tax Losses Exceed Property Tax Gains

During committee hearings concerning the tax preference, proponents discussed the positive impact data centers could have on local economies in central Washington. They testified that such benefits could include increased property values, contributing to increased property tax revenue or lower property tax rates for other property owners.

Opponents of the preference questioned the value of benefiting a single community while forgoing state revenue that might pay for other services across the state.

Based on historic growth rates, JLARC staff estimated property taxes paid on data center properties could reach \$22 million in FY 2016. JLARC staff compared this figure with estimated FY 2016 beneficiary savings, representing forgone state and local sales tax revenue.

The preference has resulted in property tax gains, but sales tax losses exceed the gains. For Fiscal Year 2016, the estimated state and local sales tax revenue losses exceed estimated state and local property tax gains by \$35.4 million.

**Estimated Sales Tax Revenue Losses Exceed Estimated Property Tax Gains**

	FY2015	FY2016
Estimated State Sales Tax Revenue Loss	(\$27,400,000)	(\$45,200,000)
Estimated Local Sales Tax Revenue Loss	(\$7,400,000)	(\$12,100,000)
Estimated State Property Tax Gain	\$3,400,000	\$4,200,000
Estimated Local Property Tax Gain	\$14,100,000	\$17,700,000
Estimated Net Revenue Impact	(\$17,300,000)	(\$35,400,000)

Source: JLARC staff analysis of DOR Tax Exemption Study, DOR Property Tax Statistics, Grant and Douglas County Property Tax Data.

**Unclear Whether Job Gains at Data Centers and Indirect and Induced Employment Gains Are Sufficient to Offset Lost State Jobs**

JLARC staff estimate that each data center job would have to support three additional jobs (a multiplier of 4) in order to offset the number of statewide jobs forgone because of the reduction in government sales tax revenues and spending.

Using the REMI model, JLARC staff estimated the net impact of the preference. (See the Technical Appendix for more information about the REMI model.)

Staff modeled a \$55 million annual increase in government spending, which was the average of estimated beneficiary savings for fiscal years 2015 through 2027.

- The REMI model associates an average of 1,057 jobs with the \$55 million in government spending. The jobs are evenly split between the private and public sectors. For the purposes of this comparison, these can be thought of as statewide jobs forgone since that money is instead provided to beneficiaries of the tax preference;
- JLARC staff estimate that data center businesses must create at least 260 jobs to meet their job creation requirements. This represents 260 direct job gains;
- Each of the 260 data center jobs would have to support approximately three more jobs in order to offset the 1,057 statewide jobs foregone.

JLARC staff approximated various employment multipliers using the REMI model, including for the sector “data processing, hosting, related services, and other information services.” JLARC staff is unable to determine the extent to which this category is representative of the more narrowly defined data center jobs.

Further, the multiplier is approximated using a statewide model, and its applicability to a specific region in Washington is unclear as well.

**JLARC Staff Estimate of REMI Employment Multipliers–Grant and Douglas County Employers**

Industry	Multiplier
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Data processing, hosting, related services, and other information services	4.5
Support activities for agriculture and forestry	1.5
Retail trade	1.9
Hospitals	2.6
Other general purpose machinery manufacturing	1.5
Fruit and vegetable preserving and specialty food manufacturing	4.2

Source: JLARC Staff Analysis of REMI Model, Grant County EDC, Port of Chelan County data.

**If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

Terminating the tax preference would reinstate the sales and use tax on purchases of eligible data center equipment and power infrastructure. Purchasers of data center equipment would see an increase in the cost of such equipment.

It is unclear whether the other factors that make Washington a favorable data center location, such as access to inexpensive power and land, would be sufficient to maintain the current level of data center investment in the state.

In testimony to the Legislature, proponents of the tax preference indicated that, without the tax preference, firms may elect to locate data centers in other states that do offer tax preferences.

**Other States with Similar Preference?**

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**Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?**

In its 2012 data center legislation, the Legislature acknowledged interstate competition and specifically mentioned Oregon, Arizona, North Carolina, South Carolina, North Dakota, Iowa, Virginia, Texas, and Illinois. The statement of intent added “[u]nprecedented incentives are available as a result of the desire of these states to attract investments that will serve as a catalyst for additional clusters of economic activity.” The incentives available in these states vary:

- Seven states (Arizona, North Carolina, South Carolina, North Dakota, Iowa, Virginia, and Texas) exempt purchases of data center equipment from sales and use taxes, subject to certain investment thresholds, size and location requirements, or both.  
North Dakota also exempts the sale of software for use in data center from the sales and use tax. In addition to software purchases, North and South Carolina, and Texas also exempt purchases of electricity by data centers.
- Although it does not have a sales tax from which to exempt data center equipment, Oregon does exempt data centers from central assessment, a method of valuing properties for property taxation. Central assessment is used to value properties that usually operate as a part of a network based on the value of the entire network, rather than just the property in a taxing jurisdiction.
- Personal property is exempt from property taxation in Illinois, contributing to a reduction in property tax liability for data centers.

Other states may offer tax incentives specific to data centers, or more general economic-development tax incentives.

Finally, data centers can benefit from non-tax incentives such as grants or loans as part of economic development programs. For example, a county in Maryland offered an \$810,000 conditional loan to an investment management organization to build a data center. The loan will be forgiven if the company meets employment and investment targets.

**Technical Appendix 1: REMI Overview**

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**REMI Overview**

JLARC staff used Regional Economic Models, Inc.’s (REMI) Tax-PI software (v 1.7.105) to model the economic impacts for three tax preference reviews in the 2016 report: trade-ins, timber, and data centers.

**REMI software** is used by 34 state governments and dozens of private sector consulting firms, research universities, and international clients.

## Model Is Tailored to Washington and Includes Government Sector

Tax-PI is an economic impact tool for evaluating the fiscal and economic effects and the demographic impacts of tax policy change. The software includes various features that make it particularly useful for analyzing the economic and fiscal impacts of tax preferences:

- REMI staff consulted with staff from the Office of Financial Management (OFM) and customized a statewide model to reflect Washington's economy;
- The model contains 160 industry sectors, based on the North American Industry Classification System (NAICS) codes;
- In contrast to other modeling software, Tax-PI includes state and local government as a sector. This permits users to see the trade-offs associated with tax policy changes (e.g., effects on the state's economy from both increased expenditures by businesses due to a tax preference along with decreased spending by government due to the revenue loss);
- For current revenue and expenditure data, users can input information to reflect their state's economic and fiscal situation. This allows JLARC staff to calibrate a state budget using up-to-date information from the Economic and Revenue Forecast Council (ERFC) and the Legislative Evaluation and Accountability Program (LEAP); and
- The model can forecast economic and revenue impacts multiple years into the future.

## Results the Model Provides

The REMI model accounts for the direct, indirect, and induced effects as they spread through the state's economy, which allows users to simulate the full impact of tax policy change over time.

- Direct effects are industry specific and capture how a target industry responds to a particular policy change (e.g., changes in industry employment following a change in tax policy);
- Indirect effects capture employment and spending decisions by businesses in the targeted industry's supply chain that provide goods and services; and
- Induced effects capture the in-state spending and consumption habits of employees in targeted and related industries.

The REMI model produces year-by-year estimates of the total statewide effects of a tax policy change. Impacts are measured as the difference between a baseline economic and revenue forecast and the estimated economic and revenue effects after the policy change.

## What the Model Includes

The REMI model is a macroeconomic impact model that incorporates aspects of four major economic modeling approaches: input-output, general equilibrium, econometric, and new economic geography. The foundation of the model, the inter-industry matrices found in the input-output models, captures Washington's industry structure and the transactions between industries. Layered on top of this structure is a complex set of mathematical equations used to estimate how private industry, consumers, and state and local governments respond to a policy change over time.

- The supply side of the model includes many economic variables representing labor supply, consumer prices, and capital and energy costs with elasticities for both the consumer and business sectors.
- Regional competitiveness is modeled via imports, exports, and output.
- Demographics are modeled using population dynamics (births, deaths, and economic and retirement migration) and includes cohorts for age, sex, race, and retirement.
- Demographic information informs the model's estimates for economic consumption and labor supply.
- The dynamic aspect comes from the ability to adjust variables over time as forecasted economic conditions change.

While the model is complex and forecasting involves some degree of uncertainty, Tax-PI provides a tool for practitioners to simulate how tax policy and the resulting industry changes affect Washington's economy, population, and fiscal situation.

## Technical Appendix 2: REMI Employment Analysis

This technical appendix describes the JLARC staff analysis of the employment impacts associated with Washington's data center equipment sales and use tax preference. Staff used REMI's Tax-PI program to perform a limited analysis of the employment effect of foregone state revenue, and to approximate employment multipliers of several industries that employ workers in central Washington. See Technical Appendix 1 for more detail about the REMI model.

## Methodology:

JLARC staff used REMI's Tax-PI model for two aspects of the analysis of the data centers tax preference. This section of the methodology first provides an overview of REMI's Tax-PI model that was used in the analysis. The methodology then discusses the two approaches used to estimate potential employment effects of the tax preference. The first approach was to estimate the potential employment losses attributable to foregone government spending resulting from the cost of the tax preference. The second approach was to approximate the employment multipliers assumed within REMI of several economic sectors.

## REMI Methodology

### User Inputs in REMI

Tax-PI allows users to model policy changes and analyze the estimated impacts to the Washington economy, both in terms of economic activity and government finances. Prior to running modeling scenarios, users must make a series of choices about how to set-up the modeling environment by building a state budget and calibrating the model accordingly. JLARC staff used the November 2015 revenue estimates produced by the Economic and Revenue Forecast Council (ERFC) and budgeted expenditures for FY 2014 and 2015, as reported by the Legislative Evaluation and Accountability Program (LEAP) Committee. These data represent the final year of budget and revenue data in the model and serve as the "jump off" point for Tax-PI's economic and fiscal estimates. Because Tax-PI is a forecasting tool, JLARC staff was unable to model the economic impact of the tax preference beginning in 2006.

In addition to establishing a budget and inputting expected revenue values, users must specify whether government expenditures are determined by demand or revenue. "By demand" imposes a level of government spending in future years that is necessary to maintain the same level-of-service as the final year in which budget data is entered whereas "by revenue" ties government expenditures to estimated changes in revenue collections.

Users may also elect to impose a balanced budget restriction or leave the model unconstrained. The balanced budget feedback forces revenue and expenditures to be equivalent and thus may impose some limitations on economic activity.

By setting expenditures to be determined by demand, users avoid making assumptions about how policymakers may alter spending priorities in the future. In addition, users essentially establish the current budget allocation as carry-forward levels for each expenditure category.

JLARC staff ran the reported scenario with expenditures set to be determined by demand and with the balanced budget feedback option turned on.

## Data

The REMI model comes with historical economic and demographic data back to 1990. Data are from federal government agencies such as the U.S. Census Bureau, U.S. Energy Information Administration, and the Bureau of Economic Analysis. As described above, current revenue and expenditure data for Washington comes from ERFC and LEAP, respectively. The data used to build the modeling scenario described below are from Department of Revenue (DOR) tax records and JLARC staff estimated beneficiary savings.

### What is the effect on employment of reduced government spending resulting from the cost of the tax preference?

The first approach assumes that if the tax preference were repealed, the additional revenue that would be collected would be spent in the same proportions of current government spending. A simulation modeling an increase in government spending of \$55 million, approximately the average estimated beneficiary savings for Fiscal Years 2015-19, predicts an increase of an average of 1,057 jobs above the baseline forecast. These jobs are split approximately evenly between the public and private sectors. Conversely, this can be viewed as the reduction in statewide employment resulting from the revenue cost of the tax preference.

### REMI Analysis Shows Increasing Government Spending Would Increase Statewide Employment

Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Avg.
Gov't Spending Inc. (\$ Millions)	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0

Jobs	1192	1260	1258	1223	1172	1117	1063	1010	964	924	885	851	822	1057
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Source: JLARC –Analysis of REMI Model.

**If employment creation targets are met, what employment multiplier would these jobs need to have to “break even” compared with lost jobs from the above approach?**

The second approach attempts to approximate the employment multiplier necessary for the jobs created at data centers to support sufficient other jobs in order to break even on an employment basis, when compared with the employment reductions estimated in the approach above. The estimated employment creation target for current approved beneficiaries of the tax preference is 260 jobs.

**Offsetting Employment Due to Government Spending Would Require a Multiplier of Approximately 4**

Average Employment Change (2015-2027) – Increase Government Spending	1,057
Required Data Center Jobs based on Square Footage of Data Center Space	260
“Break-even” Employment Multiplier	4.07

Source: JLARC Staff Analysis of DOR Data; REMI Model.

JLARC staff approximated various statewide employment multipliers using the REMI model. The analysis includes an employment multiplier for the sector “data processing, hosting, related services, and other information services.” There are two limitations to be aware of when examining the multiplier for this sector:

- It is not clear to what extent this category is representative of the more narrowly defined data center jobs.
- The multiplier is approximated using a statewide model, and its applicability to a specific region in Washington is unclear as well.

The following chart compares this employment multiplier with statewide multipliers approximated using REMI for industries that are major employers in Grant and Chelan/Douglas Counties. These multipliers were approximated by running simulations to increase employment in these sectors by 100. The multiplier is estimated by dividing the total employment increase by the increase in employment in the sector.

**REMI Statewide Employment Multipliers–Industries that Are Major Employers in Grant and Douglas Counties**

NAICS	Industry	Multiplier
518, 519	Data processing, hosting, related services, and other information services	4.5
115	Support activities for agriculture and forestry	1.5
44-45	Retail trade	1.9
622	Hospitals	2.6
3339	Other general purpose machinery manufacturing	1.5
3114	Fruit and vegetable preserving and specialty food manufacturing	4.2

Source: REMI, JLARC Staff Analysis of Grant County EDC, Port of Chelan County data.

**Data:**

This limited REMI analysis used data from the Department of Revenue’s 2016 Tax Exemption Study for the beneficiary savings estimate. Industries that are employers in Grant and Douglas Counties were identified from data reported by the Grant County Economic Development Council and the Port of Chelan County.

**Applicable Statutes**

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**Intent Statement**

**Intent—Finding—2012 2nd sp.s. c 6:** "(1) It is the legislature's intent to encourage immediate investments in technology facilities that can provide an economic stimulus, sustain long-term jobs that provide living wages, and help build the digital infrastructure that can enable the state to be competitive for additional technology investment and jobs.

(2) There is currently an intense competition for data center construction and operation in many states including: Oregon, Arizona, North and South Carolina, North Dakota, Iowa, Virginia, Texas, and Illinois. Unprecedented incentives are available as a result of the desire of these states to attract investments that will serve as a catalyst for additional clusters of economic activity.

(3) Data center technology has advanced rapidly, with marked increases in energy efficiency. Large, commercial-grade data centers leverage the economies of scale to reduce energy consumption. Combining digitized processes with the economies of scale recognized at these data centers, today's enterprises can materially reduce the energy they consume and greatly improve their efficiency.

(4) The legislature finds that offering an exemption for server and related electrical equipment and installation will act as a stimulus to incent immediate investment. This investment will bring jobs, tax revenues, and economic growth to some of our state's rural areas." [2012 2nd sp.s. c 6 § 301.]

**Existing rights, liabilities, or obligations—Effective dates—Contingent effective dates—2012 2nd sp.s. c 6:** See notes following RCW 82.04.29005.

**Effective date—2010 1st sp.s. c 23:** See note following RCW 82.32.655.

**Findings—Intent—2010 1st sp.s. c 23:** See notes following RCW 82.04.220.

**Intent—Finding—2010 1st sp.s. c 1:** "(1) It is the legislature's intent to encourage immediate investments in technology facilities that can provide an economic stimulus, sustain long-term jobs that provide living wages, and help build the digital infrastructure that can enable the state to be competitive for additional technology investment and jobs.

(2) There is currently an intense competition for data center construction and operation in many states including: Oregon, Arizona, North and South Carolina, North Dakota, Iowa, Virginia, Texas, and Illinois. Unprecedented incentives are available as a result of the desire of these states to attract investments that will serve as a catalyst for additional clusters of economic activity.

(3) Since the economic downturn, Washington has not succeeded in attracting any private investments in these centers after siting six major data centers between 2004 and 2007.

(4) Data center technology has advanced rapidly, with marked increases in energy efficiency. Large, commercial-grade data centers leverage the economies of scale to reduce energy consumption. Combining digitized processes with the economies of scale recognized at these data centers, today's enterprises can materially reduce the energy they consume and greatly improve their efficiency.

(5) The legislature finds that a fifteen-month window that offers an exemption for server and related electrical equipment and installation will act as a stimulus to incent immediate investment. This investment will bring jobs, tax revenues, and economic growth to some of our state's rural areas." [2010 1st sp.s. c 1 § 1.]

## **RCW 82.08.986**

**Tax preference performance statement—2015 3rd sp.s. c 6 §§ 302 and 303:** "This section is the tax preference performance statement for the sales and use tax exemption contained in sections 302 and 303 of this act. This performance statement is only intended to be used for subsequent evaluation of the tax preferences in sections 302 and 303 of this act. It is not intended to create a private right of action by any party or be used to determine eligibility for preferential tax treatment.

(1) The legislature categorizes this sales and use tax exemption as one intended to improve industry competitiveness, as indicated in RCW 82.32.808(2)(b).

(2) It is the legislature's specific public policy objective to improve industry competitiveness. It is the legislature's intent to provide a sales and use tax exemption on eligible server equipment and power infrastructure installed in eligible computer data centers, charges made for labor and services rendered in respect to installing eligible server equipment, and for construction, installation, repair, alteration, or improvement of eligible power infrastructures in order to increase investment in data center construction in rural Washington counties, thereby adding real and personal property to state and local property tax rolls, thereby increasing the rural county tax base.

(3) If a review finds that the rural county tax base is increased as a result of the construction of computer data centers eligible for the sales and use tax exemption in sections 302 and 303 of this act, then the legislature intends to extend the expiration date of the tax preference.

(4) In order to obtain the data necessary to perform the review in subsection (3) of this section, the joint legislative audit and review committee may refer to data available from the department of revenue regarding rural county property tax assessments." [2015 3rd sp.s. c 6 § 301.]

Effective dates—2015 3rd sp.s. c 6: See note following RCW 82.04.4266.

Exemptions—Eligible server equipment.

(1) An exemption from the tax imposed by RCW 82.08.020 is provided for sales to qualifying businesses and to qualifying tenants of eligible server equipment to be installed, without intervening use, in an eligible computer data center, and to charges made for labor and services rendered in respect to installing eligible server equipment. The exemption also applies to sales to qualifying businesses and to qualifying tenants of eligible power infrastructure, including labor and services rendered in respect to constructing, installing, repairing, altering, or improving eligible power infrastructure.

(2)(a) In order to claim the exemption under this section, a qualifying business or a qualifying tenant must submit an application to the department for an exemption certificate. The application must include the information necessary, as required by the department, to determine that a business or tenant qualifies for the exemption under this section. The department must issue exemption certificates to qualifying businesses and qualifying tenants. The department may assign a unique identification number to each exemption certificate issued under this section.

(b) A qualifying business or a qualifying tenant claiming the exemption under this section must present the seller with an exemption certificate in a form and manner prescribed by the department. The seller must retain a copy of the certificate for the seller's files.

(c) With respect to computer data centers for which the commencement of construction occurs after July 1, 2015, but before July 1, 2019, the exemption provided in this section is limited to no more than eight computer data centers, with total eligible data centers provided under this section limited to twelve from July 1, 2015, through July 1, 2025. Tenants of qualified data centers do not constitute additional data centers under the limit. The exemption is available on a first-in-time basis based on the date the application required under this section is received by the department. Exemption certificates expire two years after the date of issuance, unless construction has been commenced.

(3)(a) Within six years of the date that the department issued an exemption certificate under this section to a qualifying business or a qualifying tenant with respect to an eligible computer data center, the qualifying business or qualifying tenant must establish that net employment at the eligible computer data center has increased by a minimum of:

(i) Thirty-five family wage employment positions; or

(ii) Three family wage employment positions for each twenty thousand square feet of space or less that is newly dedicated to housing working servers at the eligible computer data center. For qualifying tenants, the number of family wage employment positions that must be increased under this subsection (3)(a)(ii) is based only on the space occupied by the qualifying tenant in the eligible computer data center.

(b) In calculating the net increase in family wage employment positions:

(i) The owner of an eligible computer data center, in addition to its own net increase in family wage employment positions, may include:

(A) The net increase in family wage employment positions employed by qualifying tenants; and

(B) The net increase in family wage employment positions described in (c)(ii)(B) of this subsection (3).

(ii)(A) Qualifying tenants, in addition to their own net increase in family wage employment positions, may include:

(I) A portion of the net increase in family wage employment positions employed by the owner; and

(II) A portion of the net increase in family wage employment positions described in (c)(ii)(B) of this subsection (3).

(B) The portion of the net increase in family wage employment positions to be counted under this subsection (3)(b)(ii) by each qualifying tenant must be in proportion to the amount of space in the eligible computer data center occupied by the qualifying tenant compared to the total amount of space in the eligible computer data center occupied by all qualifying tenants.

(c)(i) For purposes of this subsection, family wage employment positions are new permanent employment positions requiring forty hours of weekly work, or their equivalent, on a full-time basis at the eligible computer data center and receiving a wage equivalent to or greater than one hundred fifty percent of the per capita personal income of the county in which the qualified project is located. An employment position may not be counted as a family wage employment position unless the employment position is entitled to health insurance coverage provided by the employer of the employment position. For purposes of this subsection (3)(c), "new permanent employment position" means an employment position that did not exist or that had not previously been filled as of the date that the department issued an exemption certificate to the owner or qualifying tenant of an eligible computer data center, as the case may be.

(ii)(A) Family wage employment positions include positions filled by employees of the owner of the eligible computer data center and by employees of qualifying tenants.

(B) Family wage employment positions also include individuals performing work at an eligible computer data center as an independent contractor hired by the owner of the eligible computer data center or as an employee of an independent contractor hired by the owner of the eligible computer data center, if the work is necessary for the operation of the computer data center, such as security and building maintenance, and provided that all of the requirements in (c)(i) of this subsection (3) are met.

(d) All previously exempted sales and use taxes are immediately due and payable for a qualifying business or qualifying tenant that does not meet the requirements of this subsection.

(4) A qualifying business or a qualifying tenant claiming an exemption under this section or RCW 82.12.986 must complete an Annual Report with the department as required under RCW 82.32.534.

(5)(a) The exemption provided in this section does not apply to:

(i) Any person who has received the benefit of the deferral program under chapter 82.60 RCW on: (A) The construction, renovation, or expansion of a structure or structures used as a computer data center; or (B) machinery or equipment used in a computer data center; and

(ii) Any person affiliated with a person within the scope of (a)(i) of this subsection (5).

(b) If a person claims an exemption under this section and subsequently receives the benefit of the deferral program under chapter 82.60 RCW on either the construction, renovation, or expansion of a structure or structures used as a computer data center or machinery or equipment used in a computer data center, the person must repay the amount of taxes exempted under this section. Interest as provided in chapter 82.32 RCW applies to amounts due under this section until paid in full.

(6) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise.

(a) "Affiliated" means that one person has a direct or indirect ownership interest of at least twenty percent in another person.

(b) "Building" means a fully enclosed structure with a weather resistant exterior wall envelope or concrete or masonry walls designed in accordance with the requirements for structures under chapter 19.27 RCW. This definition of "building" only applies to computer data centers for which commencement of construction occurs on or after July 1, 2015.

(c)(i) "Computer data center" means a facility comprised of one or more buildings, which may be comprised of multiple businesses, constructed or refurbished specifically, and used primarily, to house working servers, where the facility has the following characteristics: (A) Uninterruptible power supplies, generator backup power, or both; (B) sophisticated fire suppression and prevention systems; and (C) enhanced physical security, such as: Restricted access to the facility to selected personnel; permanent security guards; video camera surveillance; an electronic system requiring passcodes, keycards, or biometric scans, such as hand scans and retinal or fingerprint recognition; or similar security features.

(ii) For a computer data center comprised of multiple buildings, each separate building constructed or refurbished specifically, and used primarily, to house working servers is considered a computer data center if it has all of the characteristics listed in (c)(i)(A) through (C) of this subsection (6).

(iii) A facility comprised of one building or more than one building must have a combined square footage of at least one hundred thousand square feet.

(d) "Electronic data storage and data management services" include, but are not limited to: Providing data storage and backup services, providing computer processing power, hosting enterprise software applications, and hosting web sites. The term also includes providing services such as email, web browsing and searching, media applications, and other online services, regardless of whether a charge is made for such services.

(e)(i) "Eligible computer data center" means a computer data center:

(A) Located in a rural county as defined in RCW 82.14.370;

(B) Having at least twenty thousand square feet dedicated to housing working servers, where the server space has not previously been dedicated to housing working servers; and

(C) For which the commencement of construction occurs:

(I) After March 31, 2010, and before July 1, 2011;

(II) After March 31, 2012, and before July 1, 2015; or

(III) After June 30, 2015, and before July 1, 2025.

(ii) For purposes of this section, "commencement of construction" means the date that a building permit is issued under the building code adopted under RCW 19.27.031 for construction of the computer data center. The construction of a computer data center includes the expansion, renovation, or other improvements made to existing facilities, including leased or rented space. "Commencement of construction" does not include soil testing, site clearing and grading, site preparation, or any other related activities that are initiated before the issuance of a building permit for the construction of the foundation of a computer data center.

(iii) With respect to facilities in existence on April 1, 2010, that are expanded, renovated, or otherwise improved after March 31, 2010, or facilities in existence on April 1, 2012, that are expanded, renovated, or otherwise improved after March 31, 2012, or facilities in existence on July 1, 2015, that are expanded, renovated, or otherwise improved after June 30, 2015, an eligible computer data center includes only the portion of the computer data center meeting the requirements in (e)(i)(B) of this subsection (6).

(f) "Eligible power infrastructure" means all fixtures and equipment owned by a qualifying business or qualifying tenant and necessary for the transformation, distribution, or management of electricity that is required to operate eligible server equipment within an eligible computer data center. The term includes generators; wiring; cogeneration equipment; and associated fixtures and equipment, such as electrical switches, batteries, and distribution, testing, and monitoring equipment. The term does not include substations.

(g) "Eligible server equipment" means:

(i) For a qualifying business whose computer data center qualifies as an eligible computer data center under (e)(i)(C)(I) of this subsection (6), the original server equipment installed in an eligible computer data center on or after April 1, 2010, and replacement server equipment. For purposes of this subsection (6)(g)(i), "replacement server equipment" means server equipment that:

(A) Replaces existing server equipment, if the sale or use of the server equipment to be replaced qualified for an exemption under this section or RCW 82.12.986; and

(B) Is installed and put into regular use before April 1, 2018.

(ii) For a qualifying business whose computer data center qualifies as an eligible computer data center under (e)(i)(C)(II) of this subsection (6), "eligible server equipment" means the original server equipment installed in an eligible computer data center on or after April 1, 2012, and replacement server equipment. For purposes of this subsection (6)(g)(ii), "replacement server equipment" means server equipment that:

(A) Replaces existing server equipment, if the sale or use of the server equipment to be replaced qualified for an exemption under this section or RCW 82.12.986; and

(B) Is installed and put into regular use before April 1, 2024.

(iii)(A) For a qualifying business whose computer data center qualifies as an eligible computer data center under (e)(i)(C)

(III) of this subsection (6), "eligible server equipment" means the original server equipment installed in a building within an eligible computer data center on or after July 1, 2015, and replacement server equipment. Server equipment installed in movable or fixed stand-alone, prefabricated, or modular units, including intermodal shipping containers, is not "directly installed in a building." For purposes of this subsection (6)(g)(iii)(A), "replacement server equipment" means server equipment that replaces existing server equipment, if the sale or use of the server equipment to be replaced qualified for an exemption under this section or RCW 82.12.986; and

(B) Is installed and put into regular use no later than twelve years after the date of the certificate of occupancy.

(iv) For a qualifying tenant who leases space within an eligible computer data center, "eligible server equipment" means the original server equipment installed within the space it leases from an eligible computer data center on or after April 1, 2010, and replacement server equipment. For purposes of this subsection (6)(g)(iv), "replacement server equipment" means server equipment that:

(A) Replaces existing server equipment, if the sale or use of the server equipment to be replaced qualified for an exemption under this section or RCW 82.12.986;

(B) Is installed and put into regular use before April 1, 2024; and

(C) For tenants leasing space in an eligible computer data center built after July 1, 2015, is installed and put into regular use no later than twelve years after the date of the certificate of occupancy.

(h) "Qualifying business" means a business entity that exists for the primary purpose of engaging in commercial activity for profit and that is the owner of an eligible computer data center. The term does not include the state or federal government or any of their departments, agencies, and institutions; tribal governments; political subdivisions of this state; or any municipal, quasi-municipal, public, or other corporation created by the state or federal government, tribal government, municipality, or political subdivision of the state.

(i) "Qualifying tenant" means a business entity that exists for the primary purpose of engaging in commercial activity for profit and that leases space from a qualifying business within an eligible computer data center. The term does not include the state or federal government or any of their departments, agencies, and institutions; tribal governments; political subdivisions of this state; or any municipal, quasi-municipal, public, or other corporation created by the state or federal government, tribal government, municipality, or political subdivision of the state. The term also does not include a lessee of space in an eligible computer data center under (e)(i)(C)(I) of this subsection (6), if the lessee and lessor are affiliated and:

(i) That space will be used by the lessee to house server equipment that replaces server equipment previously installed and operated in that eligible computer data center by the lessor or another person affiliated with the lessee; or

(ii) Prior to May 2, 2012, the primary use of the server equipment installed in that eligible computer data center was to provide electronic data storage and data management services for the business purposes of either the lessor, persons affiliated with the lessor, or both.

(j) "Server equipment" means the computer hardware located in an eligible computer data center and used exclusively to provide electronic data storage and data management services for internal use by the owner or lessee of the computer data center, for clients of the owner or lessee of the computer data center, or both. "Server equipment" also includes computer software necessary to operate the computer hardware. "Server equipment" does not include personal computers, the racks upon which the server equipment is installed, and computer peripherals such as keyboards, monitors, printers, and mice.

[2015 3rd sp.s. c 6 § 302; 2012 2nd sp.s. c 6 § 302; 2010 1st sp.s. c 23 § 1601; 2010 1st sp.s. c 1 § 2.]

#### NOTES:

**Reviser's note:** Pursuant to RCW 43.135.041, chapter 6, Laws of 2012 2nd special session was subject to an advisory vote of the people in the November 2012 general election on whether the tax increase in such session law should be maintained or repealed. The advisory vote was in favor of repeal.

**Effective date—2010 1st sp.s. c 1:** "This act is necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and takes effect April 1, 2010." [2010 1st sp.s. c 1 § 4.]

## RCW 82.12.986

Exemptions—Eligible server equipment.

(1) An exemption from the tax imposed by RCW 82.12.020 is provided for the use by qualifying businesses or qualifying tenants of eligible server equipment to be installed, without intervening use, in an eligible computer data center, and to the use of labor and services rendered in respect to installing such server equipment. The exemption also applies to the use by a qualifying business or qualifying tenant of eligible power infrastructure, including labor and services rendered in respect to installing, repairing, altering, or improving such infrastructure.

(2) A qualifying business or a qualifying tenant is not eligible for the exemption under this section unless the department issued an exemption certificate to the qualifying business or a qualifying tenant for the exemption provided in RCW 82.08.986.

(3)(a) The exemption provided in this section does not apply to:

(i) Any person who has received the benefit of the deferral program under chapter 82.60 RCW on: (A) The construction, renovation, or expansion of a structure or structures used as a computer data center; or (B) machinery or equipment used in a computer data center; and

(ii) Any person affiliated with a person within the scope of (a)(i) of this subsection (3).

(b) If a person has received the benefit of the exemption under this section and subsequently receives the benefit of the deferral program under chapter 82.60 RCW on either the construction, renovation, or expansion of a structure or structures used as a computer data center or machinery or equipment used in a computer data center, the person must repay the amount of taxes exempted under this section. Interest as provided in chapter 82.32 RCW applies to amounts due under this subsection (3)(b) until paid in full. A person is not required to repay taxes under this subsection with respect to property and services for which the person is required to repay taxes under RCW 82.08.986(5).

(4) The definitions and requirements in RCW 82.08.986 apply to this section.

[2015 3rd sp.s. c 6 § 303; 2012 2nd sp.s. c 6 § 304; 2010 1st sp.s. c 23 § 1602; 2010 1st sp.s. c 1 § 3.]

## Recommendations

### Legislative Auditor Recommendation

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**The Legislature should continue the data center sales and use tax exemption because the stated public policy objectives of increased rural property values and rural property taxes from investment in data center construction in rural Washington counties are being achieved.**

The tax preference performance statement stated that the Legislature intends to extend the expiration date of the tax preference if a review finds that the rural county tax base is increased as a result of the construction of data centers eligible for the tax preference. This review finds that the tax base has increased.

It is too early to tell whether data center businesses will comply with their job creation requirements. The date by which beneficiaries must establish they have increased employment by the required amount of jobs depends on when the Department of Revenue issued the exemption certificates, and the first such date will not occur until May 2016.

**Legislation Required:** No

**Fiscal Impact:** None

## **Letter from Commission Chair**

Available December 2016.

## **Commissioners' Recommendation**

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Available December 2016.

## **Agency Response**

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If applicable, will be available December 2016.

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Flavor-Imparting Items | Sales & Use Tax

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### Summary of this Review

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
<p>A sales and use tax exemption to restaurant owners on purchases of certain items that impart flavor during the cooking process. The preference only applies to items that are:</p> <ul style="list-style-type: none"> <li>• Completely or mostly consumed by combustion during the cooking process (e.g., wood chips, charcoal); or</li> <li>• Fully made from wood and support the food during cooking (e.g., cedar grilling planks).</li> </ul> <p>The preference is scheduled to expire July 1, 2017.</p>	<p><b>Sales &amp; Use RCWs</b> 82.08.210; 82.12.210</p>	<p>Unknown</p>

<b>Public Policy Objective</b>
<p>The Legislature stated the public policy objective for this preference was to provide tax relief to the restaurant industry for specific business inputs that cannot be reused and that are used in the cooking process to impart flavor to food.</p> <p>The Legislature also stated it intended:</p> <ul style="list-style-type: none"> <li>• To provide the preference in a fiscally responsible manner where the actual revenue impact substantially conforms to the 2013 fiscal estimate; and</li> <li>• For the preference to be temporary so it could assess the actual fiscal impact of the preference and assess if the items exempted were being used in a manner consistent with an ingredient or component that becomes part of the end product sold.</li> </ul>

<b>Recommendations</b>
<p><b>Legislative Auditor’s Recommendation</b></p> <p><b>Review and Clarify:</b> While the preference is achieving the stated objective of providing tax relief to restaurant owners, it is unclear if the actual fiscal impact substantially conforms to the 2013 fiscal estimate.</p> <p><b>Commissioner Recommendation:</b> Available in October 2016</p>

## Details on this Preference

### What is the Preference?

The Legislature established this preference with the stated intent to provide tax relief for the restaurant industry.

Because of the preference, restaurant owners do not pay sales or use tax on their purchase of certain items that impart flavor to food during the cooking process. The preference only applies to items that are:

- Completely or substantially consumed by combustion during the cooking process (e.g., wood chips, charcoal, charcoal briquettes, and grape vines); or
- Fully made from wood and provide support to the food during the cooking process (e.g., cedar grilling planks).

The preference does not apply to any type of gas fuel.

Restaurant owners must report the tax-exempt purchases to the Department of Revenue (DOR) using a "Buyer's Sales and Use Tax Preference" ("Buyer Addendum") when they file their tax returns unless the restaurant owners meet certain criteria that excuse them from completing an Addendum.

The preference took effect October 1, 2013, and is scheduled to expire July 1, 2017.

## Legal History

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### Pre-2012

In the past, the Department of Revenue's (DOR) interpretation of statute was that restaurant owners were required to pay sales or use taxes on their purchases of fuel or heating sources used to **cook** food.

DOR considered restaurant owners' purchases of ingredients used to **flavor** food as tax-exempt because these items become part of the final meal sold to the customer.

### 2012

Audits by DOR found that some restaurant owners had not paid sales or use tax on their purchases of charcoal briquettes used to cook customer meals. DOR's interpretation of statute considered the briquettes a heating source, and the agency assessed tax on the owners.

The restaurant owners appealed the assessments, claiming that while the charcoal briquettes were a heating source, they also imparted a specific flavor to the grilled food. By imparting this flavor, the owners asserted that the briquettes became an ingredient or component of the final meal sold to the customer. Ingredients and components that are added to the final product sold to a customer are exempt from sales and use tax.

In a published determination, DOR rejected the restaurant owners' appeal. DOR noted that the sales tax exemption for ingredients and components was meant to apply only to manufacturing activities and not to food preparation activities by restaurants.

### 2013

The Legislature enacted this tax preference. The Legislature stated its intent was to provide tax relief for the restaurant industry for specific items used in the cooking process that impart flavor to food. The preference was made temporary to allow the Legislature to assess the fiscal impact and use of the preference.

## Other Relevant Background

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### What is a Restaurant?

Statute defines a "restaurant" as any establishment with special space and accommodation where food and beverages are regularly sold to the public for immediate, but not necessarily on-site, consumption. This does not include grocery stores, mini-markets, and convenience stores. Examples of restaurants include:

- **Independent establishments**, such as lunch counters, diners, bars, and coffee shops.
- **Places within a larger facility** where food and drinks are sold for immediate consumption, and for a separate fee, such as hotels.
- **Mobile sales units** that sell food or drinks for immediate consumption within a place charging an admission fee.
- **Public and private carriers**, such as trains and vessels, that sell food or drinks for immediate consumption for a separate fee.

### Restaurants' Tax Responsibilities

Restaurant owners are generally required to collect sales tax from customers on all of their sales of meals, food to go, and catering activities.

The tables below provide examples of items restaurant owners must pay sales or use taxes on, and items that are tax-exempt. Additional taxes not listed in these tables may also apply to restaurants, such as liquor or syrup taxes.

<b>Restaurant Owners are the Consumers and Pay Sales or Use Tax on...</b>
Chairs, table, and furnishings

Dishes, silverware, and plastic trays
Janitorial supplies, pest control services, vending machine purchases and rentals
Equipment (ovens, grills, pots, pans, baking sheets, etc.)
Repair parts and labor

<b>Restaurant Owners Resell and Don't Pay Sales or Use Tax on...</b>
Food inventory and meal ingredients
Liquor, beer, and wine
Soft drinks
Paper or plastic plates, cups, lids, utensils; paper napkins, toothpicks, and straws; "to-go" containers

Source: JLARC staff analysis of DOR Restaurant and Prepared Food Retailers Industry Guide.

## **Additional Tax Preferences Directed to Restaurant Owners and Other Food Service Businesses**

Several other tax preferences are directed to restaurant owners and other food service businesses. These businesses may also qualify for other, broader tax preferences.

<b>Preference</b>	<b>Tax Type</b>	<b>Enacted</b>	<b>JLARC Staff Review?</b>
Purchases of food or food ingredients that become part of a meal sold by a restaurant	Sales and use tax exemption	1977	Exempted from review
Free meals provided by restaurant owners to their employees	B&O tax exemption Sales and use tax exemption	2011, clarified in 2015	Not yet reviewed
Returnable containers for beverages and food	Sales and use tax exemption	1974	Expedited review in 2010
Credit for the amount of syrup tax paid	B&O tax credit	2006	Full review in 2016

Source: JLARC staff analysis of tax law.

## **Public Policy Objectives**

**What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

### **Provide Tax Relief**

The Legislature stated the public policy objective for this preference was **to provide tax relief to the restaurant industry for specific business inputs that cannot be reused and that are used in the cooking process to impart flavor to food.**

### **Substantially Conform to 2013 Fiscal Estimate**

The Legislature also stated its intent to provide the preference **"in a fiscally responsible manner"** where the actual revenue impact **"substantially conforms"** to the 2013 fiscal estimate. The Legislature stated it intended the preference to be **temporary** so it could:

- Assess the actual fiscal impact of the preference; and
- Assess whether the items exempted by the preference were being used in a manner consistent with an ingredient or component that becomes part of the end product sold to the consumer.

The Legislature identified its objectives for this tax preference in an intent section rather than in a tax preference performance statement.

## **Are Objectives Being Met?**

## What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?

The preference is meeting the public policy objective of providing tax relief to the restaurant owners who claim the exemption when they purchase flavor-imparting items.

It is not clear how many restaurants are doing so because few are reporting these purchases on a Buyer Addendum.

It is also not clear whether the actual use of the preference substantially conforms to the fiscal estimate, or whether restaurants are using flavor-imparting items in a manner consistent with an ingredient or component that becomes part of the end product.

### Provide Tax Relief

The preference is providing tax relief to restaurant owners who claim the exemption. Of the estimated 14,000 or more restaurants in Washington, 25 restaurant owners in Fiscal Year 2014 and 33 restaurant owners in Fiscal Year 2015 reported purchasing flavor-imparting items on a Buyer Addendum. Vendors selling these items to restaurant owners reported four times as many sales as restaurants reported on Buyer Addenda. Therefore, it is possible that many more restaurants are using the preference but not filing Buyer Addenda.

### Substantially Conform to 2013 Fiscal Estimate

It is not clear whether the actual fiscal impact of this tax preference substantially conforms to the Department of Revenue's (DOR) 2013 fiscal estimate. For the nine months of Fiscal Year 2014 that are disclosable, actual taxpayer savings reported were 90 percent higher than the DOR estimate.

Ideally, two sources of information would be available to compare actual impacts to the 2013 estimate:

1. Vendors selling flavor-imparting items to restaurants would report these tax-exempt sales on their tax returns; and
2. Restaurant owners buying flavor-imparting items would file a Buyer Addendum detailing their tax-exempt purchases.

In this case, information on vendor sales is available for part of Fiscal Year 2014 after the preference became effective, but the number of businesses reporting for Fiscal Year 2015 is too small to allow disclosure. Additionally, Buyer Addendum information from restaurant owners appears to be under-reported (see the tab on Reporting Issues for more detail). The Legislature has also not expressly defined what it means by "substantially conforms."

The exhibit below compares nine months of actual Fiscal Year 2014 taxpayer savings as reported by vendors with the 2013 fiscal estimate from DOR for this same time period. These nine months followed the effective date of the preference. Reported taxpayer savings were 90 percent higher than DOR's 2013 fiscal estimate.

### Actual Use of Preference for Nine Months in Fiscal Year 2014 Exceeds 2013 Fiscal Estimate

Fiscal Year	DOR Estimate of Taxpayer Savings	Taxpayer Savings Reported by Vendors	Percent Reported Taxpayer Savings Differs from
2014 (10/01/13 – 6/30/14)	\$41,000	\$78,000	90% higher

Source: Estimated taxpayer savings based on 2013 fiscal estimate detail for ESSB 5882. Actual taxpayer savings as reported by vendors based on Department of Revenue tax return data from October 2013 through June 2014. Preference took effect October 1, 2013.

There is no documentation or data available to help inform whether restaurant owners use tax-exempt flavor-imparting items in a manner consistent with an ingredient or component that becomes part of the end product. DOR audit staff report the exemption is still relatively new and this issue has not been the subject of any of their audits.

## To what extent will continuation of the tax preference contribute to these public policy objectives?

Continuing the tax preference beyond the current July 1, 2017, expiration date would continue to provide tax relief to the restaurant owners who purchase tax-exempt flavor-imparting items.

It is not clear how continuing the preference would contribute to the Legislature's stated intent for impacts to substantially conform to the fiscal estimate, since the actual taxpayer savings is unknown.

## Beneficiaries

# Who are the entities whose state tax liabilities are directly affected by the tax preference?

## Direct Beneficiaries

Direct beneficiaries of this tax preference are restaurant owners who purchase charcoal, wood chips, grape vines, or other qualifying items to infuse flavor into food during the cooking process, or use cedar planks to cook food.

The total number of direct beneficiaries is unknown. Of the estimated 14,000 or more restaurants in Washington, 25 restaurant owners in Fiscal Year 2014 and 33 restaurant owners in Fiscal Year 2015 reported purchasing flavor-imparting items on the Buyer Addendum. Vendors selling these items to restaurant owners reported four times as many sales as restaurants reported on Buyer Addenda. Therefore, it is possible that many more restaurants are using the preference but not filing Buyer Addenda.

## Indirect Beneficiaries

To the extent that restaurant owners using this preference pass along their tax savings to customers, the indirect beneficiaries of this preference may be customers of these restaurants.

## Reporting Issues

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### Three Reporting Issues

Three reporting issues complicate publishing an estimate of beneficiary savings for this preference:

- Sales and related tax information from vendors selling flavor-imparting items to restaurants are not disclosable for Fiscal Year 2015;
- Information provided by restaurant owners using a Buyer Addendum appear to be under-reported; and
- Some Buyer Addendum data appears to be inaccurate.

### Fiscal Year 2015 Sales from Vendors to Restaurants Not Disclosable

Fewer than three vendors reported sales of flavor-imparting items in Fiscal Year 2015. The Department of Revenue's (DOR) taxpayer confidentiality policy prohibits disclosure of tax return data if it is comprised of fewer than three taxpayers. JLARC staff contacted the businesses to request specific authorization to disclose the tax return data, but all of the businesses did not respond. The estimated beneficiary savings are based on the only disclosable tax data, which is from the nine months of Fiscal Year 2014 that followed the effective date of this preference.

### Use of Preference is Likely Under-reported by Restaurants

Buyers using any sales and use tax exemptions enacted after August 2013, including this one, must complete a Buyer Addendum for their tax exemption purchases if:

- They are required to register with DOR;
- They are required to file monthly or quarterly tax returns with DOR; and
- The tax benefit to the buyer is \$1,000 or more per calendar year.

Of the estimated 14,000 or more restaurants in Washington, only 25 restaurant owners in Fiscal Year 2014 and 33 restaurant owners in Fiscal Year 2015 reported purchasing flavor-imparting items on a Buyer Addendum. However, vendors selling these items to restaurants owners reported four times as many sales. For example, vendors of flavor-imparting items reported sales of \$868,000 for nine months in Fiscal Year 2014. During that same time period, restaurant owners only reported \$208,000 in purchases of flavor-imparting items. The discrepancy between vendor-reported and restaurant-reported data suggests that many tax-exempt flavor-imparting item purchases are not reported by restaurant owners on a Buyer Addendum.

### Buyer Addendum Reporting by Restaurants Appears to be Inaccurate

JLARC and DOR staff reviewed Buyer Addendum data from restaurant owners who reported using the tax preference to purchase items in Fiscal Years 2014 and 2015. Many businesses have inaccurately reported data. This means that not only is there likely under-reporting, but for those that do report, they may be inaccurately reporting exemptions for items that do not qualify for this preference.

DOR states that taxpayers seem to have misunderstood what items qualified for the flavor-imparting preference. A common mistake was that restaurant owners thought purchases of syrup used to make carbonated beverages should be reported on the Addendum.

## Revenue and Economic Impacts

### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

JLARC staff estimate that the direct beneficiaries of the preference saved \$78,000 in Fiscal Year 2014. The direct beneficiary savings for the 2015-17 Biennium is unknown. This estimate is based on Department of Revenue tax return data from vendors who sell to restaurant owners. Estimated savings for Fiscal Year 2015 are not disclosable due to fewer than three businesses reporting information. As a result, estimated beneficiary savings for the 2015-17 Biennium are unknown because the base period used to estimate the savings is not disclosable.

See the [tab on Reporting Issues](#) for more information on the challenges associated with this estimate.

### Estimated 2015-17 Direct Beneficiary Savings for Flavor-Imparting Items Sales and Use Tax Exemption

Fiscal Year	Total Deductions	State Sales Tax	Local Sales Tax	Total Beneficiary Savings
2014	\$868,000	\$57,000	\$21,000	\$78,000
2015	Not Disclosable			Not Disclosable
2016	Unknown			Unknown
2017	Unknown			Unknown
Preference scheduled to expire effective July 1, 2017				
2015-17 Biennium	Unknown			Unknown

Source: JLARC staff analysis of FY 2014 tax return deduction for code 65; FY 2015 detail non-disclosable; 2016 and 2017 estimate unknown because the base year used to grow the estimate is not disclosable.

### If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?

If the tax preference is terminated or allowed to expire as scheduled, restaurant owners who use certain flavor-imparting items for cooking would pay sales or use tax on their purchases as they did prior to October 1, 2013. The effect of termination or expiration on employment and the economy would depend on the extent to which restaurant owners could absorb the increased costs or pass them along to customers.

### Other States with Similar Preference?

#### Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?

Of the 45 states and the District of Columbia with a sales and use tax, there are three states where flavor-imparting items are not subject to sales tax: California, Florida, and Missouri.

The exemptions in these states are defined more broadly as sales for resale. These states have determined that a portion of the flavor-imparting item is incorporated in the final product that is resold to the restaurant customer.

### Applicable Statutes

#### Intent Statement

Intent—2013 2nd sp.s. c 13: "The intent of part V of this act is to provide tax relief to restaurants for business inputs that cannot be reused and are consumed for a specific purpose during the cooking process. More specifically, it is the intent of part V of this act to provide a sales and use tax exemption for specific items used in the cooking process that impart flavor and therefore are similar to an ingredient added to a final product that is sold to the consumer. It is also the intent of the

legislature to provide this tax preference in a fiscally responsible manner where the actual revenue impact of the legislation substantially conforms with the fiscal estimate provided in the legislation's fiscal note. Therefore, the legislature intends for this tax preference to be temporary so the legislature can assess the actual fiscal impact of the tax preference and whether the tangible personal property subject to the exemption is being used in a manner consistent with an ingredient or component that becomes part of a product sold to a final consumer." [2013 2nd sp.s. c 13 § 501.]

## **RCW 82.08.210**

### **Exemptions—Flavor imparters—Restaurants. (Expires July 1, 2017.)**

(1) Except as provided in subsection (2) of this section, the tax levied by RCW 82.08.020 does not apply to sales to restaurants of products that impart flavor to food during the cooking process and that:

(a) Are completely or substantially consumed by combustion during the cooking process, such as wood chips, charcoal, charcoal briquettes, and grape vines; or

(b) Support the food during the cooking process and are comprised entirely of wood, such as cedar grilling planks.

(2) The exemption provided by this section does not apply to any type of gas fuel.

(3) Sellers making tax-exempt sales under this section must obtain an exemption certificate from the buyer in a form and manner prescribed by the department. The seller must retain a copy of the exemption certificate for the seller's files. In lieu of an exemption certificate, a seller may capture the relevant data elements as allowed under the streamlined sales and use tax agreement. For sellers who electronically file their taxes, the department must provide a separate tax reporting line for exemption amounts claimed under this section.

(4) For purposes of this subsection, "restaurant" has the same meaning as provided in RCW 82.08.9995.

(5) This section expires July 1, 2017.

[2013 2nd sp.s. c 13 § 502.]

## **RCW 82.12.210**

### **Flavor imparters—Restaurants. (Expires July 1, 2017.)**

(1) Except as provided in subsection (2) of this section, the provisions of this chapter do not apply to restaurants with respect to the use of products that impart flavor to food during the cooking process and that:

(a) Are completely or substantially consumed by combustion during the cooking process, such as wood chips, charcoal, charcoal briquettes, and grape vines; or

(b) Support the food during the cooking process and are comprised entirely of wood, such as cedar grilling planks.

(2) The exemption provided by this section does not apply to any type of gas fuel.

(3) For purposes of this subsection, "restaurant" has the same meaning as provided in RCW 82.08.9995.

(4) This section expires July 1, 2017.

[2013 2nd sp.s. c 13 § 503.]

## **Recommendations**

### **Legislative Auditor Recommendation**

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#### **Legislative Auditor Recommendation**

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**The Legislature should review and clarify the sales and use tax exemption for flavor-imparting items because while the preference is achieving the stated public policy objective of providing tax relief to restaurant owners, it is unclear if the actual fiscal impact substantially conforms with the 2013 fiscal estimate.**

The preference is scheduled to expire on July 1, 2017.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislative action.

### **Letter from Commission Chair**

Available December 2016.

## **Commissioners' Recommendation**

Available December 2016.

## **Agency Response**

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If applicable, available December 2016.

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# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Fuel Used by Mint Growers | Sales & Use Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
A sales and use tax exemption for purchases of propane or natural gas used by mint growers to distill mint on a farm.  The preference is scheduled to expire July 1, 2017.	Sales & Use RCWs 82.08.220; 82.12.220	\$210,000

Public Policy Objective
The Legislature stated the public policy objective was to provide an incentive for mint growers to transition from using diesel to cleaner fuels (specifically propane and natural gas) for distilling mint. The Legislature noted this transition, though costly, would improve air quality.

Recommendations
<b>Legislative Auditor's Recommendation</b> <ol style="list-style-type: none"><li><b>1. Allow to Expire:</b> As scheduled on July 1, 2017, because it is likely not providing enough of an incentive for mint growers to convert the remaining six stills from diesel fuel to cleaner fuels.</li><li>If the Legislature wants to create an incentive for the remaining six mint stills to convert to one of the cleaner fuels, it may want to consider different types of tax preferences that can apply to both propane and natural gas.</li></ol> <b>Commissioner Recommendation:</b> Available in October 2016

### Details on this Preference

#### What is the Preference?

The Legislature established this preference to provide an incentive for mint growers to transition from using diesel to cleaner fuels for distilling mint.

Because of this preference, mint growers do not pay sales or use tax on purchases of propane or natural gas that they use exclusively to distill mint on a farm.

Mint growers must report these tax exempt purchases to the Department of Revenue (DOR) using a Buyer's Sales and Use Tax Preference Addendum ("Buyer Addendum") when they file their tax returns with DOR unless the growers meet certain criteria that excuse them from completing the Buyer Addendum.

The tax preference became effective October 1, 2013, and is scheduled to expire on July 1, 2017.

#### Legal History

##### 2006

The Legislature exempted diesel fuel used in agricultural production from sales and use tax.

##### 2007

The Legislature exempted biodiesel used in agricultural production from sales and use tax.

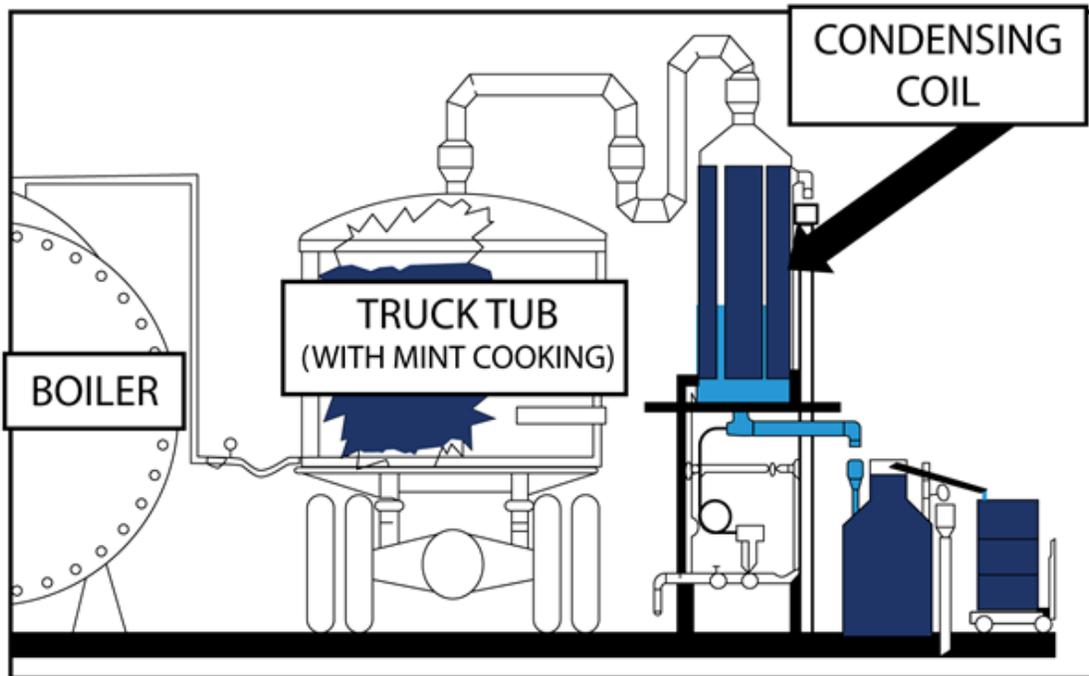
##### 2013

The Legislature enacted this tax preference to provide an incentive for mint growers to transition from using diesel to cleaner fuels for distilling mint. Mint growers do not pay sales or use tax for propane and natural gas purchased and used for mint distillation on a farm. The Legislature scheduled the preference to expire July 1, 2017.

## Other Relevant Background

### Mint Growers Use Fuel to Distill Mint Oil

Mint growers harvest mint once or twice a year, depending on the variety of plant and the desired characteristics of the oil. The mint grower cuts the mint and leaves it to dry in the field for a day or two. Once dried to the desired level, the mint is chopped and blown into an enclosed trailer (mint tub). The mint tub is pulled to a mint still (usually within a few miles of the field) and hooked to live steam that is used to distill it into oil. The steam is created by boilers that are fueled by diesel, propane, or natural gas.



JLARC staff review of graphic provided by Washington Mint Growers Association.

According to industry representatives, 28 mint stills were in use in Washington as of December 2015. Of those, 13 distill mint that their owners grow, while 15 distill mint for both their owners and for other mint growers.

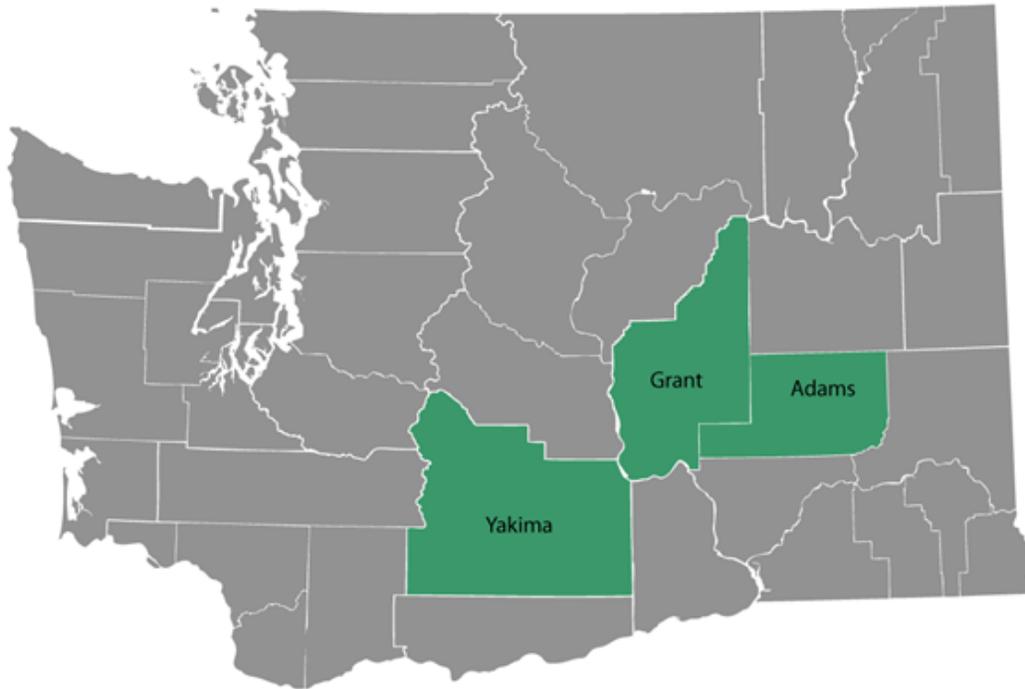
### Washington Is a Leader in Mint Production

In 2014, Washington led the nation in mint production, generating 3.5 million pounds of mint oil.

- Washington ranked first in spearmint oil production, valued at \$36 million, which is 70 percent of the U.S. production values.
- Washington ranked third in peppermint oil production, valued at \$31.5 million, which is 26 percent of the nation's production value.
- The USDA 2012 Census of Agriculture report notes 72 mint farms in the state with 26,300 acres of mint. One acre of mint produces about 19 gallons of mint oil when distilled.

The map below shows the main production areas in Washington, which are in the Yakima Valley and Columbia Basin.

## Washington's Primary Mint Production in Columbia Basin and Yakima Valley



Source: JLARC staff analysis of information from Washington Mint Growers Association.

### Other Tax Preferences Available to Mint Growers

Mint growers may qualify for several other tax preferences, as noted below, as well as broader tax preferences that are not included in this list.

#### Several Other Tax Preferences Available to Mint Growers

Type of Tax	Tax Treatment	Year Enacted	Notes
<b>Property Tax</b>	Exemption on value of agricultural crops grown	1890	JLARC staff <b><u>reviewed in 2007</u></b>
	Current use reduced valuation on agricultural land	1973	Excluded from JLARC review
	State personal property tax exemption on farm M&E	2001	Expedited <b><u>review in 2015</u></b>
<b>Sales and Use Taxes</b>	Purchases of seed, fertilizer, and sprays	1943	JLARC staff <b><u>reviewed seeds</u></b> in 2009; <b><u>fertilizer and sprays</u></b> in 2010
	Leased irrigation equipment	1983	Expedited <b><u>review in 2015</u></b>
	Purchases of horticultural services	1993	JLARC staff <b><u>reviewed in 2015</u></b>
	Farm replacement parts and repair services	2006	JLARC staff <b><u>reviewed in 2015</u></b>
	Fuel used on farms (diesel and biodiesel)	2006	JLARC staff <b><u>reviewed in 2015</u></b>

<b>B&amp;O Tax</b>	Agricultural producers	1935	JLARC staff <b>reviewed in 2008</b>
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Source: JLARC staff research and analysis of Title 82 RCW, Title 84 RCW as of March 31, 2016.

## Public Policy Objectives

### What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?

The Legislature stated in 2013 that the public policy objective was to **provide an incentive for mint growers to transition from using diesel to cleaner fuels** (specifically propane and natural gas) for distilling mint. The Legislature noted the transition, though costly, would **improve air quality**.

The Legislature noted that on-farm diesel fuel was already exempt from sales and use tax and that the preference would extend this treatment to propane and natural gas.

### Are Objectives Being Met?

### What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?

Most mint growers have transitioned their stills from diesel to cleaner fuels, but it is not clear the tax preference has been the key incentive to make this transition:

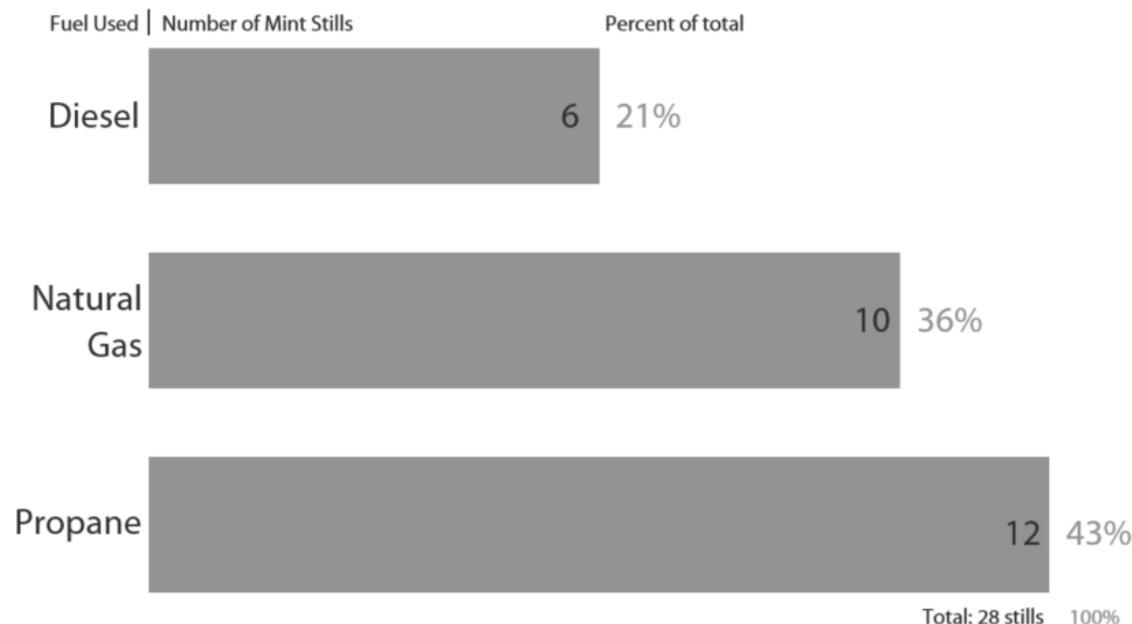
- Mint growers using natural gas to fuel their mint stills are generally not receiving benefit from the preference; and
- Even with the preference, propane remains more expensive than diesel for distilling mint, while natural gas is the least expensive of the three fuels.

Air quality has likely improved with the conversions from diesel to cleaner fuels.

### 22 of 28 Mint Stills Use Cleaner Fuels

Industry sources report that, **as of December 2015, 22 of the 28 mint stills are using one of the cleaner fuels, either propane (12 stills) or natural gas (10 stills)**. JLARC staff do not assert whether there is a causal relationship between this outcome and the tax preference. Industry representatives report that mint growers had converted seven stills to one of the cleaner burning fuels before the preference was enacted, and that mint growers converted six more after the preference was enacted. Some stills started out using one of the cleaner fuels. Six stills continue to use diesel.

### As of December 2015, 22 of 28 Mint Stills Use Cleaner Fuels, While 6 Continue to Use Diesel



### Incentive to Transition to Cleaner Fuels is Limited

Growers switching to natural gas do not benefit from the preference, and growers switching to propane have higher fuel costs than using diesel, even with the preference. Therefore, if price is a major determinant for conversion, it is unlikely the preference is providing enough of an incentive to make the conversion to the two cleaner fuels.

### Mint distillers using natural gas are not receiving benefit from the preference

The preference is not serving as an incentive for a mint distiller to convert to natural gas because the preference does not reduce the price a mint distiller pays for this fuel. Natural gas purchased **through a utility** does not qualify for or benefit from this tax preference. This is because natural gas delivered by a utility is not subject to sales or use tax. The sale is instead subject to public utility tax. Industry representatives confirmed that mint distillers choosing natural gas for their fuel are purchasing the gas through a utility.

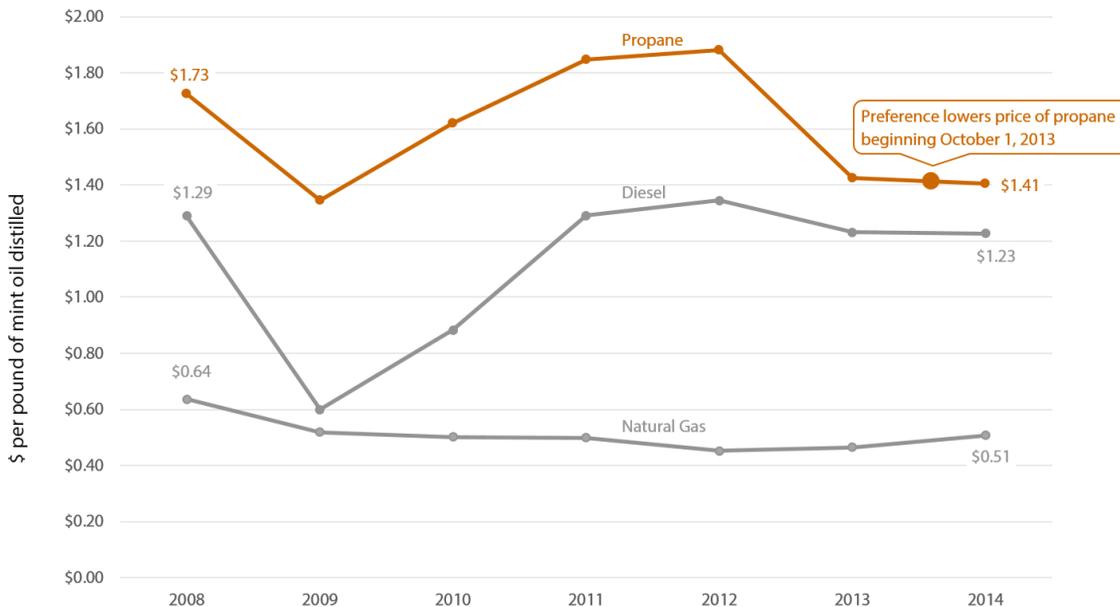
If a mint distiller purchased natural gas from an out-of-state broker, the purchase would qualify for a use tax exemption under this preference. According to the industry, these sales are not occurring.

### Propane still more expensive than diesel, natural gas the least expensive

It is not clear that the preference provides enough of a financial incentive to persuade a mint distiller to switch from diesel to propane. Even with the preference, propane is more expensive than diesel for distilling mint. Fuel costs may provide some incentive for a mint distiller to switch from diesel to natural gas. This is because natural gas is currently less expensive, but not due to the preference.

For Calendar Years 2008 through 2014, diesel remains a less expensive fuel choice than propane for mint distillation, even when factoring in the effect of the preference. Diesel burns hotter than the other two fuels, so less is needed to distill a pound of mint oil. Natural gas is the least expensive of the fuel choices, and its cost is not affected by the preference.

### For Mint Distillation, Diesel Less Expensive Than Propane, While Natural Gas the Least Expensive



Source: JLARC staff analysis of Energy Information Administration BTU conversion data and historic prices paid for fuel on farms from Washington 2014 and 2015 Agricultural Bulletins. Cost for propane incorporates October 2013 price reduction due to the preference. No sales tax on diesel over the time period. Cost for natural gas includes the public utility tax. While on a per gallon basis, propane costs less than diesel, it is more expensive per BTU.

### Air Quality Likely Improves When Switching to Cleaner Fuels

It is not possible to precisely measure the amount of impact to air quality from the mint distillers converting their stills to cleaner fuels. However, air quality officials consistently reported to JLARC staff that such conversions reduce pollutant emissions and their concentrations. The officials explained that diesel is not as refined as other fuels and contains a more diverse mixture of chemicals and toxic components. When farmers use diesel, there is a larger distribution and greater

concentration of pollutants (e.g., sulfur dioxide, nitrogen oxide, hydrocarbons, and particulate matter) than with propane and natural gas. For example, natural gas combustion produces less nitrogen oxide and hydrocarbon emissions, virtually no particulate matter, and no sulfur dioxide.

As explained above, it is not clear that the transition to cleaner fuels is the result of the tax preference.

## **To what extent will continuation of the tax preference contribute to these public policy objectives?**

It is not clear that continuing the tax preference would provide enough of an incentive for mint growers to convert the remaining six mint stills using diesel to one of the cleaner fuels:

- Mint growers who converted their stills from diesel to natural gas are not receiving benefit from this sales and use tax exemption. This is because they would likely be buying their natural gas from a utility. Such sales are not subject to sales or use tax, and therefore receive no tax advantage. Instead, these sales are subject to public utility tax.
- Mint growers who converted their stills to propane would continue to pay higher overall fuel costs than for diesel, even with the preference. In addition, JLARC staff estimate it would take between 9 and 15 years of tax preference savings for a grower to recover the costs of converting a mint still from diesel to propane. This calculation is based on conversion costs ranging from \$150,000 to \$250,000 and a mint distiller's estimated average annual savings of \$16,850.

## **If the public policy objectives are not being fulfilled, what is the feasibility of modifying the tax preference for adjustment of the tax benefits?**

The Legislature could consider adopting a tax preference that would better incent mint distillers to switch from diesel to either one of the cleaner fuels (propane or natural gas). For example, tying preferences more directly to conversion costs or extending them to natural gas users may provide more targeted incentives.

## **Beneficiaries**

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### **Who are the entities whose state tax liabilities are directly affected by the tax preference?**

#### **Direct Beneficiaries**

Direct beneficiaries of the preference are mint growers who buy propane to distill mint on a farm. Industry representatives report 12 mint stills in Washington using propane as of December 2015.

Mint growers who purchase natural gas through an out-of-state broker would also be beneficiaries. However, industry sources state this is not currently happening. Instead, mint growers who use natural gas are receiving the product through a utility and are paying the public utility tax instead of sales tax. Mint growers who use natural gas delivered by a utility are not beneficiaries of this preference.

#### **Indirect Beneficiaries**

Indirect beneficiaries of the preference may be mint growers who do not own stills and who contract with other growers to distill their mint. Some portion of the savings realized by mint growers who distill mint for others might be passed along through lower contract fees. Industry representatives report 75 mint growers in Washington as of December 2015, some of whom contract with mint still owners to process their product.

## **Reporting Issues**

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### **Two Reporting Issues**

Two reporting issues complicate estimates of the use of this preference:

- Information reported by the mint distillers using this preference is not disclosable; and
- Information from propane sellers making tax-exempt propane sales to the mint distillers appears to be under-reported.

### **Buyer Addendum Detail Not Disclosable**

Buyers using any sales and use tax exemption enacted after August 2013, including this one, must complete a Buyer Addendum detailing their tax exempt purchases if:

- They are required to register with the Department of Revenue (DOR);
- They are required to file monthly or quarterly tax returns with DOR; and
- The tax benefit to the buyer is \$1,000 or more per Calendar Year.

Because many Washington farmers (including mint growers) are not required to register or file tax returns with DOR, few Buyer Addenda were expected to be filed for this tax preference. Fewer than three businesses have filed Buyer Addenda for Fiscal Years 2014, 2015, and the first six months of 2016, so this detail is not disclosable.

### **Tax-Exempt Propane Sales to Mint Growers Appear Under-Reported**

JLARC staff reviewed amounts reported by businesses selling propane to mint growers that are exempted from sales tax by the tax preference. The foregone sales tax for these reported sales is well below JLARC staff’s estimated beneficiary savings for propane used by mint growers (see tab on Revenue and Economic Impacts). It is unclear why these sales appear to be under-reported.

### **Tax-Exempt Propane Sales to Mint Growers by Fuel Sellers Appears Under-Reported**

Fiscal Year	Estimated Beneficiary Savings	Foregone Sales Tax Reported by Propane Sellers	What Portion of Estimated Savings Was Reported?
2014 *	\$167,000	\$6,786	4% of estimate
2015	\$128,000	\$9,506	7% of estimate

Note: Fiscal Year 2014 covers period October 1, 2013 (when the preference took effect) through June 30, 2014.  
 Source: JLARC staff beneficiary savings analysis; JLARC staff analysis of DOR tax return detail October 2013 – June 2015.

## **Revenue and Economic Impacts**

### **What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?**

JLARC staff estimate the direct beneficiary savings at \$128,000 in Fiscal Year 2015 and \$210,000 for the 2015-17 Biennium.

The estimate was calculated using the projected amount of fuel used by mint farms for stills fueled with propane. The estimate does not include a natural gas component since the preference is not being used for natural gas purchases.

### **Estimated 2015-17 Direct Beneficiary Savings for Mint Grower Fuel Sales and Use Tax Exemption**

Fiscal Year	Estimated Qualifying Propane Sales	State Sales Tax	Local Sales Tax	Total Beneficiary Savings
2014 *	\$2,038,000	\$132,000	\$35,000	\$167,000
2015	\$1,549,000	\$101,000	\$27,000	\$128,000
2016	\$1,212,000	\$79,000	\$21,000	\$100,000
2017	\$1,335,000	\$87,000	\$23,000	\$110,000
Tax preference scheduled to expire July 1, 2017.				
2015-17 Biennium	\$2,547,000	\$166,000	\$44,000	\$210,000

Note: Fiscal Year 2014 covers period October 1, 2013 (when the preference took effect) through June 30, 2014.  
 Source: JLARC staff analysis of USDA 2014 mint production data, information on fuel use from Washington Mint Growers Association, estimated growth using Economic and Revenue Forecast Council IHS forecast for energy growth for Fiscal Years 2016 and 2017.

### **If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect**

## and the extent to which the resulting higher taxes would have an effect on employment and the economy?

If the tax preference were terminated, mint growers with mint stills would pay sales or use tax on propane when the fuel is used to distill mint on a farm.

The effect of these terminations on employment and the economy would depend on the extent to which Washington's mint growing industry could absorb the increased costs or pass them along to their customers. Agricultural producers, including mint growers, may not be able to pass along increased costs to their customers if the prices for their commodities are set in national or international markets.

## Other States with Similar Preference?

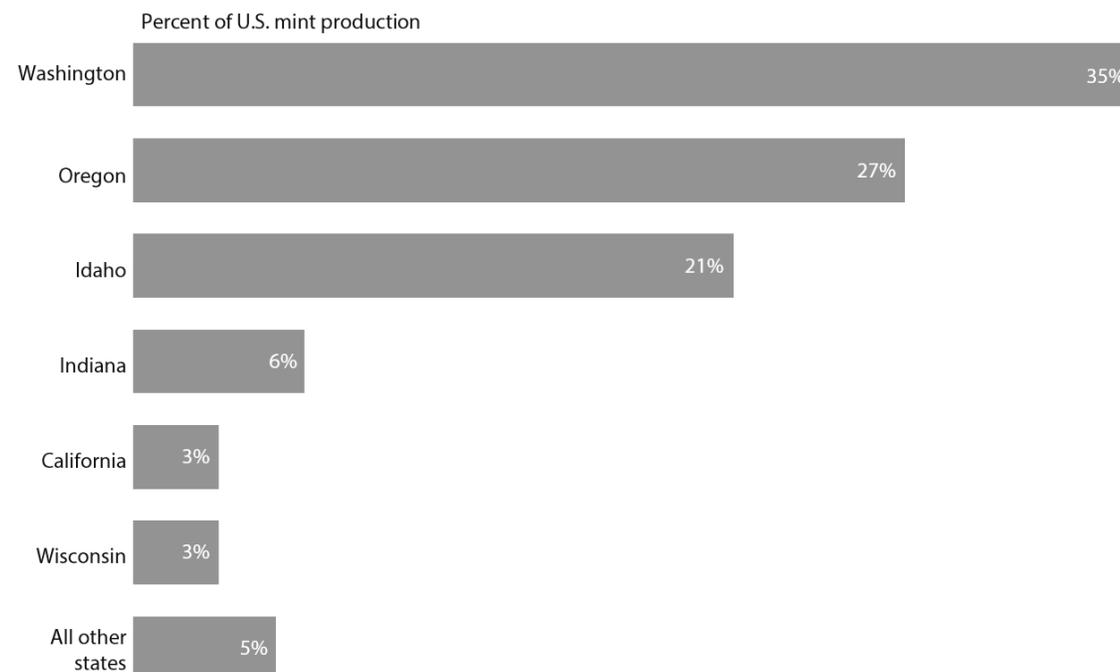
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### Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?

JLARC staff reviewed the taxation of fuel by the top mint and/or spearmint producing states and determined they generally do not tax fuel used by mint growers. The six states noted below comprise 95 percent of U.S. mint production.

- Washington exempts diesel used on farms (reviewed by JLARC in 2015) and exempts natural gas and propane used exclusively to distill mint on a farm from sales and use taxes.
- Idaho, Indiana, and Wisconsin exempt any kind of fuel used in agricultural production from sales and use taxes.
- California exempts diesel fuel used in agricultural production from the state (but not the local) portion of sales tax and exempts liquefied petroleum gas (LPG), including propane, used in agricultural production when delivered into tanks holding 30+ gallons. Natural gas is subject to sales or use tax.
- Oregon does not impose sales or use taxes.

### Top Mint Producing States Generally Exempt Fuels Used to Distill Mint



Source: JLARC staff analysis of USDA 2012 Census of Agriculture, Table 27, Other Crops 2012.

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## Applicable Statutes

### Intent Statement

Findings—Intent—2013 2nd sp.s. c 13: "The legislature finds that mint growers utilize fuel to generate heat to extract oil from harvested mint and thereby produce a saleable agricultural product. Diesel fuel is often used as the fuel source that generates heat to distill mint. This on-farm diesel fuel is currently exempt from sales and use tax. The legislature further finds that propane and natural gas are alternative sources of cleaner burning fuel. A transition by mint growers to these alternative

fuel sources, though costly, provides air quality benefits as compared to the use of diesel. It is the intent of the legislature to provide an incentive to mint growers to make the transition to cleaner fuels by extending the sales and use tax exemptions to propane and natural gas used by farmers who produce mint oil." [2013 2nd sp.s. c 13 § 1301.]

## **RCW 82.08.220**

### **Exemptions—Mint growers. (Expires July 1, 2017.)**

- (1) The tax levied by RCW 82.08.020 does not apply to sales to farmers of propane or natural gas used exclusively to distill mint on a farm.
- (2) The exemption is available only when the buyer provides the seller with an exemption certificate in a form and manner prescribed by the department. The seller must retain a copy of the certificate for the seller's files. For sellers who electronically file their taxes, the department must provide a separate line for exemption amounts claimed under this section.
- (3) For the purposes of this section, "farmer" has the same meaning as provided in RCW 82.04.213.
- (4) This section expires July 1, 2017.

[2013 2nd sp.s. c 13 § 1302.]

## **RCW 82.12.220**

### **Exemptions—Mint growers. (Expires July 1, 2017.)**

- (1) The provisions of this chapter do not apply with respect to the use of propane or natural gas by a farmer to exclusively distill mint on a farm.
- (2) For the purposes of this section, "farmer" has the same meaning as provided in RCW 82.04.213.
- (3) This section expires July 1, 2017.

[2013 2nd sp.s. c 13 § 1303.]

## **Recommendations**

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### **Legislative Auditor Recommendation**

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#### **Legislative Auditor Recommendations**

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1. **The Legislature should allow the sales and use tax exemption for propane and natural gas used by mint growers to expire as scheduled on July 1, 2017, because it is likely not providing enough of an incentive for mint growers to convert the remaining six stills from diesel fuel.**

Mint growers considering a conversion to natural gas would not benefit from the preference because a utility would be delivering their natural gas. Natural gas purchased through a utility is subject to public utility tax rather than sales or use tax. Mint growers considering a conversion to propane would still pay higher fuel costs than for their current diesel, even with the preference.

**Legislation Required:** No.

**Fiscal Impact:** None.

2. **If the Legislature wants to create an incentive for the remaining six mint stills to convert to one of the cleaner fuels, it may want to consider different types of tax preferences that can apply to both propane and natural gas.** For example, tying preferences more directly to conversion costs or extending them to natural gas users may provide more targeted incentives.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislation.

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## **Letter from Commission Chair**

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Available December 2016.

**Commissioners' Recommendation**

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Available December 2016.

**Agency Response**

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If applicable, available December 2016.

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# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Nonresident Large, Private Airplanes | Sales and Use Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
A sales and use tax exemption for nonresidents on their purchases in Washington of: <ul style="list-style-type: none"><li>• Large private airplanes; and</li><li>• Labor and services performed in Washington to repair, clean, alter, or improve large, private airplanes they own.</li></ul> The preference is scheduled to expire July 1, 2021.	Sales & Use RCWs 82.08.215; 82.12.215	\$0

Public Policy Objective
The Legislature stated the public policy objective was to promote the economic development of Washington’s aerospace cluster and increase collected tax revenues through promoting a competitive marketplace for storing and modifying unfurnished, noncommercial aircraft.

Recommendations
<b>Legislative Auditor’s Recommendation</b>  <b>Allow to Expire:</b> If it is still not achieving the stated public policy objectives by the scheduled July 1, 2021, expiration date, the preference should be allowed to expire. Available evidence indicates that the preference has not been used since enacted.  <b>Commissioner Recommendation:</b> Available in October 2016

### Details on this Preference

#### What is the Preference?

The Legislature established this preference to promote the economic development of Washington’s aerospace cluster and increase tax revenues by promoting a competitive marketplace for storing and modifying unfurnished, noncommercial aircraft.

Nonresidents do not pay sales or use tax on their purchases in Washington of:

- a. Large, private airplanes; and
- b. Labor and services performed in Washington to repair, clean, alter, or improve large, private airplanes they own.

The sales and use tax exemption applies only when the large private airplane is not required by law to be registered with or file annual renewals with the Aviation Division of the Washington State Department of Transportation (WSDOT Aviation). See the Legal History tab for additional detail.

The preference took effect on January 1, 2014, and is scheduled to expire July 1, 2021.

A “large, private airplane”:

- Is not used in interstate commerce;
- Is not owned or leased by a government entity;
- Weighs more than 41,000 pounds (generally Boeing 737s and above); and

- Is assigned a category A, B, C, or D aircraft weight class by the Federal Aviation Administration.

## Legal History

### 2013

The Legislature enacted this preference. The bill included an intent section stating that the public policy objective was to promote economic development of the state’s aerospace cluster and increase state tax revenues by promoting a competitive marketplace for storing and modifying unfurnished, noncommercial aircraft.

This tax preference was part of a bill passed during the second special session, intended to modify Washington’s tax policy in several ways to encourage additional growth of the aerospace cluster in the state.

In addition to this preference, the 2013 bill also had the following effects, which are not part of this review.

Tax Treatment	Previously	After 2013 Legislation	Result
<b>WSDOT aircraft annual registration, \$15 fee</b>	Exemption for: <ul style="list-style-type: none"> <li>• Nonresident airplanes in state for less than 90 days;</li> <li>• Aircraft flying commercially</li> </ul>	Exemption extended to large, private nonresident airplanes in state <b>90 days or more</b> when here for: <ul style="list-style-type: none"> <li>• <b>Continual storage</b> for at least one year; or</li> <li>• <b>Exclusively for repair, alteration, or reconstruction</b></li> </ul>	Large, private airplanes owned by nonresidents in state for 90 days or more for continual storage or repair/alteration now exempt from registration requirements and \$15 fee. Must provide written documentation to WSDOT within 90 days of arrival.
<b>Aircraft excise tax</b>  (Ranges from \$20 - \$125/year, depending on size and type of aircraft)  This is an in-lieu of tax for personal property tax.	Airplanes flying commercially are subject to personal property tax based on the fair market value of the airplane. Such airplanes are exempt from aircraft excise tax.	Aircraft excise tax exemption removed for <b>airplanes used in commercial</b> flying when in-state exclusively for <b>continual storage</b> of at least one calendar year.	Airplanes flying commercially that are in-state for continual storage are now subject to aircraft excise tax <b>INSTEAD</b> of the larger personal property tax.  NOTE: This change impacted commercial aircraft. Large, private aircraft owned by nonresidents in state for 90 days or more had already been taxed in this manner.

Source: JLARC staff analysis of RCWs 82.48.100, RCW 47.68.250, and RCWs 82.08.215 and 82.12.215.

Industry representatives testified and provided information to the Legislature claiming the changes created in the bill would create 1,195 jobs, each with wages and benefits of \$70,000-\$80,000 per year, add B&O tax revenue, and grow the aerospace industry in Washington by making Washington’s tax structure “more competitive.”

The preference took effect January 1, 2014, and is scheduled to expire July 1, 2021.

During the 2013 third special session, the Legislature extended the expiration date and preferential tax treatment provided on a different package of aerospace tax preferences. JLARC staff reviewed this package of aerospace tax preferences in 2014.

## Public Policy Objectives

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### **What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

In the intent section for the preference, the Legislature stated its objective was to **promote economic development**. The bill also directed JLARC staff to **measure the net impact** of the preference on state tax revenues.

#### **Promote Economic Development**

The Legislature stated the public policy objective for this preference was to:

. . . promote the economic development of our state's aerospace cluster and increase the tax revenues collected by the state through promoting a competitive marketplace for storing and modifying unfurnished, noncommercial aircraft.

The Legislature noted that Washington was losing jobs in this industry to other states, resulting in the loss of high-wage jobs and new tax revenue. The bill also stated that Washington tax statutes were an impediment to encouraging development of aerospace clusters in the state. The Legislature concluded it intended to modify Washington's tax policy to encourage aerospace cluster development within the state and increase tax revenues.

#### **Measure Net Impact of the Tax Preference**

The Legislature directed JLARC staff to:

- Estimate the **net impact** of the preference on state tax revenues by comparing the decrease in state revenues resulting from the changes made in the bill with the additional tax revenues generated from the direct, indirect, and induced economic impacts from the changes.
- Estimate, to the extent practicable, job growth in the aerospace cluster resulting from the tax preference(s) changes.

## Are Objectives Being Met?

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### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

The tax preference is not achieving its objective of promoting economic development. As of March 2016, no one is using it. The net impact of the preference is zero.

#### **Promote Economic Development**

As of March 2016, there is no evidence of qualifying sales of large, private airplane to nonresidents or of qualifying modification work on such airplanes.

JLARC staff worked with the Department of Revenue (DOR) to identify any evidence of use of the preference. These efforts included:

- Contacting the businesses that had expressed interest during the 2013 legislative session in performing this work. The businesses reported no qualifying work.
- Analyzing tax return deduction detail to look for businesses selling or modifying large, private airplanes to or for nonresidents. There were no qualifying sales.
- Reviewing businesses that had reported an amount on their tax return showing use of the preference. This review showed that these businesses had reported incorrectly.
- Reviewing Buyer Addendum data. There were no qualifying purchases, and some businesses incorrectly reported making such purchases.
- Contacting the Aerospace Futures Alliance, the lobbying organization that had promoted the legislation in 2013. JLARC staff asked whether the preference had stimulated the predicted activity. As of May 2016, JLARC staff had received no response from the industry.
- Contacting WSDOT Aviation to determine if any nonresident owners of large, private airplanes had filed documentation indicating the aircraft was exempt from registration. As of April 2016, WSDOT Aviation had received

no registration exemptions.

## Measure Net Impact of the Preference on State Tax Revenues

As of March 2016, there is no evidence that the preference has stimulated any of the anticipated economic activity. The net impact is zero.

## To what extent will continuation of the tax preference contribute to these public policy objectives?

The preference is not being used at this time. Continuing the preference will not contribute to the public policy objectives if it is not used.

## Beneficiaries

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### Who are the entities whose state tax liabilities are directly affected by the tax preference?

The available evidence shows no direct or indirect beneficiaries.

## Reporting Issues

As required in statute, the Department of Revenue added a specific reporting line for businesses selling large, private airplanes or repairing or modifying them to report their business income from such activities.

In examining tax return data, JLARC staff found reporting problems, which were confirmed by subsequent Department of Revenue examination and outreach. The businesses that had reported amounts on the line established for this preference had incorrectly reported.

## Revenue and Economic Impacts

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### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

There are no direct beneficiary savings for this tax preference. Available evidence indicates that, as of March 2016, there have been no qualifying sales or services taking place in Washington.

### If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?

There would be no negative effects if the preference were terminated, since the available evidence indicates it has not been used.

## Other States with Similar Preference?

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### Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?

When the Legislature considered this preference in 2013, industry representatives stated customers wanting private airplane modifications were inclined to go to other states that offered “more favorable tax exemption codes.” They noted the preference would provide a “level playing field” with other states.

JLARC staff examined states specifically identified in testimony as competitors for large, private airplane sales and modifications. All of these states provide a **sales tax exemption for large airplanes purchased by nonresidents**, although several states require the airplane to leave the state within a set timeframe after purchase. Kansas and Texas were specifically mentioned as being competitive for airplane modification work.

### Other States Competing for Nonresident Airplane Sales and Modification Work

State	Parts, Repair, & Modification Services for Nonresidents Tax Exempt?	Airplane Sales to Nonresidents Tax Exempt?

<b>Washington</b>	ü	ü
<b>Arizona</b>	ü	ü
<b>California</b>	ü	ü Must leave “promptly” and not return for 12 months
<b>Connecticut</b>	ü	ü Must leave immediately after delivery
<b>Indiana</b>	ü	ü Must leave within 30 days of delivery
<b>Kansas</b>	ü	ü Must leave within 10 days of delivery
<b>New Mexico</b>	ü	ü
<b>Oklahoma</b>	ü	ü
<b>Texas</b>	ü	ü

Note: California and Arizona do not impose sales tax on repair and modification services.  
Source: JLARC staff analysis of other states statutes, rules.

## Applicable Statutes

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### Intent Statement

#### ESSB 5882 (2013)

**Sec. 1101.** (1) The legislature intends to promote the economic development of our state’s aerospace cluster and increase the tax revenues collected by the state through promoting a competitive marketplace for storing and modifying unfurnished, noncommercial aircraft. The legislature finds that Washington is currently losing these types of jobs to other states, resulting in the loss of high-wage jobs and new tax revenue. Further, the legislature finds that the current tax statutes are an impediment to encouraging the development of aerospace clusters in our state. Therefore, the legislature intends to modify our state’s tax policy to encourage aerospace cluster development within the state and increase tax revenues

(2) The joint legislative audit and review committed, as part of its tax preference review process, must estimate the net impact on state tax revenues by comparing the decrease in state revenues resulting from the changes made in part XI of this act to the additional tax revenues generated from the direct, indirect, and induced economic impacts from those changes. The committee must also, to the extent practicable, estimate job growth in the aerospace cluster resulting from the changes made in part XI of this act. The committee must conduct its tax preference review of part XI of this act during calendar year 2016 and report its findings and recommendations to the legislature by January 1, 2017.

#### RCW 82.08.215

#### Exemptions—Large private airplanes. (Expires July 1, 2021.)

(1)(a) The tax levied by RCW 82.08.020 does not apply to:

(i) Sales of large private airplanes to nonresidents of this state; and

(ii) Sales of or charges made for labor and services rendered in respect to repairing, cleaning, altering, or improving large private airplanes owned by nonresidents of this state.

(b) The exemption provided by this section applies only when the large private airplane is not required to be registered with the department of transportation, or its successor, under chapter 47.68 RCW. The airplane owner or lessee claiming an exemption under this section must provide the department, upon request, a copy of the written statement required under RCW 47.68.250(5)(c)(ii) documenting the airplane's registration exemption and any additional information the department may require.

(2) Sellers making tax-exempt sales under this section must obtain an exemption certificate from the buyer in a form and manner prescribed by the department. The seller must retain a copy of the exemption certificate for the seller's files. In lieu of an exemption certificate, a seller may capture the relevant data elements as allowed under the streamlined sales and use tax agreement. For sellers who electronically file their taxes, the department must provide a separate tax reporting line for exemption amounts claimed under this section.

(3) Upon request, the department of transportation must provide to the department of revenue information needed by the department of revenue to verify eligibility under this section.

(4) For purposes of this section "large private airplane" means an airplane not used in interstate commerce, not owned or leased by a government entity, weighing more than forty-one thousand pounds, and assigned a category A, B, C, or D test flow management system aircraft weight class by the federal aviation administration's office of aviation policy and plans.

[2013 2nd sp.s. c 13 § 1103.]

## **RCW 82.12.215**

### **Exemptions—Large private airplanes. (Expires July 1, 2021.)**

(1)(a) The tax levied by RCW 82.12.020 does not apply to the use of:

(i) Large private airplanes owned by nonresidents of this state; and

(ii) Labor and services rendered in respect to repairing, cleaning, altering, or improving large private airplanes owned by nonresidents of this state.

(b) The exemption provided by this section applies only when the large private airplane is not required to be registered with the department of transportation, or its successor, under chapter 47.68 RCW. The airplane owner or lessee claiming an exemption under this section must provide the department, upon request, a copy of the written statement required under RCW 47.68.250(5)(c)(ii) documenting the airplane's registration exemption and any additional information the department may require.

(2) Upon request, the department of transportation must provide to the department of revenue information needed by the department of revenue to verify eligibility under this section.

(3) For purposes of this section, the conditions, limitation, and definitions in RCW 82.08.215 apply to this section.

[2013 2nd sp.s. c 13 § 1104.]

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## **Recommendations**

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### **Legislative Auditor Recommendation**

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#### **Legislative Auditor Recommendation**

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**The Legislature should allow this preference to expire if it still is not achieving the stated public policy objectives by the scheduled July 1, 2021, expiration date.**

The available evidence indicates that, as of March 2016, the preference has not been used since enacted. JLARC staff will monitor this preference to see if any qualifying activity takes place and if so, may recommend that it be evaluated again before it expires. The preference may be a candidate to include as part of JLARC staff's legislatively required review of aerospace industry tax preferences in 2019.

**Legislation Required:** No.

**Fiscal Impact:** None known.

## **Letter from Commission Chair**

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Available December 2016.

## **Commissioners' Recommendation**

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Available December 2016.

## **Agency Response**

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If applicable, will be available December 2016.

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Rural Electric Cooperative Finance Organization | B&O Tax

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### Summary of this Review

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
A B&O tax deduction for cooperative finance organizations on any interest income earned from loans to rural electric cooperatives or other nonprofit or government utility service providers.  The preference is scheduled to expire July 1, 2017.	B&O RCW 82.04.43394	Unknown

<b>Public Policy Objective</b>
The Legislature stated the public policy objective was to provide tax relief for customers of rural electric cooperatives by providing this incentive to finance organizations that lend to rural electric cooperatives.

<b>Recommendations</b>
<b>Legislative Auditor’s Recommendation</b>  <b>Modify the Preference:</b> As currently structured, there is no guarantee that the savings realized by finance organizations will be passed on to Washington rural electric cooperatives and their customers, as the Legislature intended.  <b>Commissioner Recommendation:</b> Available in October 2016

### Details on this Preference

#### What is the Preference?

The Legislature established this tax preference to provide tax relief for customers of rural electric cooperatives.

A cooperative finance organization can deduct the interest income earned from loans to rural electric cooperatives or other nonprofit or governmental utility service providers organized under Washington law when calculating their taxable income for business and occupation (B&O) tax purposes.

The preference took effect October 1, 2013, and is scheduled to expire July 1, 2017.

A “**cooperative finance organization**” is a nonprofit organization with the primary purpose to provide, secure, or otherwise arrange financing for rural electric cooperatives.

A “**rural electric cooperative**” is a nonprofit, customer-owned organization that provides utility services to rural areas.

#### Legal History

##### 2009

Anderson Island residents are members of a rural electrical cooperative. In February, the single marine cable that connected Anderson Island’s utilities to the mainland failed. The cost to replace and lay two miles of cable to the island was about \$9 million. The local cooperative noted it worked with the National Rural Utilities Cooperative Finance Corporation to ensure the work was financed and the repairs completed.

##### 2013

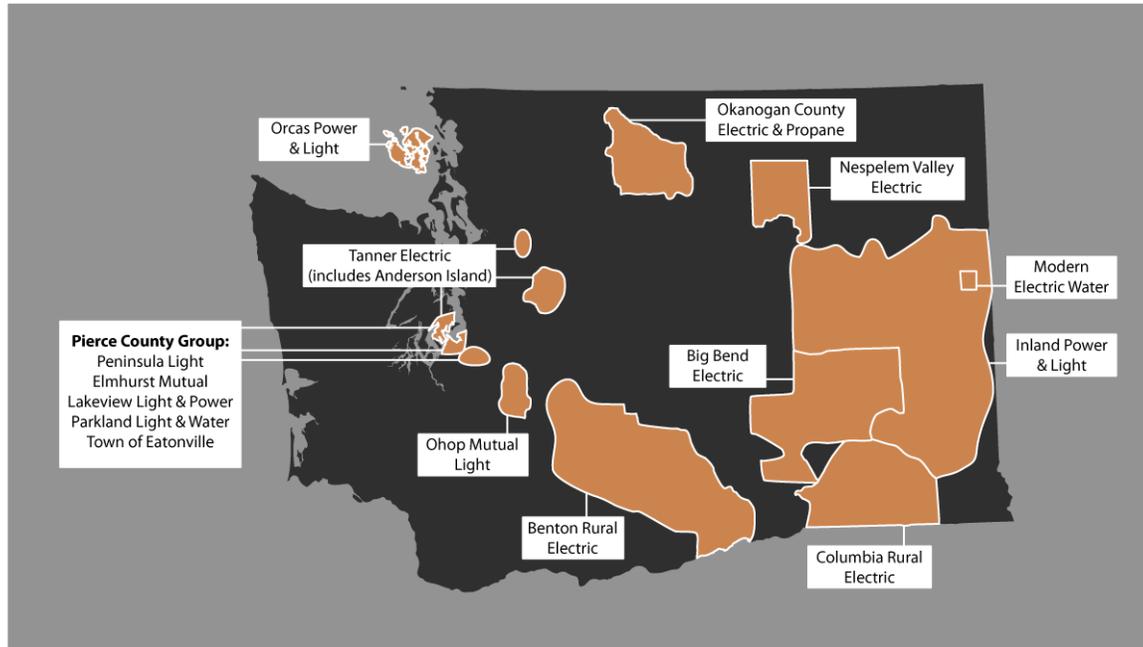
The Legislature enacted this preference allowing cooperative finance organizations to deduct interest income received from loans made to member-owned electric cooperatives or other nonprofit or governmental utility service providers in rural areas. Representatives from the cooperative serving Anderson Island testified in House and Senate committee hearings that a cooperative finance organization helped them finance and complete the work necessary to repair their utility services. The Legislature scheduled the preference to expire July 1, 2017.

## Other Relevant Background

### Rural Electric Cooperatives

The Washington Rural Electric Cooperative Association identified 15 rural electric cooperatives that are headquartered in Washington. These cooperatives provide electric service at cost to over 280,000 customers. They are managed by a locally elected board of directors, who set rates and policies for the utility. The Rural Electric Cooperative Association notes that these cooperatives deliver 11 percent of the total kilowatt hours sold in the U.S. each year.

#### Rural Electric Cooperatives Headquartered in Washington



Source: JLARC staff analysis of Washington Rural Electric Cooperative Association (WRECA) detail on Rural Electric Cooperatives headquartered in Washington.

### National Rural Utilities Cooperative Finance Corporation

In 1969, cooperatives throughout the country formed the **National Rural Utilities Cooperative Finance Corporation**, a member-owned, nonprofit 501(c)(4) cooperative financing organization.

The Finance Corporation raises and loans funds to supplement the loan programs for electric cooperatives offered by the federal Rural Utilities Service. In 2012, the Finance Corporation's outstanding loans and guarantees to cooperatives nationwide totaled \$20.2 billion. The Finance Corporation is the only known beneficiary of the tax preference.

As of January 2016, Washington electric cooperatives had approximately \$160 million in outstanding loans with the Finance Corporation.

### Public Policy Objectives

#### **What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

The Legislature stated the public policy objective for this preference was **to provide tax relief for customers of rural electric cooperatives** by providing this tax preference to finance organizations that lend to rural electric cooperatives. The Legislature also indicated its intent that the **actual revenue impact** of the preference **substantially conforms with the fiscal estimate**.

The Legislature stated these objectives in an intent section rather than in a tax preference performance statement.

## **Provide Tax Relief to Customers of Rural Electric Cooperatives**

The prime sponsors of earlier House and Senate bills that would have provided the same preference noted the preference would save money for a particular cooperative finance organization making loans to Washington cooperatives, and that those savings would be returned to cooperative members. The National Rural Utilities Cooperative Finance Corporation was specifically mentioned in committee hearings.

A representative for the Washington Rural Electric Cooperative Association testified at House and Senate committee hearings that Washington “did not recognize” the Finance Corporation as a tax-exempt organization, unlike most other states, and that the Finance Corporation’s tax burden was an additional cost that was passed along to Washington cooperative members and customers.

The representative stated the preference would save the Finance Corporation between \$160,000 to \$167,000 each year, which would be passed on to Washington cooperatives and their members. He estimated the average rural electric cooperative customer would save \$17.32 over a ten-year period or \$1.73 per year.

## **Substantially Conform to 2013 Estimate**

The Legislature also stated that it intended to provide the tax relief in a **fiscally responsible manner**, where the actual tax relief provided “substantially conforms” to the revenue loss estimated in the 2013 fiscal estimate.

## **Are Objectives Being Met?**

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### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

- There is no evidence that the preference is providing tax relief for customers of rural electric cooperatives.
- The Department of Revenue's (DOR) fiscal estimate for the preference was “confidential, but not zero,” so a comparison of the DOR estimate with the actual revenue impact is not feasible.
- The actual beneficiary savings exceeds what the Legislature heard in testimony.

## **Provide Tax Relief to Customers of Rural Electric Cooperatives**

The preference is providing tax relief to a rural electric finance corporation. However, there is no evidence of corresponding tax relief for customers of Washington’s rural electric cooperatives.

To measure the effectiveness of this preference, the Legislature directed JLARC staff to:

. . . specifically evaluate customer rates charged by rural electric cooperatives that are repaying debt to the national rural utilities cooperative finance organization, or any similar financing organization, and the impact the business and occupation deduction . . . has had on those rates.

JLARC staff approached this task in two ways, examining:

1. The electricity rates charged by Washington rural electric cooperatives; and
2. The loan rates charged by a known finance organization to Washington rural electric cooperatives.

### **1) Unclear if Electricity Rates Impacted by Preference**

JLARC staff contacted all 15 Washington rural electric cooperatives to determine if they had outstanding loans to a finance corporation and if their customer rates had changed since 2012 (the year prior to the tax preference taking effect).

Of the 15 cooperatives, nine reported having outstanding loans with one finance corporation, the National Rural Utilities Cooperative Finance Corporation. All nine also reported they had increased their electricity rates for kilowatt hour and/or their base rates at least once since 2012. Several cooperative representatives stated that changes in their electricity rates have little to do with their outstanding loans but are instead impacted by other factors, primarily the cost of electricity from electrical producers.

### **2) Not Possible to Quantify if Loan Rates Changed by Preference**

JLARC staff asked the Finance Corporation specific questions regarding its loans to Washington cooperatives. The Corporation responded that it does not determine its loan rates on a state by state basis, but instead determines rates on a national level. It noted any cost savings the Finance Corporation recognizes may be passed on nationwide to cooperatives and their members in all the states where it provides loans, not just to Washington, which comprises 0.8 percent of its outstanding loan values. The Finance Corporation indicated it is impossible to quantify the exact benefit in the form of reduced loan rates to members in one state attributable to one item of reduced cost (the preference) due to the fact that it operates on a national level.

**Substantially Conform to 2013 Fiscal Estimate?**

DOR reported its 2013 fiscal estimate for this preference as “confidential, but not zero.” It is not feasible to compare the actual revenue impact of the preference with this DOR estimate.

To provide the Legislature with a comparison, JLARC staff turned to legislative testimony.

A representative of the Washington Rural Electric Cooperative Association testified that the preference would save the Finance Corporation between \$160,000 and \$167,000 per year, which would then be passed on to Washington cooperatives and their customers.

For our comparison, the National Rural Utilities Cooperative Finance Corporation voluntarily authorized JLARC staff to disclose information on its taxpayer savings as part of its performance audit of the tax preference.

The actual taxpayer savings exceed the estimate legislators heard in testimony by between 27 percent and 31 percent. The Legislature has not defined what it means by “substantially conforms,” to know if between 27 percent and 31 percent is an acceptable variation.

**Actual Use of Preference Exceeds Estimates Provided in Testimony**

Fiscal Year	Estimated Taxpayer Savings Based on Testimony	Actual Taxpayer Savings	% Actual Taxpayer Savings Exceeds Estimate Based on Testimony
2014 (Oct 2013 – June 2014)	\$123,000	\$161,263	31%
2015	\$164,000	\$208,658	27%

Note: The estimate for Fiscal Year 2014 is less than the full range provided in testimony because the preference was only in effect for part of the year.

Source: JLARC staff analysis of 2013 testimony by representatives of rural electric cooperatives; JLARC staff analysis of Department of Revenue tax return deduction detail.

**To what extent will continuation of the tax preference contribute to these public policy objectives?**

Continuing the tax preference will continue to provide tax relief to direct beneficiaries. However, it is unclear if continuing the tax preference would provide any tax relief to customers of Washington rural electric cooperatives.

**If the public policy objectives are not being fulfilled, what is the feasibility of modifying the tax preference for adjustment of the tax benefits?**

The Legislature might consider modifying the preference to more directly pass along savings from the B&O tax deduction to Washington rural electric cooperative customers. The Legislature has structured some other tax preferences to accomplish something similar, for example:

- A public utility tax credit for utilities selling to aluminum smelters that requires the utility claiming the credit to reduce the price charged to aluminum smelters in an amount equal to the credit claimed. (Reviewed by JLARC staff in 2015.)
- A public utility tax credit for utilities equal to the amount that they pay to customers for the power customers produce through their own renewable energy systems. (JLARC staff are reviewing in 2016.)

Alternatively, the Legislature could target a public utility tax preference directly to the cooperatives and their customers.

**Beneficiaries**

## Who are the entities whose state tax liabilities are directly affected by the tax preference?

### Direct Beneficiary

There was just one known direct beneficiary identified in testimony when this preference was enacted: the National Rural Utilities Cooperative Finance Corporation. JLARC staff found no evidence of any other direct beneficiaries. The preference would apply to other cooperative finance organizations meeting the statutory definition of having a primary purpose to provide, secure, or otherwise arrange financing for cooperatives.

### Indirect Beneficiaries

Washington rural electric cooperatives could be indirect beneficiaries to the extent that the preference might have an impact in lowering their interest rates on loans from a direct beneficiary. Additionally, customers and members of Washington cooperatives may also be indirect beneficiaries to the extent that cooperatives pass along any savings in their loan rates to their customers in the form of lower or less increases in rates. Testimony for the bill establishing the preference estimated savings for customers of \$1.73 per year.

## To what extent is the tax preference providing unintended benefits to entities other than those the Legislature intended?

This preference may provide unintended benefits to rural electric cooperatives in other states, as well as their customers.

The Finance Corporation reports that it determines its loan rates at a national level. It notes that any cost savings the Corporation receives may be passed on nationwide to cooperatives and their customers in all the states where the Corporation makes loans. Over 99 percent of the loans made by the Finance Corporation are in states other than Washington.

## Reporting Issues

When reviewing the tax return deduction reporting for this preference, JLARC staff found several businesses had incorrectly reported on the deduction line established for this preference by DOR (56 businesses in Fiscal Year 2014 and 34 in Fiscal Year 2015).

DOR reports that upon examination, most of the incorrect deductions reported were situations where businesses had valid deductions but reported them on the wrong deduction line.

## Revenue and Economic Impacts

### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

JLARC staff estimate the direct beneficiary saved \$208,658 in Fiscal Year 2015, however JLARC staff have not received specific authorization to publish estimated beneficiary savings for the 2015-17 Biennium.

### Estimated Direct 2015-17 Beneficiary Savings for Rural Electric Cooperative Finance Organization B&O Tax Exemption

Fiscal Year	Beneficiary Savings
2014 (October 2013 – June 2014)	\$161,263
2015	\$208,658
2016	Unknown
2017	Unknown
Preference scheduled to expire July 1, 2017	

Source: Fiscal Years 2014-2015: JLARC staff analysis of Department of Revenue tax return deduction detail for October 2013 through June 2015. Beneficiary savings for Fiscal years 2016-2017 unknown.

DOR's taxpayer confidentiality policy prohibits disclosure of tax return data if it is comprised of fewer than three taxpayers. However, in this case the one known beneficiary specifically authorized JLARC staff to publish its B&O tax savings for the period including October 2013 through December 2015.

### **If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

If the preference was terminated, cooperative finance organizations would pay B&O tax on interest income they receive from loans made to Washington rural electric cooperatives. It is unclear to what extent the B&O tax increase would impact Washington cooperatives or their customers.

### **Other States with Similar Preference?**

#### **Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?**

Most states that impose a state income tax provide income tax exemptions for at least some nonprofit organizations in the same manner as allowed for federal income tax purposes.

Washington's B&O tax, which is imposed on a business's gross receipts or gross sales is unique among the states. Ohio imposes a commercial activity tax similar to Washington's B&O tax and exempts interest income earned by nonprofit entities.

Representatives of rural cooperatives testified in 2013 that Washington, California, and Hawaii were the only states to tax interest income earned by cooperative finance organizations. As of March 2016, the Finance Corporation reports that California and Hawaii continue to tax the interest income.

### **Applicable Statutes**

#### **Intent Statement**

Intent—2013 2nd sp.s. c 13: "(1) The intent of part VI of this act is to provide tax relief for customers of rural electric cooperatives by providing a business and occupation tax deduction for interest income on loans made by certain finance organizations to rural electric cooperatives. It is the further intent of the legislature to provide this tax deduction in a fiscally responsible manner where the actual revenue impact of the legislation substantially conforms with the fiscal estimate provided in the legislation's fiscal note.

(2) To measure the effectiveness of this tax preference in meeting its policy objectives, the joint legislative audit and review committee shall specifically evaluate customer rates charged by rural electric cooperatives that are repaying debt to the national rural utilities cooperative finance organization, or any similar financing organization, and the impact the business and occupation deduction provided under part VI of this act has had on those rates." [2013 2nd sp.s. c 13 § 601.]

#### **RCW 82.04.43394**

#### **Deductions—Cooperative finance organizations. (Expires July 1, 2017.)**

(1) In computing tax there may be deducted from the measure of tax, amounts received by a cooperative finance organization where the amounts are derived from loans to rural electric cooperatives or other nonprofit or governmental providers of utility services organized under the laws of this state.

(2) For the purposes of this section, the following definitions apply:

(a) "Cooperative finance organization" means a nonprofit organization with the primary purpose of providing, securing, or otherwise arranging financing for rural electric cooperatives.

(b) "Rural electric cooperative" means a nonprofit, customer-owned organization that provides utility services to rural areas.

(3) This section expires July 1, 2017.

## **Recommendations**

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### **Legislative Auditor Recommendation**

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#### **Legislative Auditor Recommendation**

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**The Legislature should modify the B&O tax preference for rural electric cooperative finance organizations because, as currently structured, there is no guarantee that the savings realized by finance organizations will be passed on to Washington rural electric cooperatives and their customers, as the Legislature intended.**

The Legislature stated its intent that the preference provide tax relief for customers of Washington’s rural electric cooperatives. This review found no evidence that this objective was being met. The review also provides two examples where the Legislature has structured a tax preference to ensure taxpayer savings are passed on to others. The one beneficiary has noted this may be difficult because it sets its loan rates nationally rather than state by state. Alternatively, the Legislature could target a preference directly to the cooperatives and their customers.

This preference is scheduled to expire July 1, 2017.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on modification.

### **Letter from Commission Chair**

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Available December 2016.

### **Commissioners’ Recommendation**

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Available December 2016.

### **Agency Response**

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If applicable, available December 2016.

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# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Self-Service Laundry Facilities | Sales & Use Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
A sales and use tax exemption for people purchasing services at self-service (coin-operated) laundry facilities.  The preference has no expiration date.	Sales & Use RCW 82.04.050(2) (a)	\$11.9 million

Public Policy Objective
The Legislature did not state the public policy objective for this preference. JLARC staff infer two public policy objectives: <ul style="list-style-type: none"><li>To provide consistent tax treatment for all self-service laundry operations, regardless of where the facility is located, and</li><li>To help people with lower incomes, who may be more likely to use these facilities.</li></ul>

Recommendations
<b>Legislative Auditor’s Recommendation</b>  <b>Continue:</b> It is achieving the inferred public policy objectives of providing consistent tax treatment to all self-service laundry facilities, and helping people with low incomes who may be more likely to use these facilities.  <b>Commissioner Recommendation:</b> Available in October 2016

### Details on this Preference

#### What is the Preference?

People who use self-service (e.g., coin-operated) laundry facilities do not pay sales or use tax for those services. The preference is provided by excluding use of these facilities from the definition of “retail sale.”

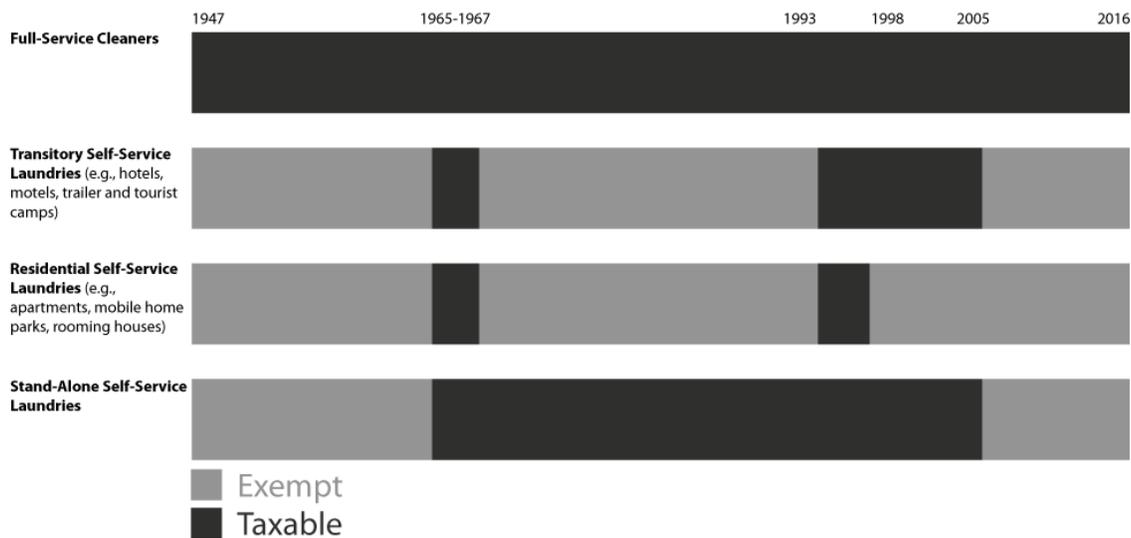
The preference applies to self-service washers and dryers in stand-alone laundromats, in apartment buildings, and in more transitory lodging establishments such as hotels, motels, and trailer camps.

People who use full-service laundry and dry cleaning businesses do pay sales tax for those services.

#### Legal History

Over many decades, the Legislature and the Tax Commission (predecessor to the Department of Revenue) varied the approach to taxing self-service laundry facilities. During some periods, users of these facilities had to pay sales tax, while during other periods, the Legislature provided exemptions for some types of facilities but not others. In addition, the Tax Commission struggled to administer and enforce the taxation. In 2005, the Legislature extended the sales tax exemption to apply to all self-service laundry facilities.

#### Taxation of Self-Service Laundry Services Has Fluctuated Over the Years



Source: JLARC staff analysis of statutory history.

Year	Action
1947	The Tax Commission updated an administrative rule on laundry services, noting <b>self-service washer and dryer use was not subject to sales tax.</b>
Mid 1950s	Industry practices changed. Self-service laundries where an operator performed or supervised parts of the cleaning process emerged. The Tax Commission updated its administrative rule to note <b>businesses had to collect sales tax on activities where the operator performed or supervised parts of the laundry activity.</b>
1964	The Tax Commission issued an advisory to address continuing problems with tax compliance in the laundry services industry. After publishing the advisory, the Commission discovered many self-service laundry businesses that should have collected sales tax had not done so.
1965	The Legislature changed the definition of “retail sale,” <b>making all laundry services subject to sales tax.</b> This included self-service (e.g., coin-operated) machines. The Tax Commission stated it had requested the change to clarify and make all laundry and dry cleaning businesses taxed in an equitable manner.
1966	The Tax Commission experienced problems enforcing the 1965 law change in apartment buildings with coin-operated machines for tenants. Apartment building owners were generally not required to register with the Commission, and their compliance with the requirement to collect sales tax was inconsistent.
1967	The Legislature <b>exempted from sales tax coin-operated laundry facilities</b> for exclusive use by tenants in apartments, hotels, motels, rooming houses, trailer camps, or tourist camps. Stand-alone self-service laundromat facilities continued to be subject to sales tax.  The Tax Commission noted it had struggled to identify, register, and collect sales tax from many apartment building owners and others after the 1965 law change.
1971	A legislative staff interim report noted that sales tax laws for coin-operated laundry machines put stand-alone self-service laundromat owners at a competitive disadvantage relative to similar machines located in apartments, hotels, etc.
1993	As part of a bill intended to increase state revenue, the Legislature <b>extended sales tax</b> to several personal, professional, and business services, including <b>coin-operated laundry facilities located in an apartment, hotel, motel, rooming house, trailer camp, or tourist camp</b> for exclusive use by tenants.
1998	The Legislature <b>reestablished a sales tax exemption for coin-operated laundry facilities</b> located in apartments, rooming houses, or mobile home parks for exclusive use by tenants. Laundry facilities in stand-alone laundromats, hotels, motels, trailer, and tourist camps remained subject to sales tax.  Legislators and proponents stated the intent was to provide relief to lower-income individuals and families for a basic necessity.

2005

The Legislature **extended the sales tax exemption to cover all charges for “self-service” laundry facilities**, no matter the location of the facilities or who used them, making all self-service laundry facilities exempt from sales tax.

## Public Policy Objectives

### **What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

The Legislature did not state a public policy objective when it provided this preference for use of self-service laundry facilities.

JLARC staff infer two public policy objectives based on testimony by legislators and industry stakeholders on similar bills in previous years and from the variation in taxation of self-service laundry facilities over the years:

- To **provide consistent tax treatment for all self-service laundry operations**, regardless of where the self-service facilities are located.
- To **help people with lower incomes**, who may be more likely to use those facilities.

This preference was enacted prior to the Legislature’s requirement to provide a performance statement for each preference.

### **Are Objectives Being Met?**

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#### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

##### **Provide consistent tax treatment**

The preference is achieving the inferred public policy objective of providing consistent tax treatment for all self-service laundry facilities.

##### **Help people with lower incomes**

The preference is achieving the inferred public policy objective of helping people with lower incomes.

U.S. Census and other federal data from 2010 – 2013 indicates that people with lower incomes are more likely to do their laundry outside of their homes. For example, 38 percent of households with annual incomes below \$20,000 do not use a clothes washer at home, compared to 13 percent of households earning \$20,000 or above. Thus, people with lower incomes are more likely to use self-service laundries and benefit by not paying sales tax on their charges for doing so.

While the evidence shows the tax preference appears to be focused on lower income people, the specific savings by income level is unknown.

## Beneficiaries

### **Who are the entities whose state tax liabilities are directly affected by the tax preference?**

#### **Direct beneficiaries**

Individuals and families who wash and dry their laundry at self-service facilities are direct beneficiaries of the preference. They do not pay sales tax for using self-service washers or dryers.

#### **Indirect beneficiaries**

Businesses that provide self-service laundry machines are indirect beneficiaries of the preference. These include laundromats, apartment buildings, hotels, motels, rooming houses, and trailer or tourist camps that provide self-service laundry facilities. With the preference, these businesses avoid either having to create a mechanism to collect the sales tax or absorbing the sales tax themselves. In testimony, businesses indicated they were willing to pay a higher business and occupation (B&O) tax rate if they could avoid having to absorb the sales tax.

## Revenue and Economic Impacts

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## What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

JLARC staff estimate the direct beneficiary savings for Fiscal Year 2015 is \$5.0 million. The estimated beneficiary savings for the 2017-2019 Biennium is \$11.9 million. JLARC staff estimated the beneficiary savings using DOR tax return data and U.S. Energy Information Administration and Census Bureau information.

### Estimated 2017-19 Direct Beneficiary Savings for Self-Service Laundry Sales and Use Tax Exemption

Fiscal Year	Estimated Taxable Income	State Sales Tax	Local Sales Tax	Total Beneficiary Savings
2014	\$ 53,924,000	\$ 3,505,000	\$ 1,323,000	\$ 4,828,000
2015	\$ 55,854,000	\$ 3,630,000	\$ 1,379,000	\$ 5,010,000
2016	\$ 58,646,000	\$ 3,812,000	\$ 1,466,000	\$ 5,278,000
2017	\$ 61,579,000	\$ 4,002,000	\$ 1,539,000	\$ 5,541,000
2018	\$ 64,657,000	\$ 4,203,000	\$ 1,616,000	\$ 5,819,000
2019	\$ 67,890,000	\$ 4,413,000	\$ 1,696,000	\$ 6,109,000
2017-19 Biennium	\$ 132,548,000	\$ 8,616,000	\$ 3,312,000	\$ 11,928,000

Source: JLARC staff analysis of Department of Revenue tax return detail for NAICS 81231 service tax reporting, FY2013-2015. U.S. Energy Information Administration and laundry industry data on laundry use by renters. Growth estimated using annual growth in income reported for applicable businesses for period 2010-2015.

While excluding self-service laundry facilities from the definition of “retail sale” benefits those who use such facilities, it results in a higher business and occupation (B&O) tax rate for the businesses that provide the laundry facilities. Businesses that provide self-service laundry facilities are taxed under the service and other activities classification (rate of 1.5 percent) rather than the retailing classification (rate of 0.471 percent).

### If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?

If the tax preference were terminated, the owners of self-service laundries would need to establish mechanisms to collect sales tax from their customers. The effects of this are unclear, as it would depend on the extent to which laundry owners increased prices or absorbed the taxes.

While users of self-service laundries would pay more due to sales tax for laundry services, the business B&O tax obligation for facility owners would be reduced, from 1.5 percent (service and other activities rate) to 0.471 percent (retailing B&O tax rate).

The **net effect** of removing the sales tax exemption for self-service laundry facilities, coupled with a decrease in B&O tax paid by businesses operating these facilities would result in an estimated increase of \$4.7 million in state revenue in Fiscal Year 2016 and \$10.5 million in the 2017-19 Biennium. The Department of Revenue has previously testified that it is difficult to fully collect tax due on these activities.

The effect of such changes on use and viability of laundry facilities is unknown.

### Other States with Similar Preference?

#### Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?

Three states impose sales tax on self-service (e.g., coin-operated) laundry operations: Hawaii, New Mexico, and West Virginia.

South Dakota imposes a special license fee on self-service laundries in lieu of imposing sales tax.

The remaining 41 states and the District of Columbia either do not impose sales tax on any cleaning services or have a special sales and use tax exemption for self-service laundries.

## **Applicable Statutes**

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### **RCW 82.04.050**

#### **"Sale at retail," "retail sale." (Effective until January 1, 2016.)**

(1)(a) "Sale at retail" or "retail sale" means every sale of tangible personal property (including articles produced, fabricated, or imprinted) to all persons irrespective of the nature of their business and including, among others, without limiting the scope hereof, persons who install, repair, clean, alter, improve, construct, or decorate real or personal property of or for consumers other than a sale to a person who:

(i) Purchases for the purpose of resale as tangible personal property in the regular course of business without intervening use by such person, but a purchase for the purpose of resale by a regional transit authority under RCW 81.112.300 is not a sale for resale; or

(ii) Installs, repairs, cleans, alters, imprints, improves, constructs, or decorates real or personal property of or for consumers, if such tangible personal property becomes an ingredient or component of such real or personal property without intervening use by such person; or

(iii) Purchases for the purpose of consuming the property purchased in producing for sale as a new article of tangible personal property or substance, of which such property becomes an ingredient or component or is a chemical used in processing, when the primary purpose of such chemical is to create a chemical reaction directly through contact with an ingredient of a new article being produced for sale; or

(iv) Purchases for the purpose of consuming the property purchased in producing ferrosilicon which is subsequently used in producing magnesium for sale, if the primary purpose of such property is to create a chemical reaction directly through contact with an ingredient of ferrosilicon; or

(v) Purchases for the purpose of providing the property to consumers as part of competitive telephone service, as defined in RCW 82.04.065; or

(vi) Purchases for the purpose of satisfying the person's obligations under an extended warranty as defined in subsection (7) of this section, if such tangible personal property replaces or becomes an ingredient or component of property covered by the extended warranty without intervening use by such person.

(b) The term includes every sale of tangible personal property that is used or consumed or to be used or consumed in the performance of any activity defined as a "sale at retail" or "retail sale" even though such property is resold or used as provided in (a)(i) through (vi) of this subsection following such use.

(c) The term also means every sale of tangible personal property to persons engaged in any business that is taxable under RCW 82.04.280(1) (a), (b), and (g), 82.04.290, and 82.04.2908.

(2) The term "sale at retail" or "retail sale" includes the sale of or charge made for tangible personal property consumed and/or for labor and services rendered in respect to the following:

(a) The installing, repairing, cleaning, altering, imprinting, or improving of tangible personal property of or for consumers, including charges made for the mere use of facilities in respect thereto, but excluding charges made for the use of self-service laundry facilities, and also excluding sales of laundry service to nonprofit health care facilities, and excluding services rendered in respect to live animals, birds and insects;

(b) The constructing, repairing, decorating, or improving of new or existing buildings or other structures under, upon, or above real property of or for consumers, including the installing or attaching of any article of tangible personal property therein or thereto, whether or not such personal property becomes a part of the realty by virtue of installation, and also includes the sale of services or charges made for the clearing of land and the moving of earth excepting the mere leveling of land used in commercial farming or agriculture;

(c) The constructing, repairing, or improving of any structure upon, above, or under any real property owned by an owner who conveys the property by title, possession, or any other means to the person performing such construction, repair, or improvement for the purpose of performing such construction, repair, or improvement and the property is then reconveyed by title, possession, or any other means to the original owner;

(d) The cleaning, fumigating, razing, or moving of existing buildings or structures, but does not include the charge made for janitorial services; and for purposes of this section the term "janitorial services" means those cleaning and caretaking services ordinarily performed by commercial janitor service businesses including, but not limited to, wall and window washing, floor cleaning and waxing, and the cleaning in place of rugs, drapes and upholstery. The term "janitorial services" does not include painting, papering, repairing, furnace or septic tank cleaning, snow removal or sandblasting;

(e) Automobile towing and similar automotive transportation services, but not in respect to those required to report and pay taxes under chapter 82.16 RCW;

(f) The furnishing of lodging and all other services by a hotel, rooming house, tourist court, motel, trailer camp, and the granting of any similar license to use real property, as distinguished from the renting or leasing of real property, and it is presumed that the occupancy of real property for a continuous period of one month or more constitutes a rental or lease of real property and not a mere license to use or enjoy the same. For the purposes of this subsection, it is presumed that the sale of and charge made for the furnishing of lodging for a continuous period of one month or more to a person is a rental or lease of real property and not a mere license to enjoy the same;

(g) The installing, repairing, altering, or improving of digital goods for consumers;

(h) Persons taxable under (a), (b), (c), (d), (e), (f), and (g) of this subsection when such sales or charges are for property, labor and services which are used or consumed in whole or in part by such persons in the performance of any activity defined as a "sale at retail" or "retail sale" even though such property, labor and services may be resold after such use or consumption. Nothing contained in this subsection may be construed to modify subsection (1) of this section and nothing contained in subsection (1) of this section may be construed to modify this subsection.

(3) The term "sale at retail" or "retail sale" includes the sale of or charge made for personal, business, or professional services including amounts designated as interest, rents, fees, admission, and other service emoluments however designated, received by persons engaging in the following business activities:

(a)(i) Amusement and recreation services including but not limited to golf, pool, billiards, skating, bowling, ski lifts and tows, day trips for sightseeing purposes, and others, when provided to consumers.

(ii) Until July 1, 2017, amusement and recreation services do not include the opportunity to dance provided by an establishment in exchange for a cover charge.

(iii) For purposes of this subsection (3)(a):

(A) "Cover charge" means a charge, regardless of its label, to enter an establishment or added to the purchaser's bill by an establishment or otherwise collected after entrance to the establishment, and the purchaser is provided the opportunity to dance in exchange for payment of the charge.

(B) "Opportunity to dance" means that an establishment provides a designated physical space, on either a temporary or permanent basis, where customers are allowed to dance and the establishment either advertises or otherwise makes customers aware that it has an area for dancing;

(b) Abstract, title insurance, and escrow services;

(c) Credit bureau services;

(d) Automobile parking and storage garage services;

(e) Landscape maintenance and horticultural services but excluding (i) horticultural services provided to farmers and (ii) pruning, trimming, repairing, removing, and clearing of trees and brush near electric transmission or distribution lines or equipment, if performed by or at the direction of an electric utility;

(f) Service charges associated with tickets to professional sporting events; and

(g) The following personal services: Physical fitness services, tanning salon services, tattoo parlor services, steam bath services, turkish bath services, escort services, and dating services.

(4)(a) The term also includes the renting or leasing of tangible personal property to consumers.

(b) The term does not include the renting or leasing of tangible personal property where the lease or rental is for the purpose of sublease or subrent.

(5) The term also includes the providing of "competitive telephone service," "telecommunications service," or "ancillary services," as those terms are defined in RCW 82.04.065, to consumers.

(6)(a) The term also includes the sale of prewritten computer software to a consumer, regardless of the method of delivery to the end user. For purposes of (a) and (b) of this subsection, the sale of prewritten computer software includes the sale of or charge made for a key or an enabling or activation code, where the key or code is required to activate prewritten computer

software and put the software into use. There is no separate sale of the key or code from the prewritten computer software, regardless of how the sale may be characterized by the vendor or by the purchaser.

(b) The term "retail sale" does not include the sale of or charge made for:

(i) Custom software; or

(ii) The customization of prewritten computer software.

(c)(i) The term also includes the charge made to consumers for the right to access and use prewritten computer software, where possession of the software is maintained by the seller or a third party, regardless of whether the charge for the service is on a per use, per user, per license, subscription, or some other basis.

(ii)(A) The service described in (c)(i) of this subsection (6) includes the right to access and use prewritten computer software to perform data processing.

(B) For purposes of this subsection (6)(c)(ii), "data processing" means the systematic performance of operations on data to extract the required information in an appropriate form or to convert the data to usable information. Data processing includes check processing, image processing, form processing, survey processing, payroll processing, claim processing, and similar activities.

(7) The term also includes the sale of or charge made for an extended warranty to a consumer. For purposes of this subsection, "extended warranty" means an agreement for a specified duration to perform the replacement or repair of tangible personal property at no additional charge or a reduced charge for tangible personal property, labor, or both, or to provide indemnification for the replacement or repair of tangible personal property, based on the occurrence of specified events. The term "extended warranty" does not include an agreement, otherwise meeting the definition of extended warranty in this subsection, if no separate charge is made for the agreement and the value of the agreement is included in the sales price of the tangible personal property covered by the agreement. For purposes of this subsection, "sales price" has the same meaning as in RCW 82.08.010.

(8)(a) The term also includes the following sales to consumers of digital goods, digital codes, and digital automated services:

(i) Sales in which the seller has granted the purchaser the right of permanent use;

(ii) Sales in which the seller has granted the purchaser a right of use that is less than permanent;

(iii) Sales in which the purchaser is not obligated to make continued payment as a condition of the sale; and

(iv) Sales in which the purchaser is obligated to make continued payment as a condition of the sale.

(b) A retail sale of digital goods, digital codes, or digital automated services under this subsection (8) includes any services provided by the seller exclusively in connection with the digital goods, digital codes, or digital automated services, whether or not a separate charge is made for such services.

(c) For purposes of this subsection, "permanent" means perpetual or for an indefinite or unspecified length of time. A right of permanent use is presumed to have been granted unless the agreement between the seller and the purchaser specifies or the circumstances surrounding the transaction suggest or indicate that the right to use terminates on the occurrence of a condition subsequent.

(9) The term also includes the charge made for providing tangible personal property along with an operator for a fixed or indeterminate period of time. A consideration of this is that the operator is necessary for the tangible personal property to perform as designed. For the purpose of this subsection (9), an operator must do more than maintain, inspect, or set up the tangible personal property.

(10) The term does not include the sale of or charge made for labor and services rendered in respect to the building, repairing, or improving of any street, place, road, highway, easement, right-of-way, mass public transportation terminal or parking facility, bridge, tunnel, or trestle which is owned by a municipal corporation or political subdivision of the state or by the United States and which is used or to be used primarily for foot or vehicular traffic including mass transportation vehicles of any kind.

(11) The term also does not include sales of chemical sprays or washes to persons for the purpose of postharvest treatment of fruit for the prevention of scald, fungus, mold, or decay, nor does it include sales of feed, seed, seedlings, fertilizer, agents for enhanced pollination including insects such as bees, and spray materials to: (a) Persons who participate in the federal conservation reserve program, the environmental quality incentives program, the wetlands reserve program, and the wildlife habitat incentives program, or their successors administered by the United States department of agriculture; (b) farmers for the purpose of producing for sale any agricultural product; (c) farmers for the purpose of providing bee pollination services; and (d) farmers acting under cooperative habitat development or access contracts with an organization exempt from federal income tax under 26 U.S.C. Sec. 501(c)(3) of the federal internal revenue code or the Washington state department of fish and wildlife to produce or improve wildlife habitat on land that the farmer owns or leases.

(12) The term does not include the sale of or charge made for labor and services rendered in respect to the constructing, repairing, decorating, or improving of new or existing buildings or other structures under, upon, or above real property of or for the United States, any instrumentality thereof, or a county or city housing authority created pursuant to chapter 35.82 RCW, including the installing, or attaching of any article of tangible personal property therein or thereto, whether or not such personal property becomes a part of the realty by virtue of installation. Nor does the term include the sale of services or charges made for the clearing of land and the moving of earth of or for the United States, any instrumentality thereof, or a county or city housing authority. Nor does the term include the sale of services or charges made for cleaning up for the United States, or its instrumentalities, radioactive waste and other by-products of weapons production and nuclear research and development.

(13) The term does not include the sale of or charge made for labor, services, or tangible personal property pursuant to agreements providing maintenance services for bus, rail, or rail fixed guideway equipment when a regional transit authority is the recipient of the labor, services, or tangible personal property, and a transit agency, as defined in RCW 81.104.015, performs the labor or services.

(14) The term does not include the sale for resale of any service described in this section if the sale would otherwise constitute a "sale at retail" and "retail sale" under this section.

[2015 3rd sp.s. c 6 § 1104; 2013 2nd sp.s. c 13 § 802; 2011 c 174 § 202. Prior: 2010 c 112 § 14; 2010 c 111 § 201; 2010 c 106 § 202; prior: 2009 c 563 § 301; 2009 c 535 § 301; prior: 2007 c 54 § 4; 2007 c 6 § 1004; prior: 2005 c 515 § 2; 2005 c 514 § 101; prior: 2004 c 174 § 3; 2004 c 153 § 407; 2003 c 168 § 104; 2002 c 178 § 1; 2000 2nd sp.s. c 4 § 23; prior: 1998 c 332 § 2; 1998 c 315 § 1; 1998 c 308 § 1; 1998 c 275 § 1; 1997 c 127 § 1; prior: 1996 c 148 § 1; 1996 c 112 § 1; 1995 1st sp.s. c 12 § 2; 1995 c 39 § 2; 1993 sp.s. c 25 § 301; 1988 c 253 § 1; prior: 1987 c 285 § 1; 1987 c 23 § 2; 1986 c 231 § 1; 1983 2nd ex.s. c 3 § 25; 1981 c 144 § 3; 1975 1st ex.s. c 291 § 5; 1975 1st ex.s. c 90 § 1; 1973 1st ex.s. c 145 § 1; 1971 ex.s. c 299 § 3; 1971 ex.s. c 281 § 1; 1970 ex.s. c 8 § 1; prior: 1969 ex.s. c 262 § 30; 1969 ex.s. c 255 § 3; 1967 ex.s. c 149 § 4; 1965 ex.s. c 173 § 1; 1963 c 7 § 1; prior: 1961 ex.s. c 24 § 1; 1961 c 293 § 1; 1961 c 15 § 82.04.050; prior: 1959 ex.s. c 5 § 2; 1957 c 279 § 1; 1955 c 389 § 6; 1953 c 91 § 3; 1951 2nd ex.s. c 28 § 3; 1949 c 228 § 2, part; 1945 c 249 § 1, part; 1943 c 156 § 2, part; 1941 c 178 § 2, part; 1939 c 225 § 2, part; 1937 c 227 § 2, part; 1935 c 180 § 5, part; Rem. Supp. 1949 § 8370-5, part.]

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## Recommendations

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### Legislative Auditor Recommendation

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#### Legislative Auditor Recommendation

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The Legislature should continue the sales and use tax exemptions for self-service laundry facilities because it is achieving the inferred public policy objectives of providing consistent tax treatment to all self-service laundry facilities and helping people with low incomes who may be more likely to use these facilities.

Legislation Required: No.

Fiscal Impact: None.

### Letter from Commission Chair

Available December 2016.

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### Commissioners' Recommendation

Available December 2016.

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### Agency Response

If applicable, will be available December 2016.

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Semiconductor Materials Manufacturing | Multiple Taxes

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
For the two preferences in use:		
A reduced business and occupation (B&O) rate for manufacturing semiconductor materials. Beneficiaries pay a rate of 0.275 percent, compared to the general manufacturing rate of 0.484 percent. This preference is scheduled to expire December 1, 2018.	B&O Tax RCW 82.04.2404	Not Disclosable
A sales and use tax exemption for purchases of gases and chemicals used in specific phases of the semiconductor production process. This preference is scheduled to expire December 1, 2018.	Sales and Use Tax RCW 82.08.9651, 82.12.9651	\$3.2 million
For the six Preferences not yet in effect: (Expiration dates contingent on date exemptions are utilized)		
A sales and use tax exemption for the construction of new buildings used for manufacturing semiconductor materials.	Sales and Use Tax RCW 82.08.965, 82.12.965	\$0
A property tax exemption for machinery and equipment used for manufacturing semiconductor materials when located in a building exempted from sales tax.	Property Tax RCW 84.36.645	\$0
A B&O tax credit of \$3,000 for each manufacturing production job located in a building exempted from sales tax.	B&O Tax RCW 82.04.448	\$0
A reduced B&O tax rate for manufacturing semiconductor materials. Beneficiaries would pay a rate of 0.275 percent compared to the general manufacturing rate of 0.484 percent for twelve years after its effective date.	B&O Tax RCW 82.04.240(2)	\$0
A sales and use tax exemption for purchases of gases and chemicals used in the production of semiconductor materials for twelve years after its effective date.	Sales and Use Tax RCW 82.08.970, 82.12.970	\$0
A full B&O tax exemption for manufacturing semiconductor microchips.	B&O Tax RCW 82.04.426	\$0

**Public Policy Objective**  
The Legislature stated its intent for this preference was to induce significant construction projects, retain, expand and attract semiconductor businesses, and create family wage jobs.

**Recommendations**

### For the two preferences in use:

**Review and Clarify:** While there has been one significant construction project, it is unclear what employment outcomes the Legislature wants to achieve. As part of the clarification, the Legislature should add uniform reporting requirements and targets for employment growth and wages to facilitate future reviews.

### For the six preferences not yet in effect:

**Terminate:** They have not been used in the thirteen years since they were enacted.

**Commissioner Recommendation:** Available in October 2016

## Details on this Preference

### What is the Preference?

This review covers eight tax preferences related to the semiconductor materials manufacturing industry. A semiconductor is a substance like silicon with electrical properties that make it ideal for use in electronic circuits. The term also applies to the devices made of these substances.

The Legislature's intent is that the preferences induce significant construction projects; retain, expand, and attract semiconductor businesses; and encourage and expand family wage jobs.

The Legislature chose different definitions of "semiconductor materials" for different preferences. As a result, the preferences vary in where they apply in the manufacturing process. The descriptions and exhibits below identify the different definitions and illustrate the steps in the manufacturing process that are covered by the different preferences.

Two of the eight preferences are currently in use. Six of the preferences are not currently in use because there has not been a required level of investment from a semiconductor business to trigger their taking effect.

### Two Preferences in Use

Manufacturers of semiconductor materials and businesses that perform manufacturing services on semiconductor materials owned by others (known as "processors for hire") receive the following:

1. A **reduced business and occupation (B&O) rate** for manufacturing semiconductor materials. Beneficiaries pay a rate of 0.275 percent, compared to the general manufacturing rate of 0.484 percent. They are required to file an Annual Report with the Department of Revenue (DOR).
2. A **sales and use tax exemption** for purchases of gases and chemicals used in specific phases of the semiconductor production process, such as:
  - o Growing or cleaning semiconductor materials, and other procedures where the gases and chemicals come into direct contact with the materials, or
  - o Cleaning the chambers and other equipment in which processing takes place.

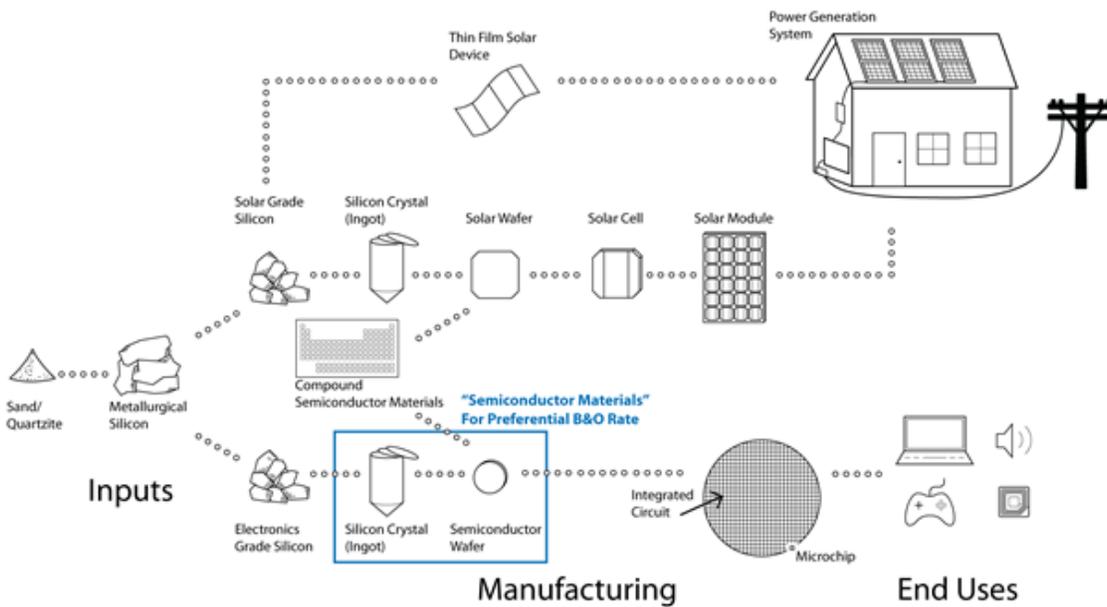
Beneficiaries are required to report their tax savings and some employment information on an Annual Survey with DOR, unless they are already required to file an Annual Report for use of the B&O preference. Annual Reports include employment information. Beneficiaries who do not file an Annual Survey must file a Buyer Addendum, which states the value of the exempt items purchased.

Both of these preferences expire on December 1, 2018.

### Reduced B&O Rate

For the reduced B&O rate, the Legislature defined semiconductor materials to mean silicon crystals, silicon ingots, raw polished semiconductor wafers, and compound semiconductor wafers. The exhibit below shows the supply chain and manufacturing process for semiconductors from inputs through end uses. The box highlights the steps in the process where a semiconductor manufacturer or processor for hire can benefit from the B&O tax preference. See the **Other Relevant Background** tab for a more detailed explanation of this graphic.

### Reduced B&O Rate Applies to Specific Materials Produced During Manufacturing



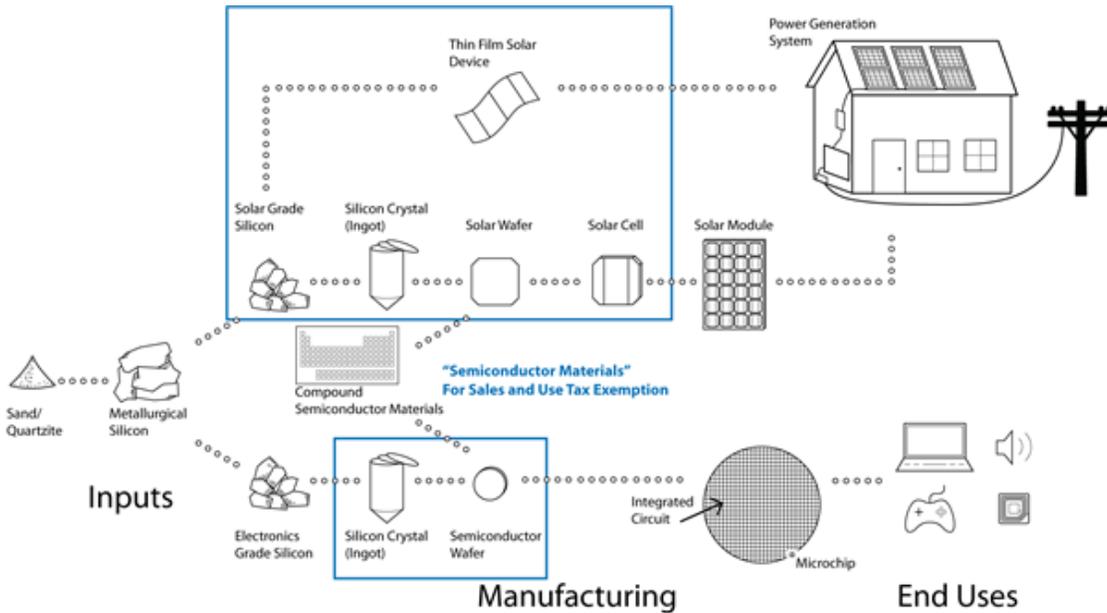
Source: JLARC staff analysis of semiconductor industry documents.

### Sales & Use Tax Exemption

For the sales and use tax exemption, the Legislature included the same definition of semiconductor materials as used for the reduced B&O rate but later **expanded** the definition to include materials that are used in solar energy systems. These include solar grade silicon, silicon solar wafers, compound semiconductor solar wafers, silicon solar cells, and thin film solar devices. The **expansion** of this preference expires on June 30, 2017.

The exhibit below shows the same supply chain and manufacturing process as shown earlier, with the boxes highlighting the larger area where a semiconductor manufacturer or processor for hire can benefit from the sales and use tax exemption.

### Sales and Use Tax Exemption Applies to Additional Semiconductor Materials Used for Manufacturing Solar Panels



Source: JLARC staff analysis of semiconductor industry documents.

### Six preferences are not in effect:

The following six tax preferences were enacted in 2003 but will not go into effect until a firm makes an investment of at least \$1 billion in new buildings, machinery and equipment to site and operate a semiconductor microchip fabrication facility. The investment has not yet occurred.

The first three preferences would reduce the tax obligations of semiconductor businesses **locating or expanding** in Washington:

1. A **sales and use tax exemption** for the construction of new buildings used for manufacturing semiconductor materials. The preference applies to materials that become part of the building, and labor and services to install that property. The preference requires an employer to maintain at least 75 percent of full employment for eight years. Beneficiaries must pay back one eighth of the preference for each year in which the employment target is not met.
2. A **property tax exemption** for machinery and equipment used for manufacturing semiconductor materials when located in a building exempted from sales tax.
3. A **B&O tax credit** of \$3,000 for each manufacturing production job located in a building exempted from sales tax. The credit applies for each year the job is maintained up to a maximum of eight years.

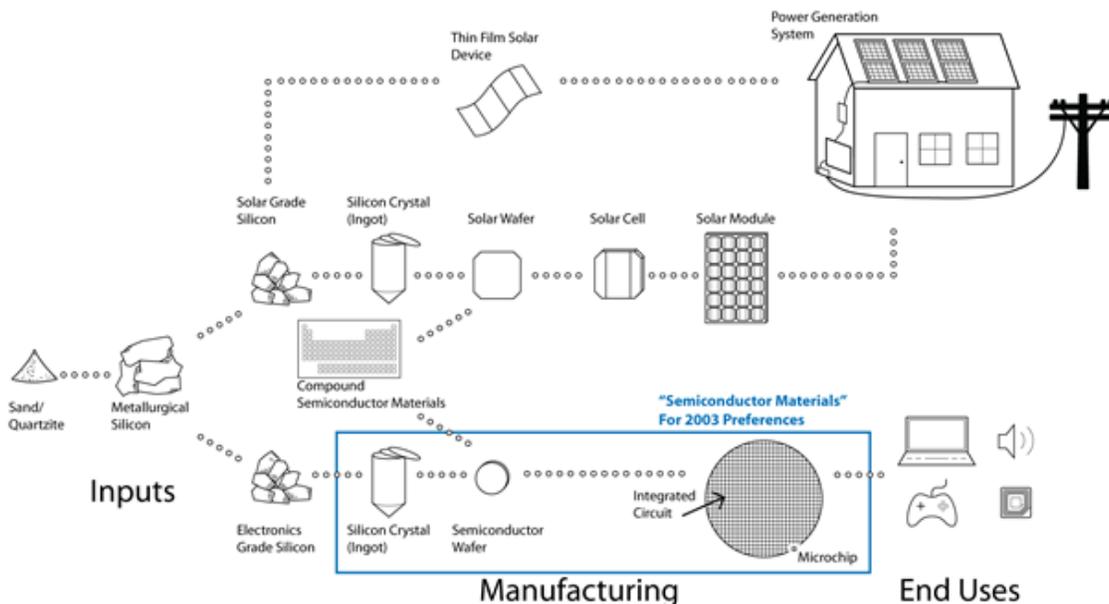
The remaining three preferences would reduce the tax obligations of businesses based on their daily operations, without regard to whether they built a new building.

4. A **reduced B&O tax rate** for manufacturing semiconductor materials. Beneficiaries would pay a rate of 0.275 percent compared to the general manufacturing rate of 0.484 percent for twelve years after its effective date.
5. A **sales and use tax exemption** for purchases of gases and chemicals used in the production of semiconductor materials for twelve years after its effective date.
6. A full **B&O tax exemption** for manufacturing semiconductor microchips. This preference would only apply to the steps in the manufacturing process that result in the production of a microchip. This preference would apply for nine years after its effective date.

These preferences define semiconductor materials as silicon crystals, silicon ingots, raw polished semiconductor wafers, and compound semiconductor wafers, integrated circuits and microchips. The full B&O exemption only applies to the manufacturing of semiconductor microchips.

The exhibit below shows the same supply chain and manufacturing process for semiconductors as was used to describe the two preferences that are in use, with the boxes highlighting the different definition of semiconductor materials.

### Six Preferences Not in Use Would Apply to Manufacturing of Semiconductor Materials, including Microchips and Integrated Circuits



Source: JLARC staff analysis of semiconductor industry documents.

All six of the preferences enacted in 2003 would require beneficiaries to file an Annual Report to DOR detailing their employment information if they were in effect.

## Legal History

### 2001

Governor Locke's Washington Competitiveness Council identified the semiconductor industry as an important industry cluster for the state's economy. A common definition of an industry cluster is a geographic concentration of interconnected companies in a particular field. It may include suppliers, producers, providers, and other related entities.

### 2003

The Legislature enacted a package of six preferences targeting the semiconductor cluster. These preferences only become effective if a firm makes an investment of at least \$1 billion in new buildings, machinery and equipment to site and operate a semiconductor microchip fabrication facility.

When enacting these preferences, the Legislature indicated that additional incentives were needed in light of the unique forces and global issues involved in the cluster, and that businesses in Washington were facing pressure to expand elsewhere.

During legislative hearings for these preferences, representatives from one semiconductor manufacturer (Wafertech) testified that the business was considering investing \$3.5 billion in a new facility to produce 12 inch wafers. They indicated that the technology in their existing 8 inch wafer facility would be obsolete in 8 to 10 years and that their parent company would have to make a decision on whether or not to remain at the site if that happened.

The bill's prime sponsor stated:

...one particular employer in Southwest Washington, whom without this we probably don't stand a strong chance of keeping that employer down the road, currently employs about 900 individuals and that number is going to go up to 1,200 with an average salary of around \$60,000 a year with full benefits...that's \$54 million a year just in payroll going into the local economy that you stand to lose, not to mention the growth and other jobs that grow around these types of centers.

In the intent statement for the bill, the Legislature cited the Washington Competitiveness Council's identification of semiconductors as a key industry cluster.

The required level of investment did not take place, and the preferences did not take effect.

### 2006

The Legislature enacted two new semiconductor preferences. These preferences were nearly identical in language to the 2003 preferential B&O tax rate and the sales and use tax exemption for gases and chemicals, with two notable differences:

- In the new (2006) preferences, the Legislature excluded microchips and integrated circuits from the definition of semiconductor materials. These materials were specifically targeted in the 2003 preferences;
- The preferences were contingent on different amounts of capital investment. The 2003 preferences required at least one business to make a minimum investment of \$1 billion in a semiconductor microchip fabrication facility, while the 2006 preferences required an investment of \$350 million by a semiconductor materials fabrication facility in order for the preferences to take effect.

Legislative testimony and newspaper reports at the time the preferences passed indicate that one semiconductor firm in particular, S E H America, was considering a large investment in Washington.

Unlike the 2003 preferences, a semiconductor business did make the required minimum investment to put the 2006 preferences into effect. The Department of Revenue gave notice that the preferences were in effect as of December 1, 2006.

Both the reduced B&O rate and the sales and use tax exemption include an expiration date of December 1, 2018.

### 2009

The Legislature expanded the definition of semiconductor materials for the 2006 sales and use tax exemption. The new definition included solar wafers, silicon solar cells and thin film solar devices. The provision was part of a larger bill expanding solar tax preferences.

### 2013

The Legislature further expanded the definition of semiconductor materials for the sales and use tax exemption to include the manufacturing of solar grade silicon. In the same bill, the Legislature extended a different preference for solar silicon manufacturers. That preference, and the expansion of semiconductor materials, are both scheduled to expire in 2017. JLARC staff are reviewing the preference for **solar silicon manufacturing** in 2016.

This same legislation amended reporting requirements for beneficiaries of the preferential B&O rate. The beneficiaries were required to file an Annual Survey with DOR, reporting their tax savings and some employment information. Beneficiaries of the sales and use tax exemption were still required to file an Annual Report with employment information, and any taxpayer claiming both preferences was required to file both.

## 2014

The Legislature changed the reporting requirements to allow manufacturers claiming both the B&O tax preferential rate and the sales and use tax exemption to file only the Annual Report with DOR. Beneficiaries not filing an Annual Survey are required to file a Buyer Addendum.

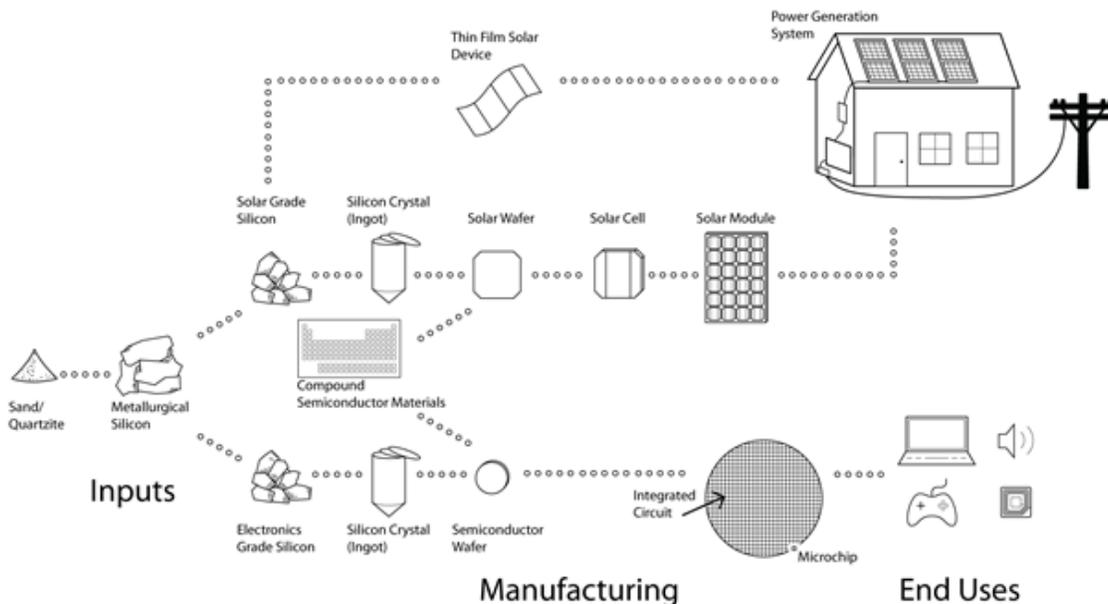
## Other Relevant Background

### Semiconductor Manufacturing Process

The preferences in this report relate to supplies and materials used in different stages of the semiconductor manufacturing process. The exhibits included in the **What is the Preference?** tab show the supply chain and manufacturing process for semiconductors from inputs through end uses. The boxes on each exhibit highlight the supplies and materials covered by the relevant preference. In general terms, the semiconductor manufacturing process:

- Begins with a raw material like sand which is smelted and purified into solar or electronic grade silicon.
- The silicon is grown into crystals (also known as ingots) and then sliced into thin solar or semiconductor wafers. Wafers can also be produced from other materials called compound semiconductors, which have similar electronic properties to silicon.
- The silicon wafers are processed to create integrated circuits, which are then cut and packaged into individual microchips. Similarly, the solar wafers are processed to make solar modules.
- Integrated circuits are used to make many types of end products, including computers, video games, audio equipment, radio frequency identification (RFID) tags, and sensors for industrial machinery, medical devices and avionics.
- Solar modules are combined in various forms to generate electricity from sunlight.

### Overview of the semiconductor manufacturing process



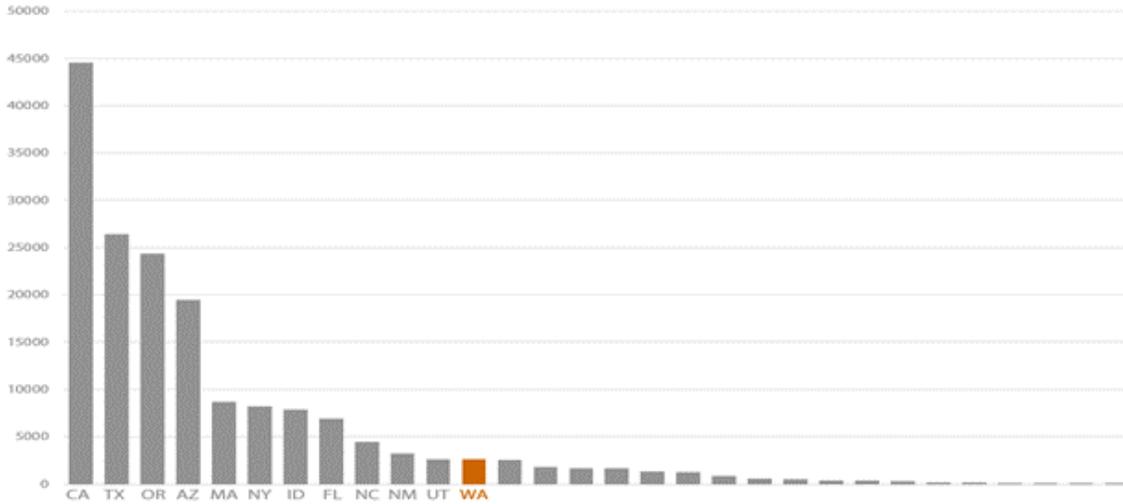
Source: JLARC staff analysis of semiconductor industry documents.

## Semiconductor Employment in Washington

The Legislature has identified the semiconductor industry as one of the state’s key industry clusters. The Bureau of Labor Statistics (BLS) provides semiconductor employment data by state and by county.

In 2014, Washington **ranked 12th in the nation** in the number of semiconductor sector employees, but was lower than neighboring states California, Oregon and Idaho. This ranking was based on all businesses in the industry, not just businesses that are eligible for the preferences.

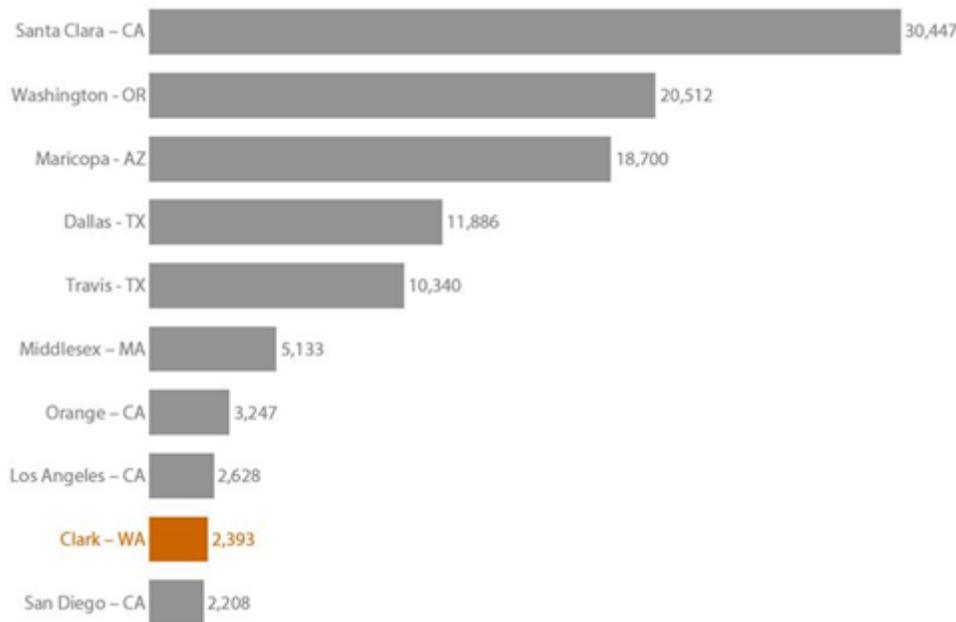
### Washington is 12th in the nation in semiconductor jobs



Source: JLARC staff analysis of 2014 BLS employment data.

Clark County, with 92% of the state’s semiconductor jobs, **ranked 9th in the nation** in county semiconductor sector employment.

### Clark county ranked 9th in semiconductor jobs among all counties in the nation



Source: JLARC staff analysis of 2014 BLS data.

## Public Policy Objectives

### What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?

All of the semiconductor preferences were enacted prior to the Legislature’s requirement to provide a performance statement.

The Legislature expressed its intent for these semiconductor preferences to meet the following objectives:

## **Induce Significant Construction Projects**

The Legislature required semiconductor businesses to make an investment in order for the tax preferences to take effect:

- For the 2003 preferences, the Legislature required an investment of at least \$1 billion in a semiconductor microchip fabrication facility;
- For the 2006 preferences, the Legislature required an investment of at least \$350 million in a semiconductor materials fabrication facility.

The Legislature noted that these major investments in significant construction projects would create jobs and bring many indirect benefits to the state during the construction phase.

## **Retain, Expand, and Attract Semiconductor Businesses**

The Legislature stated that tax incentives for the semiconductor cluster are important in both retention and expansion of existing businesses and attraction of new ones. The intent statements recognized the semiconductor industry, including the design and manufacture of semiconductor materials, as one of the state's key industry clusters.

## **Family-Wage Jobs**

The Legislature noted that the welfare of the people of the state is positively impacted through the encouragement and expansion of family wage employment in the state's manufacturing industries. Presumably these legislative intent statements applied to jobs in semiconductor manufacturing.

## **Are Objectives Being Met?**

### **What evidence exists to show that the tax preference has contributed to the achievement of any of the public policy objectives?**

There are mixed results on inducing significant construction projects. The \$1 billion investment necessary for the 2003 preferences never took place, so those preferences have never taken effect and are not meeting their public policy objectives.

For the 2006 preferences, there are mixed results on the other objectives.

## **Significant Construction Projects**

No firm has invested the required \$1 billion to build a microchip fabrication facility. Absent this requirement being met, the six 2003 preferences have never gone into effect and are not meeting their public policy objectives.

In contrast, at least one business made the \$350 million investment required for the two 2006 preferences to take effect, and at least one significant semiconductor construction project has been completed. The Department of Revenue (DOR) gave notice that the two preferences were in effect as of December 2006. DOR did not identify the business.

The remainder of the evidence section focuses on the two preferences that are in use.

## **Retain, Expand, and Attract Semiconductor Businesses**

Between 2006 and 2014, the net number of businesses in the semiconductor sector increased from 16 to 18. However, the number of semiconductor businesses receiving the reduced B&O rate decreased from three to two. So the net increase in semiconductor businesses did not come from businesses receiving the reduced B&O rate.

In the intent section for the 2006 legislation, the Legislature referenced the semiconductor industry "cluster," which it described as including the design and manufacturing of semiconductor materials. JLARC staff analyzed Employment Security Department (ESD) data reported by businesses that are classified as part of the Semiconductor and Related Device Manufacturing sector. This classification is broader than the activities covered by the B&O preference.

The net increase in the number of businesses in the overall sector between 2006 and 2014 is a mix of retained and new businesses as well as a reduction from businesses that no longer report to ESD. They may have moved, closed, or merged with other businesses.

In 2014, four businesses reported using the sales and use tax preference. Due to a lack of reporting, there is no comparative figure for 2006.

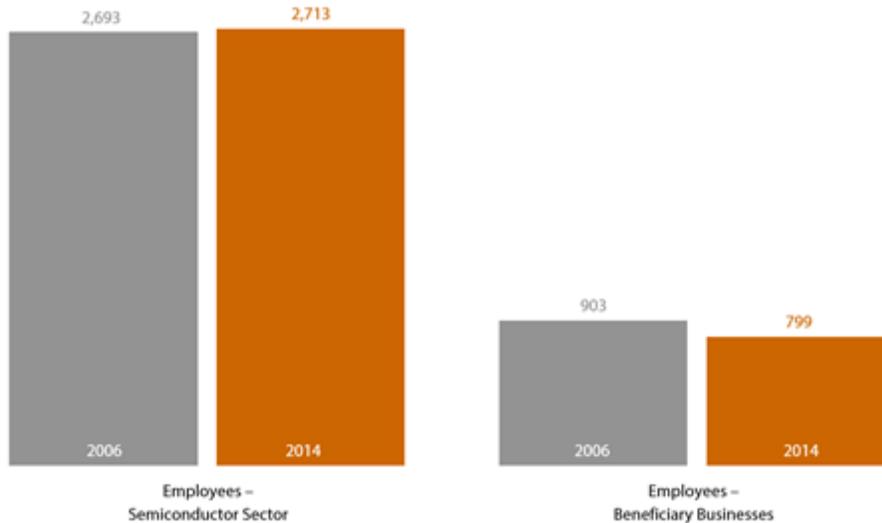
## **Family-Wage Jobs**

Matching the pattern for the number of businesses, employment in the semiconductor sector as a whole increased slightly (less than one percent) between 2006 and 2014. However, employment in the businesses receiving the reduced B&O rate declined 11.5 percent. So the slight increase in the number of jobs in the semiconductor sector did not come from businesses receiving the reduced B&O rate.

Employment for the semiconductor sector as a whole increased from 2,693 jobs in 2006 to 2,713 jobs in 2014. During the same period, employment in semiconductor businesses receiving the reduced B&O rate declined from 903 to 799, a loss of 104 jobs. Employment numbers for businesses using the sales and use tax preference are not disclosable due to the combination of different forms used to report to DOR. See the **Reporting Issues** tab for more information.

See the **Other Relevant Background** tab for how Washington ranks compared to other states.

### **Employment in the Semiconductor Sector Increased Slightly (Less than 1%) While Employment for Businesses Taking the B&O Preference Declined 11.5%**



Source: JLARC staff analysis of ESD data and Annual Reports filed by taxpayers.

### **Job Quality – “Family Wage”**

The Legislature did not define what it meant by “family wage employment”. JLARC staff used two measures for comparison:

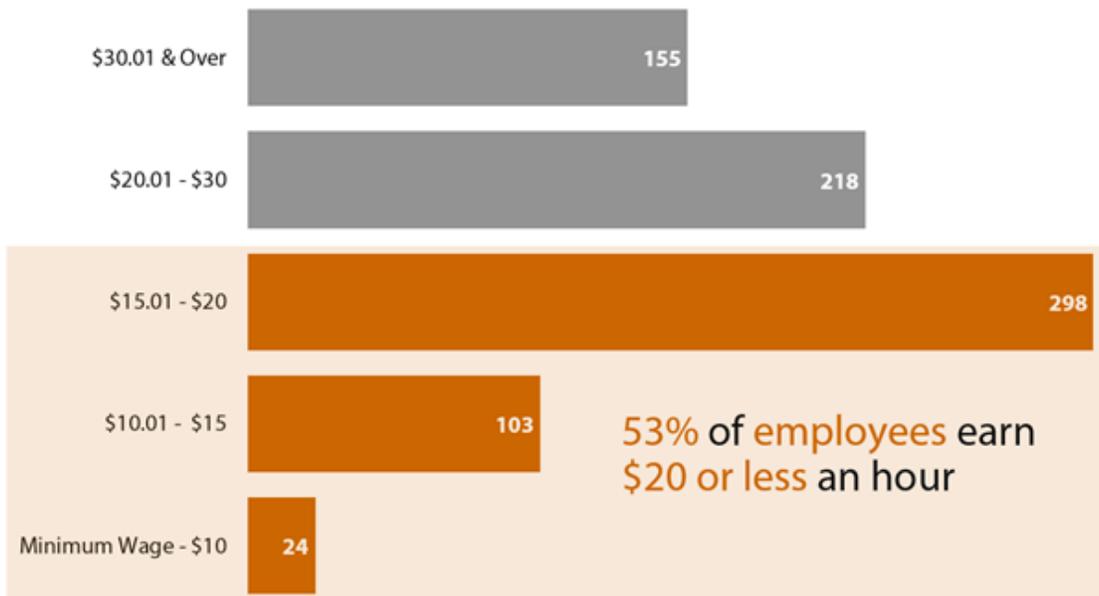
- The state’s private sector median wage, \$21.48 per hour; and
- \$60,000 per year, based on prime sponsor testimony.

Information on wages and benefits is available for 2014 from the two semiconductor businesses receiving the reduced B&O rate:

- 53 percent of employees earned \$20 an hour or less, putting their wages below both the private sector median wage and the wage level identified in testimony;
- Between 88 and 93 percent of employees were eligible for medical benefits, and 88 percent of employees enrolled in medical plans.

Wage and benefit information is not disclosable for the businesses using the sales and use tax preference due to the combination of different forms used to report to DOR. See the Reporting Issues tab for more information.

### **In 2014, 53% of Employees of the Two Businesses Receiving the Reduced B&O Rate Earned \$20 or Less an Hour**



Source: JLARC staff analysis of Annual Report data from DOR.

Note: Job numbers add to 798 rather than 799 due to rounding of numbers reported within the hourly wage bands.

**In 2014, Between 88 and 93 Percent of Employees of the Two Businesses Receiving the Reduced B&O Rate Were Eligible for Medical Benefits**

Beneficiary Businesses	Number of employees	Percent eligible for medical benefits	Percent of employees enrolled in medical plans	Average monthly employer contribution	Average employee premium responsibility	Dependent coverage
S E H America Inc.	782	93%	88%	\$384	10%	Yes, with additional premium
Galaxy Compound Semiconductor Inc.	17	88%	88%	\$135	20%	Yes, with additional premium

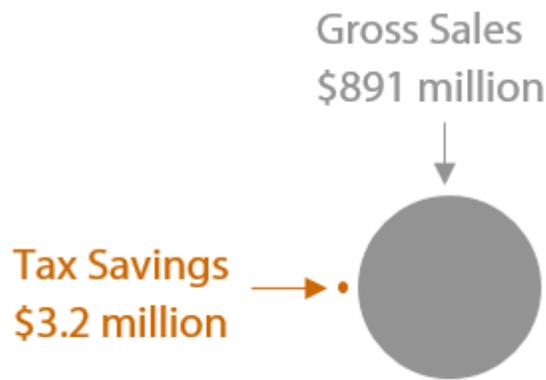
Source: DOR Annual Report data.

**To what extent will continuation of the tax preference contribute to these public policy objectives?**

It is unclear to what extent continuation of the preferences will contribute to the public policy objectives:

- The 2003 preferences have yet to induce the required investment to take effect. It is unclear whether the 2006 preferences will induce any additional significant construction projects now that the initial required investment has occurred.
- While there have been slight increases in the number of businesses and jobs in the semiconductor sector as a whole, these increases have not come from businesses receiving the reduced B&O rate.
- For the businesses that are using the preferences, it is unclear whether the amount saved from the preferences relative to income from gross sales is enough to lead to business or job retention or expansion. In 2014, tax savings from the preferences equated to approximately 1/3 of one percent of gross sales for businesses using the sales and use tax exemption.

**The Tax Savings Associated with the Preferences Equate to About 1/3 of One Percent of the Businesses' Gross Sales**



Source: JLARC staff analysis of DOR tax return and Annual Survey data.

To compare tax savings with gross sales in 2014,

- JLARC staff used the 2014 savings reported by beneficiaries of the sales and use tax preference (\$2.3 million) combined with an estimate of 2014 tax savings for the beneficiaries of the B&O preference (\$855,000). The actual amount of 2014 B&O savings is not disclosable. JLARC staff based their estimate of B&O savings on information reported by beneficiaries between 2007 and 2009, when this information was disclosable. Estimated total tax savings in 2014 from both the B&O and sales and use preferences is \$3.155 million.
- JLARC staff used total gross sales reported for 2014 by the beneficiaries of the sales and use tax preference (\$891 million). The gross sales for beneficiaries of the B&O preference are not included because that information is not disclosable.

## Beneficiaries

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### Who are the entities whose state tax liabilities are directly affected by the tax preference?

There are no beneficiaries for the six preferences passed in 2003 because the required level of private investment to trigger their taking effect has not occurred.

The following information is for beneficiaries of the two tax preferences passed in 2006:

#### Direct Beneficiaries

In 2014, the beneficiaries of the reduced B&O tax rate were two businesses that manufacture or process semiconductor materials.

In that same year, the beneficiaries of the sales and use tax exemption were four businesses that use gases and chemicals in the production of semiconductor materials.

#### Indirect Beneficiaries

To the extent that the tax savings are passed on to customers of semiconductor materials or lead to increased purchases from suppliers, other businesses in the semiconductor cluster may be indirect beneficiaries of the preferences.

## Reporting Issues

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### Three Reporting Issues

Three reporting issues complicate estimates of beneficiary savings and estimates of the number of family wage jobs offered by businesses that use the preferences.

#### Beneficiary Savings for B&O Preference Not Disclosable

Businesses using the B&O reduced tax rate are required to report their qualifying manufacturing activities on a separate line of their individual tax returns. Tax return data can only be disclosed in the aggregate and if three or more businesses report using the reduced rate. In 2014, less than three businesses reported using the rate so the information is not disclosable.

The Legislature passed SB 5882 in 2013 authorizing disclosure of tax return information after 24 months following the date a return is filed. The reduced B&O rate for semiconductor materials was enacted in 2006. The provisions of SB 5882 authorizing disclosure are not applicable to this preference unless it is modified or extended in the future.

Businesses using the B&O reduced tax rate are also required to file an Annual Report with the Department of Revenue (DOR). The Annual Report includes information on employment and wages but does not require businesses to report their tax savings.

### **Employment and Wage Estimates for Sales and Use Tax Exemption Not Disclosable**

Businesses using the sales and use tax exemption are required to file an Annual Survey with DOR. However, if the same businesses also use the reduced B&O rate, they have the option of filing an Annual Report instead. Several businesses chose to do so in 2014. The result is that fewer than three businesses filed an Annual Survey. Employment and wage information from the Annual Survey is not disclosable if fewer than three businesses report to DOR.

### **Inconsistent Reporting Requirements Result in Incomplete Information**

Beneficiaries of the reduced B&O rate are required to file a different report to DOR than beneficiaries of the sales and use tax exemption. Businesses using both preferences can choose to file only the Annual Report and Buyer Addendum. The reports contain different types of information and neither one provides a complete picture of beneficiary savings and employment and wage data for all businesses using the preferences.

- Businesses using a reduced B&O rate must file an Annual Report with DOR. This includes employment information by occupation, such as number of employees, and percent of employees in different hourly wage categories. It does not include the amount of savings the businesses claimed from the preferential rate.
- Businesses using the sales and use tax exemption must file an Annual Survey with DOR. This includes aggregate employment information for the business, rather than employment by occupation. It also groups employees by annual wages rather than hourly wages. Unlike the Annual Report, the Annual Survey includes the amount of savings businesses claimed from the exemption.
- Businesses using both preferences can choose to file an Annual Report and a Buyer Addendum instead of the Annual Survey. This results in varying employment information collected on businesses using the sales and use tax exemption.

To obtain complete information on employment and tax savings for businesses using both preferences, all businesses would need to submit the same form to DOR, regardless of which preference they are taking. Employment and wage information on the Annual Report forms is publicly disclosable. This information on the Annual Survey is not currently disclosable.

## **Revenue and Economic Impacts**

### **What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?**

JLARC staff estimate the direct beneficiary savings from the sales and use tax exemption for Fiscal Year 2015 is \$2.2 million. The estimated beneficiary savings for the sales and use tax exemption for the 2017-19 Biennium is \$3.2 million.

Estimated beneficiary savings for the preferential B&O tax rate are not disclosable because fewer than three taxpayers have claimed the preference since 2010. Between 2007 and 2009, when there were at least three taxpayers, the annual beneficiary savings averaged \$875,000.

### **Estimated 2017-2019 Direct Beneficiary Savings for Semiconductor Materials Gases and Chemicals Sales and Use Tax Exemption, Reduced B&O Tax Rate (\$)**

<b>Fiscal Year</b>	<b>State Sales Tax</b>	<b>Local Sales Tax</b>	<b>Total Beneficiary Savings from Sales Tax</b>	<b>Reduced B&amp;O Tax Rate</b>
<b>2014</b>	\$1,800,000	\$500,000	\$2,300,000	Not Disclosable
<b>2015</b>	\$1,700,000	\$500,000	\$2,200,000	Not Disclosable
<b>2016</b>	\$1,800,000	\$500,000	\$2,300,000	Not Disclosable
<b>2017</b>	\$1,800,000	\$500,000	\$2,300,000	Not Disclosable

<b>2018</b>	\$1,800,000	\$500,000	\$2,300,000*	Not Disclosable
<b>2019</b> (7/1/18-12/1/18; Preference scheduled to expire December 1, 2018)	\$700,000	\$200,000	\$900,000	Not Disclosable
<b>2017-19 Biennium</b>	<b>\$2,500,000</b>	<b>\$7,000,000</b>	<b>\$3,200,000</b>	<b>Not Disclosable</b>

Source: JLARC staff analysis of self-reported taxpayer data and tax returns.

Note: This estimate may be overstated because part of the sales and use tax exemption expires in 2017. The expiring part of the exemption relates to semiconductor materials that are used in solar energy systems.

### **If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

If the tax preferences were terminated, semiconductor businesses that are currently benefiting from the preferences would pay more in B&O, sales, and use taxes. The effect on employment and the economy would depend on the extent to which these manufacturers could absorb this increased cost or pass it along to their customers.

### **Other States with Similar Preference?**

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#### **Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?**

Some states, like Washington, provide incentives with statutes specifically targeting semiconductor manufacturers. Other states, like California and Oregon, use different tools and approaches that benefit many industries, including semiconductors.

**Idaho** exempts semiconductor businesses from paying sales tax on tangible personal property used in, or to maintain, clean rooms. Clean rooms are manufacturing areas with low levels of environmental pollutants such as dust, airborne microbes, aerosol particles and chemical vapors. This exemption is in addition to Idaho's broader Production Exemption, which applies to chemicals and catalysts used to change a product in the manufacturing process.

**Arizona** exempts semiconductor clean rooms from sales and use tax. This exemption is in addition to the broader sales and use tax exemption for chemicals used in manufacturing and processing. Clean rooms are also assessed as tangible personal property for the purpose of property taxes, which allows for preferable tax treatment.

**Florida** exempts semiconductor, defense, and space technology businesses from sales and use tax on their machinery and equipment.

The **District of Columbia** offers all qualified high-tech companies, including semiconductor businesses, a package of tax incentives including a reduction or exemption from income tax and property tax, plus tax credits for relocation and hiring certain types of employees.

**California** has the highest number of semiconductor employees in the country. It offers the California Competes Tax Credit which is a negotiable credit available to businesses locating or growing in California. The state also offers a sales and use tax exclusion for advanced manufacturing, which includes semiconductors. Other California incentive programs include cash reimbursement for employee training costs, industrial development bonds and small business loan guarantees.

**Oregon's** incentive program was mentioned in public testimony during hearings for the Washington preferences. Oregon currently has three strategic investment agreements with two semiconductor businesses, providing partial property tax exemptions.

### **Applicable Statutes**

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#### **Preferences in effect**

#### **Intent Statement**

**Findings—Intent—2006 c 84:** "The legislature finds that the welfare of the people of the state of Washington is positively impacted through the encouragement and expansion of family wage employment in the state's manufacturing industries. The legislature further finds that targeting tax incentives to focus on key industry clusters is an important business climate strategy. Washington state has recognized the semiconductor industry, which includes the design and manufacture of semiconductor materials, as one of the state's existing key industry clusters. Businesses in this cluster in the state of Washington are facing increasing pressure to expand elsewhere. The sales and use tax exemptions for manufacturing machinery and equipment enacted by the 1995 legislature improved Washington's ability to compete with other states for manufacturing investment. In 2003 the legislature enacted comprehensive tax incentives for the semiconductor cluster that address activities of the lead product industry and its suppliers and customers. These tax incentives are contingent on the investment of at least one billion dollars in a new semiconductor microchip fabrication facility in this state, which has not occurred. This investment criteria failed to recognize the significance of potential investment in the advanced semiconductor materials sector. Therefore, the legislature intends to complement existing comprehensive tax incentives for the semiconductor cluster to address activities of the advanced semiconductor materials product industry and its suppliers and customers. Tax incentives for the semiconductor cluster are important in both retention and expansion of existing businesses and attraction of new businesses, all of which will strengthen this cluster. The legislature also recognizes that the semiconductor industry involves major investment that results in significant construction projects, which will create jobs and bring many indirect benefits to the state during the construction phase." [ 2006 c 84 § 1.]

## **Preferences not in effect**

### **Intent Statement**

**Findings—Intent—2003 c 149:** "The legislature finds that the welfare of the people of the state of Washington is positively impacted through the encouragement and expansion of family wage employment in the state's manufacturing industries. The legislature further finds that targeting tax incentives to focus on key industry clusters is an important business climate strategy. The Washington competitiveness council has recognized the semiconductor industry, which includes the design and manufacture of semiconductor materials, as one of the state's existing key industry clusters. Businesses in this cluster in the state of Washington are facing increasing pressure to expand elsewhere. The sales and use tax exemptions for manufacturing machinery and equipment enacted by the 1995 legislature improved Washington's ability to compete with other states for manufacturing investment. However, additional incentives for the semiconductor cluster need to be put in place in recognition of the unique forces and global issues involved in business decisions that key businesses in this cluster face.

Therefore, the legislature intends to enact comprehensive tax incentives for the semiconductor cluster that address activities of the lead product industry and its suppliers and customers. Tax incentives for the semiconductor cluster are important in both retention and expansion of existing business and attraction of new businesses, all of which will strengthen this cluster. The legislature also recognizes that the semiconductor industry involves major investment that results in significant construction projects, which will create jobs and bring many indirect benefits to the state during the construction phase." [ 2003 c 149 § 1.]

## **Preferences in effect**

### **RCW 82.04.2404**

#### **Manufacturers—Processors for hire—Semiconductor materials. (Expires December 1, 2018.)**

(1) Upon every person engaging within this state in the business of manufacturing or processing for hire semiconductor materials, as to such persons the amount of tax with respect to such business is, in the case of manufacturers, equal to the value of the product manufactured, or, in the case of processors for hire, equal to the gross income of the business, multiplied by the rate of 0.275 percent.

(2) For the purposes of this section "semiconductor materials" means silicon crystals, silicon ingots, raw polished semiconductor wafers, and compound semiconductor wafers.

(3) A person reporting under the tax rate provided in this section must file a complete Annual Report with the department under RCW 82.32.534.

(4) This section expires December 1, 2018.

[ 2010 c 114 § 105; 2006 c 84 § 2.]

### **RCW 82.08.9651**

## **Exemptions—Gases and chemicals used in production of semiconductor materials. (Expires December 1, 2018.)**

(1) The tax levied by RCW 82.08.020 does not apply to sales of gases and chemicals used by a manufacturer or processor for hire in the production of semiconductor materials. This exemption is limited to gases and chemicals used in the production process to grow the product, deposit or grow permanent or sacrificial layers on the product, to etch or remove material from the product, to anneal the product, to immerse the product, to clean the product, and other such uses whereby the gases and chemicals come into direct contact with the product during the production process, or uses of gases and chemicals to clean the chambers and other like equipment in which such processing takes place. For the purposes of this section, "semiconductor materials" has the meaning provided in RCW 82.04.2404 and 82.04.294(3).

(2)(a) Except as provided under (b) of this subsection (2), a person claiming the exemption under this section must file a complete Annual Survey with the department under RCW 82.32.585.

(b) A person claiming the exemption under this section and who is required to file a complete Annual Report with the department under RCW 82.32.534 as a result of claiming the tax preference provided by RCW 82.04.2404 is not also required to file a complete Annual Survey under RCW 82.32.585.

(3) No application is necessary for the tax exemption. The person is subject to all of the requirements of chapter 82.32 RCW.

(4) This section expires December 1, 2018.

[ 2014 c 97 § 405; 2010 c 114 § 124; 2009 c 469 § 502; 2006 c 84 § 3.]

## **RCW 82.12.9651**

### **Exemptions—Gases and chemicals used in production of semiconductor materials. (Expires December 1, 2018.)**

(1) The provisions of this chapter do not apply with respect to the use of gases and chemicals used by a manufacturer or processor for hire in the production of semiconductor materials. This exemption is limited to gases and chemicals used in the production process to grow the product, deposit or grow permanent or sacrificial layers on the product, to etch or remove material from the product, to anneal the product, to immerse the product, to clean the product, and other such uses whereby the gases and chemicals come into direct contact with the product during the production process, or uses of gases and chemicals to clean the chambers and other like equipment in which such processing takes place. For purposes of this section, "semiconductor materials" has the meaning provided in RCW 82.04.2404 and 82.04.294(3).

(2)(a) Except as provided under (b) of this subsection (2), a person claiming the exemption under this section must file a complete Annual Survey with the department under RCW 82.32.585.

(b) A person claiming the exemption under this section and who is required to file a complete Annual Report with the department under RCW 82.32.534 as a result of claiming the tax preference provided by RCW 82.04.2404 is not also required to file a complete Annual Survey under RCW 82.32.585.

(3) No application is necessary for the tax exemption. The person is subject to all of the requirements of chapter 82.32 RCW.

(4) This section expires December 1, 2018.

[ 2014 c 97 § 406; 2010 c 114 § 130; 2009 c 469 § 503; 2006 c 84 § 4.]

## **RCW 82.04.294**

### **Tax on manufacturers or wholesalers of solar energy systems. (Expires June 30, 2017.)**

(1) Upon every person engaging within this state in the business of manufacturing solar energy systems using photovoltaic modules or stirling converters, or of manufacturing solar grade silicon, silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers to be used exclusively in components of such systems; as to such persons the amount of tax with respect to such business is, in the case of manufacturers, equal to the value of the product manufactured, or in the case of processors for hire, equal to the gross income of the business, multiplied by the rate of 0.275 percent.

(2) Upon every person engaging within this state in the business of making sales at wholesale of solar energy systems using photovoltaic modules or stirling converters, or of solar grade silicon, silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers to be used exclusively in components of such systems, manufactured by

that person; as to such persons the amount of tax with respect to such business is equal to the gross proceeds of sales of the solar energy systems using photovoltaic modules or stirling converters, or of the solar grade silicon to be used exclusively in components of such systems, multiplied by the rate of 0.275 percent.

(3) Silicon solar wafers, silicon solar cells, thin film solar devices, solar grade silicon, or compound semiconductor solar wafers are "semiconductor materials" for the purposes of RCW 82.08.9651 and 82.12.9651.

(4) The definitions in this subsection apply throughout this section.

(a) "Compound semiconductor solar wafers" means a semiconductor solar wafer composed of elements from two or more different groups of the periodic table.

(b) "Module" means the smallest nondivisible self-contained physical structure housing interconnected photovoltaic cells and providing a single direct current electrical output.

(c) "Photovoltaic cell" means a device that converts light directly into electricity without moving parts.

(d) "Silicon solar cells" means a photovoltaic cell manufactured from a silicon solar wafer.

(e) "Silicon solar wafers" means a silicon wafer manufactured for solar conversion purposes.

(f) "Solar energy system" means any device or combination of devices or elements that rely upon direct sunlight as an energy source for use in the generation of electricity.

(g) "Solar grade silicon" means high-purity silicon used exclusively in components of solar energy systems using photovoltaic modules to capture direct sunlight. "Solar grade silicon" does not include silicon used in semiconductors.

(h) "Stirling converter" means a device that produces electricity by converting heat from a solar source utilizing a stirling engine.

(i) "Thin film solar devices" means a nonparticipating substrate on which various semiconducting materials are deposited to produce a photovoltaic cell that is used to generate electricity.

(5) A person reporting under the tax rate provided in this section must file a complete Annual Survey with the department under RCW 82.32.585.

(6) This section expires June 30, 2017.

## **Preferences not in effect**

### **RCW 82.04.240**

#### **Tax on manufacturers. (Contingent effective date; contingent expiration of subsection.)**

(1) Upon every person engaging within this state in business as a manufacturer, except persons taxable as manufacturers under other provisions of this chapter; as to such persons the amount of the tax with respect to such business is equal to the value of the products, including byproducts, manufactured, multiplied by the rate of 0.484 percent.

(2)(a) Upon every person engaging within this state in the business of manufacturing semiconductor materials, as to such persons the amount of tax with respect to such business is, in the case of manufacturers, equal to the value of the product manufactured, or, in the case of processors for hire, equal to the gross income of the business, multiplied by the rate of 0.275 percent. For the purposes of this subsection "semiconductor materials" means silicon crystals, silicon ingots, raw polished semiconductor wafers, compound semiconductors, integrated circuits, and microchips.

(b) A person reporting under the tax rate provided in this subsection (2) must file a complete annual report with the department under RCW 82.32.534.

(c) This subsection (2) expires twelve years after \*the effective date of this act.

(3) The measure of the tax is the value of the products, including byproducts, so manufactured regardless of the place of sale or the fact that deliveries may be made to points outside the state.

[ 2010 c 114 § 104; 2003 c 149 § 3; 1998 c 312 § 3; 1993 sp.s. c 25 § 102; 1981 c 172 § 1; 1979 ex.s. c 196 § 1; 1971 ex.s. c 281 § 3; 1969 ex.s. c 262 § 34; 1967 ex.s. c 149 § 8; 1965 ex.s. c 173 § 5; 1961 c 15 § 82.04.240. Prior: 1959 c 211 § 1; 1955 c 389 § 44; prior: 1950 ex.s. c 5 § 1, part; 1949 c 228 § 1, part; 1943 c 156 § 1, part; 1941 c 178 § 1, part; 1939 c 225 § 1, part; 1937 c 227 § 1, part; 1935 c 180 § 4, part; Rem. Supp. 1949 § 8370-4, part.]

### **RCW 82.04.426**

## **Exemptions—Semiconductor microchips. (Contingent effective date; contingent expiration date.)**

(1) The tax imposed by RCW 82.04.240(2) does not apply to any person in respect to the manufacturing of semiconductor microchips.

(2) For the purposes of this section:

(a) "Manufacturing semiconductor microchips" means taking raw polished semiconductor wafers and embedding integrated circuits on the wafers using processes such as masking, etching, and diffusion; and

(b) "Integrated circuit" means a set of microminiaturized, electronic circuits.

(3) A person reporting under the tax rate provided in this section must file a complete annual report with the department under RCW 82.32.534.

(4) This section expires nine years after \*the effective date of this act.

[ 2010 c 114 § 110; 2003 c 149 § 2.]

## **RCW 82.04.448**

### **Credit—Manufacturing semiconductor materials. (Contingent effective date; contingent expiration date.)**

(1) Subject to the limits and provisions of this section, a credit is authorized against the tax otherwise due under RCW 82.04.240(2) for persons engaged in the business of manufacturing semiconductor materials. For the purposes of this section "semiconductor materials" has the same meaning as provided in RCW 82.04.240(2).

(2)(a) The credit under this section equals three thousand dollars for each employment position used in manufacturing production that takes place in a new building exempt from sales and use tax under RCW 82.08.965 and 82.12.965. A credit is earned for the calendar year a person fills a position. Additionally a credit is earned for each year the position is maintained over the subsequent consecutive years, up to eight years. Those positions that are not filled for the entire year are eligible for fifty percent of the credit if filled less than six months, and the entire credit if filled more than six months.

(b) To qualify for the credit, the manufacturing activity of the person must be conducted at a new building that qualifies for the exemption from sales and use tax under RCW 82.08.965 and 82.12.965.

(c) In those situations where a production building in existence on \*the effective date of this section will be phased out of operation, during which time employment at the new building at the same site is increased, the person is eligible for credit for employment at the existing building and new building, with the limitation that the combined eligible employment not exceed full employment at the new building. "Full employment" has the same meaning as in RCW 82.08.965. The credit may not be earned until the commencement of commercial production, as that term is used in RCW 82.08.965.

(3) No application is necessary for the tax credit. The person is subject to all of the requirements of chapter 82.32 RCW. In no case may a credit earned during one calendar year be carried over to be credited against taxes incurred in a subsequent calendar year. No refunds may be granted for credits under this section.

(4) If at any time the department finds that a person is not eligible for tax credit under this section, the amount of taxes for which a credit has been claimed is immediately due. The department must assess interest, but not penalties, on the taxes for which the person is not eligible. The interest must be assessed at the rate provided for delinquent excise taxes under chapter 82.32 RCW, is retroactive to the date the tax credit was taken, and accrues until the taxes for which a credit has been used are repaid.

(5) A person claiming the credit under this section must file a complete annual report with the department under RCW 82.32.534.

(6) Credits may be claimed after twelve years after \*the effective date of this act, for those buildings at which commercial production began before twelve years after \*the effective date of this act, subject to all of the eligibility criteria and limitations of this section.

(7) This section expires twelve years after \*the effective date of this act.

[ 2010 c 114 § 117; 2003 c 149 § 9.]

## **RCW 82.08.970**

## **Exemptions—Gases and chemicals used to manufacture semiconductor materials. (Contingent effective date; contingent expiration date.)**

(1) The tax levied by RCW 82.08.020 does not apply to sales of gases and chemicals used by a manufacturer or processor for hire in the manufacturing of semiconductor materials. This exemption is limited to gases and chemicals used in the manufacturing process to grow the product, deposit or grow permanent or sacrificial layers on the product, to etch or remove material from the product, to anneal the product, to immerse the product, to clean the product, and other such uses whereby the gases and chemicals come into direct contact with the product during the manufacturing process, or uses of gases and chemicals to clean the chambers and other like equipment in which such processing takes place. For the purposes of this section, "semiconductor materials" has the same meaning as provided in RCW 82.04.240(2).

(2) A person claiming the exemption under this section must file a complete annual report with the department under RCW 82.32.534. No application is necessary for the tax exemption. The person is subject to all of the requirements of chapter 82.32 RCW.

(3) This section expires twelve years after \*the effective date of this act.

[ 2010 c 114 § 125; 2003 c 149 § 7.]

## **RCW 82.12.970**

### **Exemptions—Gases and chemicals used to manufacture semiconductor materials. (Contingent effective date; contingent expiration date.)**

(1) The provisions of this chapter do not apply with respect to the use of gases and chemicals used by a manufacturer or processor for hire in the manufacturing of semiconductor materials. This exemption is limited to gases and chemicals used in the manufacturing process to grow the product, deposit or grow permanent or sacrificial layers on the product, to etch or remove material from the product, to anneal the product, to immerse the product, to clean the product, and other such uses whereby the gases and chemicals come into direct contact with the product during the manufacturing process, or uses of gases and chemicals to clean the chambers and other like equipment in which such processing takes place. For purposes of this section, "semiconductor materials" has the same meaning as provided in RCW 82.04.240(2).

(2) A person claiming the exemption under this section must file a complete annual report with the department under RCW 82.32.534. No application is necessary for the tax exemption. The person is subject to all of the requirements of chapter 82.32 RCW.

(3) This section expires twelve years after \*the effective date of this act.

[ 2010 c 114 § 131; 2003 c 149 § 8.]

## **RCW 82.08.965**

### **Exemptions—Semiconductor materials manufacturing. (Contingent effective date; contingent expiration date.)**

(1) The tax levied by RCW 82.08.020 does not apply to charges made for labor and services rendered in respect to the constructing of new buildings used for the manufacturing of semiconductor materials, to sales of tangible personal property that will be incorporated as an ingredient or component of such buildings during the course of the constructing, or to labor and services rendered in respect to installing, during the course of constructing, building fixtures not otherwise eligible for the exemption under RCW 82.08.02565(2)(b). The exemption is available only when the buyer provides the seller with an exemption certificate in a form and manner prescribed by the department. The seller must retain a copy of the certificate for the seller's files.

(2) To be eligible under this section the manufacturer or processor for hire must meet the following requirements for an eight-year period, such period beginning the day the new building commences commercial production, or a portion of tax otherwise due will be immediately due and payable pursuant to subsection (3) of this section:

(a) The manufacturer or processor for hire must maintain at least seventy-five percent of full employment at the new building for which the exemption under this section is claimed.

(b) Before commencing commercial production at a new facility the manufacturer or processor for hire must meet with the department to review projected employment levels in the new buildings. The department, using information provided by the taxpayer, must make a determination of the number of positions that would be filled at full employment. This number must be used throughout the eight-year period to determine whether any tax is to be repaid. This information is not subject to the confidentiality provisions of RCW 82.32.330 and may be disclosed to the public upon request.

(c) In those situations where a production building in existence on \*the effective date of this section will be phased out of operation during which time employment at the new building at the same site is increased, the manufacturer or processor for hire must maintain seventy-five percent of full employment at the manufacturing site overall.

(d) No application is necessary for the tax exemption. The person is subject to all the requirements of chapter 82.32 RCW. A person claiming the exemption under this section must file a complete annual report with the department under RCW 82.32.534.

(3) If the employment requirement is not met for any one calendar year, one-eighth of the exempt sales and use taxes will be due and payable by April 1st of the following year. The department must assess interest to the date the tax was imposed, but not penalties, on the taxes for which the person is not eligible.

(4) The exemption applies to new buildings, or parts of buildings, that are used exclusively in the manufacturing of semiconductor materials, including the storage of raw materials and finished product.

(5) For the purposes of this section:

(a) "Commencement of commercial production" is deemed to have occurred when the equipment and process qualifications in the new building are completed and production for sale has begun; and

(b) "Full employment" is the number of positions required for full capacity production at the new building, for positions such as line workers, engineers, and technicians.

(c) "Semiconductor materials" has the same meaning as provided in RCW 82.04.240(2).

(6) No exemption may be taken after twelve years after \*the effective date of this act, however all of the eligibility criteria and limitations are applicable to any exemptions claimed before that date.

(7) This section expires twelve years after \*the effective date of this act.

[ 2010 c 114 § 123; 2003 c 149 § 5.]

## **RCW 82.12.965**

### **Exemptions—Semiconductor materials manufacturing. (Contingent effective date; contingent expiration date.)**

(1) The provisions of this chapter do not apply with respect to the use of tangible personal property that will be incorporated as an ingredient or component of new buildings used for the manufacturing of semiconductor materials during the course of constructing such buildings or to labor and services rendered in respect to installing, during the course of constructing, building fixtures not otherwise eligible for the exemption under RCW 82.08.02565(2)(b).

(2) The eligibility requirements, conditions, and definitions in RCW 82.08.965 apply to this section, including the filing of a complete annual report with the department under RCW 82.32.534.

(3) No exemption may be taken twelve years after \*the effective date of this act, however all of the eligibility criteria and limitations are applicable to any exemptions claimed before that date.

(4) This section expires twelve years after \*the effective date of this act.

[ 2010 c 114 § 129; 2003 c 149 § 6.]

## **RCW 84.36.645**

### **Semiconductor materials. (Contingent effective date; contingent expiration date.)**

(1) Machinery and equipment exempt under RCW 82.08.02565 or 82.12.02565 used in manufacturing semiconductor materials at a building exempt from sales and use tax and in compliance with the employment requirement under RCW 82.08.965 and 82.12.965 are exempt from property taxation. "Semiconductor materials" has the same meaning as provided in RCW 82.04.240(2).

(2) A person seeking this exemption must make application to the county assessor, on forms prescribed by the department.

(3) A person claiming an exemption under this section must file a complete annual report with the department under RCW 82.32.534.

(4) This section is effective for taxes levied for collection one year after \*the effective date of this act and thereafter.

(5) This section expires December 31st of the year occurring twelve years after \*the effective date of this act, for taxes levied for collection in the following year.

[ 2010 c 114 § 150; 2003 c 149 § 10.]

## **RCW 82.32.790**

### **Tax incentives contingent upon semiconductor microchip fabrication facility siting and operation.**

(1)(a) Section 206, chapter 106, Laws of 2010, sections 104, 110, 117, 123, 125, 129, 131, and 150, chapter 114, Laws of 2010, section 3, chapter 461, Laws of 2009, section 7, chapter 300, Laws of 2006, and section 4, chapter 149, Laws of 2003 are contingent upon the siting and commercial operation of a significant semiconductor microchip fabrication facility in the state of Washington.

(b) For the purposes of this section:

(i) "Commercial operation" means the same as "commencement of commercial production" as used in RCW 82.08.965.

(ii) "Semiconductor microchip fabrication" means "manufacturing semiconductor microchips" as defined in RCW 82.04.426.

(iii) "Significant" means the combined investment of new buildings and new machinery and equipment in the buildings, at the commencement of commercial production, will be at least one billion dollars.

(2) Chapter 149, Laws of 2003 takes effect the first day of the month in which a contract for the construction of a significant semiconductor fabrication facility is signed, as determined by the director of the department of revenue.

(3)(a) The department of revenue must provide notice of the effective date of sections 104, 110, 117, 123, 125, 129, 131, and 150, chapter 114, Laws of 2010[,] section 3, chapter 461, Laws of 2009, section 7, chapter 300, Laws of 2006, and section 4, chapter 149, Laws of 2003 to affected taxpayers, the legislature, and others as deemed appropriate by the department.

(b) If, after making a determination that a contract has been signed and chapter 149, Laws of 2003 is effective, the department discovers that commencement of commercial production did not take place within three years of the date the contract was signed, the department must make a determination that chapter 149, Laws of 2003 is no longer effective, and all taxes that would have been otherwise due are deemed deferred taxes and are immediately assessed and payable from any person reporting tax under RCW 82.04.240(2) or claiming an exemption or credit under section 2 or 5 through 10, chapter 149, Laws of 2003. The department is not authorized to make a second determination regarding the effective date of chapter 149, Laws of 2003.

[ 2010 c 114 § 201; 2010 c 106 § 401; 2009 c 461 § 9; 2006 c 300 § 12; 2003 c 149 § 12.]

## **Recommendations**

### **Legislative Auditor Recommendation**

#### **Legislative Auditor Recommendation**

**1. For the six preferences not currently in effect, the Legislature should terminate the preferences because they have not been used in the thirteen years since they were enacted.**

- No firm has made the required investment of at least \$1 billion in a new microchip fabrication facility located in Washington. The tax preferences are contingent on this investment.
- The legislative history of the six preferences indicates that the Legislature wanted to provide incentive for a specific firm, Wafertech, to stay in Washington. Wafertech still remains in the state.

**Legislation Required:** Yes.

**Fiscal Impact:** None.

**2. The Legislature should review and clarify the two preferences currently in effect because while there has been one significant construction project, it is unclear what employment outcomes the Legislature wants to achieve. As part of the clarification, the Legislature should add uniform reporting requirements and targets for employment growth and wages to facilitate future reviews.**

- It is unclear whether the preferences will induce any additional significant construction projects now that the initial required investment has occurred.

- While there have been slight increases in the net number of businesses and in jobs in the semiconductor sector as a whole, these increases have not come from businesses receiving the reduced B&O rate. The number of businesses receiving the reduced B&O rate has declined from three to two, and their employment has decreased by 11.5 percent since 2006.
- To facilitate future reviews of the preferences, the Legislature should consider setting targets for employment growth and wages. Additionally, the Legislature should consider requiring uniform reporting requirements for all businesses that claim one or both preferences and authorizing disclosure of tax savings by those businesses. This would provide a more complete picture of beneficiary savings and allow for meaningful comparisons of employment and wages among the businesses using the preferences.

Both the reduced B&O rate and the sales and use tax exemption expire on December 1, 2018. The part of the sales and use tax exemption relating to solar energy systems expires on June 30, 2017.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislative action.

## **Letter from Commission Chair**

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Available December 2016.

## **Commissioners' Recommendation**

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Available December 2016.

## **Agency Response**

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If applicable, will be available December 2016.

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# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Solar Energy and Silicon Product Manufacturers | B&O Tax

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### Summary of this Review

<b>The Preference Provides</b>	<b>Tax Type</b>	<b>Estimated Biennial Beneficiary Savings</b>
A reduced business and occupation (B&O) tax rate of 0.275 percent to manufacturers of certain kinds of solar energy systems and their components. Without the preference, these manufacturers would pay a B&O tax rate of 0.484 percent.  The preference is scheduled to expire June 30, 2017.	<b>B&amp;O Tax</b> RCW 82.04.294	\$1.1 million

<b>Public Policy Objective</b>
The Legislature stated in 2013 that the public policy objective was to maintain and grow jobs in the solar silicon industry.

<b>Recommendations</b>
<b>Legislative Auditor's Recommendation</b>  <b>Review and Clarify:</b> The intent statement appears narrower than the types of businesses that qualify for the preference. In clarifying, the Legislature should provide a performance statement and relevant metrics such as a jobs target to measure the preference's effectiveness.  <b>Commissioner Recommendation:</b> Available in October 2016

### Details on this Preference

#### What is the Preference?

The preference provides a reduced business and occupation (B&O) tax rate of 0.275 percent to manufacturers of certain kinds of solar energy systems and their components. Without the preference, these manufacturers would pay a B&O tax rate of 0.484 percent.

The Legislature's objective with this preference is to maintain and grow jobs in the solar silicon industry.

The preference applies to:

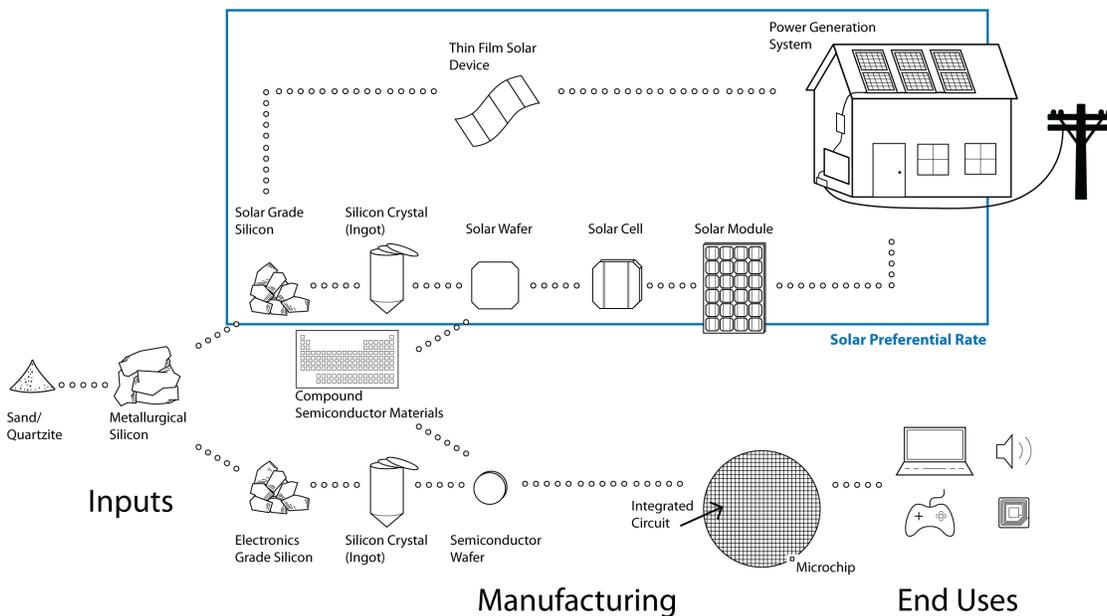
- Manufacturers of solar energy systems using photovoltaic modules or stirling converters. Solar energy systems are devices that rely on direct sunlight as an energy source to generate electricity, such as solar panels. A stirling converter is a device that produces electricity by converting heat from a solar source;
- Manufacturers of certain components of solar energy systems, specifically, solar grade silicon, silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers for use exclusively in solar energy systems.

The preference also includes the wholesale sales of these systems or components by their manufacturers.

The tax preference expires June 30, 2017.

The exhibit below provides an overview of the solar energy system manufacturing process and shows the materials included in the preference. Stirling converters are not included in the exhibit because they are not currently being produced in Washington.

#### Overview of the Solar Energy System Manufacturing Process



Source: JLARC staff analysis of industry information.

Businesses are required to file an Annual Survey for each year they take the preferential B&O tax rate. The Annual Surveys identify the amount of the preference claimed for the calendar year, as well as information about the number of employees, their wages and benefits, and their status as either full-time, part-time, or temporary workers.

## Legal History

### Over time, Legislature has expanded products covered under the preference

The Legislature began the preference with coverage for businesses that manufacture either solar energy systems or silicon components of these systems. Over time, the Legislature added other solar-related products and materials. However, in its 2013 statement of the intent of the preference, the Legislature focused on jobs in the solar silicon industry.

#### 2004

The Legislature **considered two bills** that provided several incentives to manufacturers of photovoltaic (PV) solar modules: a reduced B&O tax rate, a B&O tax exemption if the manufacturer is located in a county with an unemployment rate of more than 12 percent, a B&O tax credit for creating jobs, and sales, use, and property tax exemptions. According to testimony at a public hearing, the legislation was intended to encourage a certain manufacturer to locate in Ferry County. The bills were not enacted, and the manufacturer did not locate in Washington.

#### 2005

The Legislature **enacted two bills** to encourage in-state production and use of solar energy: one lowered the costs of production, and the other lowered costs to consumers. The first bill, which is the focus of this review, provided a reduced B&O tax rate of 0.2904 percent for businesses manufacturing solar energy systems using photovoltaic modules and for businesses manufacturing silicon components of these systems. The reduced rate also applied to businesses making wholesale sales of the solar energy systems or silicon components they manufacture. The legislation required beneficiaries to file an Annual Report with the Department of Revenue detailing their employment information. The bill set an initial expiration date of June 30, 2014.

The Legislature's intent section for the B&O preference discussed retaining and expanding solar electric industry businesses, attracting new ones, and creating jobs. Testimony noted that manufacturers were waiting to locate in Ferry or Garfield Counties and that others would locate and begin manufacturing in Washington, provided these incentives were passed.

The second bill passed by the Legislature lowered costs for consumers to purchase these systems, creating a cost-recovery incentive program to promote renewable energy systems using solar, wind, or anaerobic digesters. JLARC staff are separately reviewing **this tax preference in 2016**.

The manufacturers discussed in testimony did not locate in Washington.

## 2007

The Legislature **clarified** that the preferential B&O tax rate applied to manufacturing and wholesale sales of “solar grade silicon to be used exclusively in components of” solar energy systems rather than “silicon components” of these systems.

## 2009

As part of a bill that provided a number of tax incentives to various renewable or “green” industries, the Legislature made the following changes to this preference:

1. **Added a number of materials** to the list of qualifying items manufactured or sold at wholesale, including: silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers to be used exclusively in components of solar energy systems; and
2. **Reduced the B&O tax rate** from 0.2904 to 0.275 percent for qualifying manufacturers or wholesalers, matching the rate provided to other solar technology preferences.

## 2011

The Legislature **expanded** the preference to include solar energy systems using **stirling converters**. A stirling converter is a device that produces electricity by converting heat from a solar source. Testimony by a representative for a company at a Senate Ways & Means hearing noted that stirling converters were newly developed technology not covered under the existing tax preference.

## 2012

**JLARC staff reviewed the preference.** The Legislative Auditor recommended the Legislature review and clarify the preference to determine if the progress toward its solar industry objectives was sufficient and to consider identifying targets for solar business retention, attraction, and job creation.

## 2013

The Legislature **extended the expiration date** of the preference to June 30, 2017. The Legislature stated that the objective of the preference is to maintain and grow jobs in the solar silicon industry. The bill did not include targets for solar business retention, attraction, or jobs. It directed JLARC staff to assess the actual fiscal impact of this tax preference in relation to the fiscal estimate and assess changes in employment for firms claiming the preference.

The legislation amended the reporting requirements for the preference to require an Annual Survey instead of an Annual Report. The Annual Survey includes a beneficiary’s tax savings from a preference and has different rules for the disclosure of taxpayer information.

The prime sponsor of the bill testified in a committee hearing that REC Silicon, a solar silicon manufacturer in Moses Lake, had recently had to reduce and lay off workers due to a fiercely competitive global market. The sponsor said that hopefully this extension would allow the company to weather the volatility and eventually hire back those workers and expand.

In the same bill, the Legislature expanded a different sales and use tax preference for semiconductor manufacturers to include some solar energy manufacturers. JLARC staff are reviewing the sales and use tax exemption in 2016.

## Other Relevant Background

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### Taxation of the Solar Energy Industry

The Legislature has provided several other tax preferences for various aspects of the solar industry, including:

- Sales and use tax exemptions for gases and chemicals used in the production of semiconductor materials, including many solar energy system components. JLARC staff are reviewing **this preference in 2016**. It is scheduled to expire in 2018;
- Sales and use tax exemptions for renewable energy machinery and equipment, including solar energy. The preference was reviewed by JLARC staff in 2011 and is scheduled for JLARC staff to review again in 2017. It is scheduled to expire in 2018;
- Sales and use tax exemptions for small solar energy machinery and equipment. The preference is scheduled for JLARC staff to review in 2017. It is scheduled to expire in 2020; and
- A public utility tax credit for utilities administering a cost recovery program for individuals, businesses, and local governments that produce energy using anaerobic digesters, solar power, and wind power. JLARC staff are

reviewing **this preference in 2016**. The right to earn credits expires in 2020.

Solar energy manufacturers also likely qualify for sales and use tax exemptions for manufacturing machinery and equipment.

## **U.S. Trade Dispute with China**

The intent section in the 2013 legislation noted reduced employment in the solar silicon industry due to global conditions.

The United States and China are in a trade dispute over the production of solar cells and other solar component products. In an investigation concluded in 2012, the federal Department of Commerce found that China had provided some subsidies to Chinese producers and exporters of solar cells that warranted a U.S. response, and that Chinese businesses had sold solar cells below cost into the U.S.

Following the investigation, the United States imposed tariffs on imports of solar cells made by Chinese producers and on imported solar panels made from these solar cells. The Chinese Ministry of Commerce then imposed tariffs on certain silicon exports from the United States, including solar silicon.

The solar silicon manufacturer in Moses Lake reported that it had initially been able to avoid the new tariffs using a set of trade rules that applied to materials Chinese businesses imported to use in domestic manufacturing for export. The manufacturer reports that the Chinese Ministry of Commerce suspended that option in September 2014. The manufacturer idled production at its facility in February of 2016, pending progress in resolution of the trade dispute. In May it announced plans to resume production, but noted that the trade negotiations were still ongoing.

## **Public Policy Objectives**

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### **What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

The Legislature stated in 2013 that the public policy objective was to **maintain and grow jobs in the solar silicon industry**. The intent statement for the bill noted recent employment reductions by solar silicon businesses due to global conditions.

This focus on jobs in the solar silicon industry is more narrow than the previous statement of legislative intent for the preference. The Legislature previously spoke more broadly of retaining, expanding, and attracting solar electric industry businesses and creating jobs.

The Legislature also specifically directed JLARC to assess changes in employment for firms claiming the preferential tax rate.

### **Are Objectives Being Met?**

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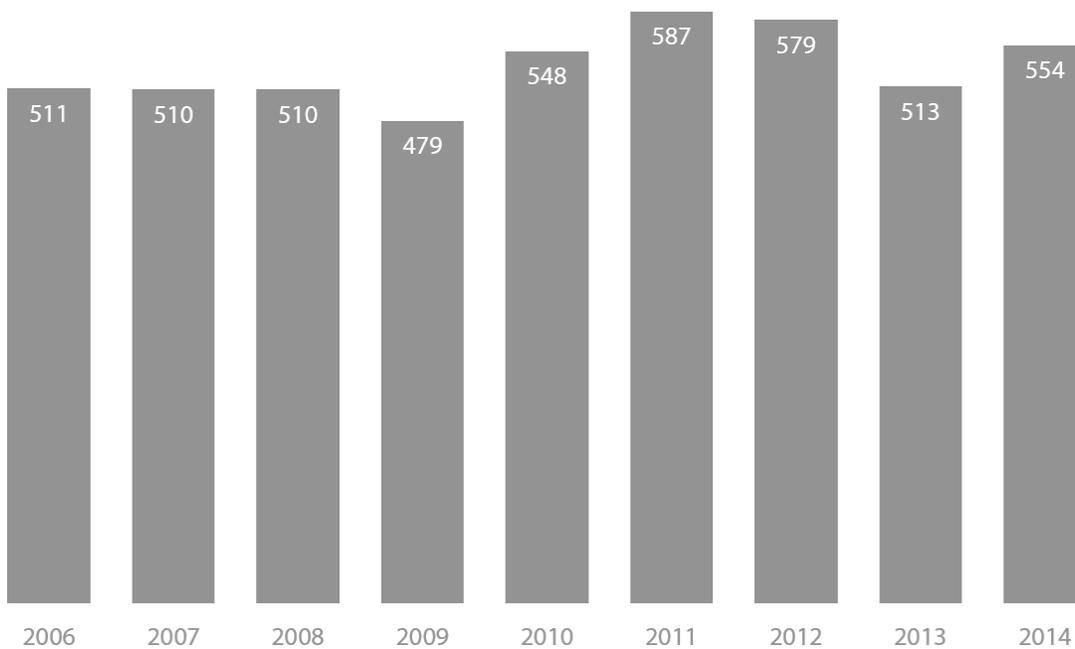
#### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

##### **Maintain and Grow Jobs in the Solar Silicon Industry**

It is unclear whether the preference is achieving its objective of retaining and expanding jobs in the solar silicon industry. The Legislature did not set a target number of jobs to retain. The Legislature also did not define “solar silicon industry,” and the preference applies to businesses that do not produce or use silicon, such as manufacturers of photovoltaic cells made from other materials, and manufacturers of systems using stirling converters. Total employment for all businesses benefitting from the preference has fluctuated.

Beneficiaries report to the Department of Revenue on the number of their employees in Washington each year. The total number of reported employees decreased in 2012 and 2013 but increased to 554 in 2014.

##### **Employment levels with beneficiaries have fluctuated over time**



Source: JLARC staff analysis of DOR Annual Report data.

In 2014, REC Silicon in Moses Lake accounted for 90 percent of the reported **value** of the preference. In 2012, the last year all beneficiaries filed publicly disclosable employment information, REC Silicon was responsible for 93 percent of reported **jobs**.

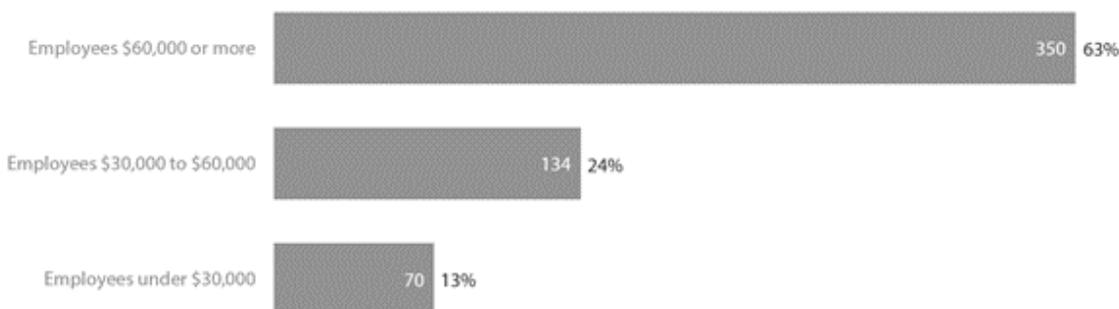
However, the job situation for this solar silicon manufacturer has changed. In February 2016, REC Silicon reported its plan to idle its production in Moses Lake, “dependent on the ongoing negotiations towards a resolution in the solar trade war and the general market development outside China.”

In May 2016, the company announced it would resume production. REC reported in its first quarter 2016 results that its access to Chinese markets continues to be restricted but it is having increased success in penetrating other markets.

### Job Quality

The Legislature has not established requirements or targets for the quality of the jobs it intends for the preference. In 2014, beneficiaries of the preference reported that 63 percent of employees earned \$60,000 per year or more.

### In 2014, beneficiaries reported that 63 percent of their employees earned \$60,000 or more



Source: JLARC staff analysis of DOR Annual Survey data.

Of the 555 total employees in 2014, beneficiaries report 473 (85 percent) were enrolled in medical plans, 453 (82 percent) were enrolled in dental plans, and 448 (81 percent) were enrolled in retirement plans.

### To what extent will continuation of the tax preference contribute to these public policy objectives?

It is unknown how much continuation of the preference will contribute to the objective of maintaining and growing jobs in the solar silicon industry. The largest beneficiary of the preference and the state’s one manufacturer of solar silicon, REC Silicon, idled its production for part of 2016 due to the trade dispute between the U.S. and China. The trade dispute and the

company's ability to access other markets likely have a larger role in determining future job prospects for the manufacturer than the tax preference.

## Beneficiaries

### Who are the entities whose state tax liabilities are directly affected by the tax preference?

#### Direct Beneficiaries

Direct beneficiaries of the preference are businesses manufacturing certain solar energy systems and their components. Five qualifying businesses filed Annual Surveys for Calendar Year 2014.

Business	Location	Solar Product Manufactured	Amount claimed
REC Solar Grade Silicon LLC	Grant County	Solar grade silicon	\$598,000
Itekenenergy LLC	Whatcom County	Solar panels	\$48,000
Silicon Energy LLC	Snohomish County	Solar panels	\$5,000
Samson Solar LLC	Kitsap County	Inverters	Requested Confidentiality
APS America Corp.	Kitsap County	Inverters	Requested Confidentiality

Source: DOR Annual Survey data. Note: Businesses reporting a tax reduction of less than \$10,000 may request that the amount be treated as confidential taxpayer information and not disclosed.

#### Indirect Beneficiaries

To the extent that manufacturers' savings are passed on to customers or result in increased production, solar energy system consumers and other businesses in the manufacturing supply chain may be indirect beneficiaries.

## Revenue and Economic Impacts

### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

The actual amount of savings from the preferential rate in Fiscal Year 2015 was \$551,000. JLARC staff estimate beneficiary savings for the 2015-17 Biennium will be \$1.1 million.

This estimate does not include forecasted growth because the amount of beneficiary savings has fluctuated widely from year to year, and ongoing trade negotiations between the United States and China could affect the levels of business activity in Washington.

#### Estimated 2015-17 Direct Beneficiary Savings for Solar Energy and Silicon Manufacturing Preferential B&O Rate

Fiscal Year	Taxable Gross Income	Estimated Beneficiary Savings
2013	\$234,590,000	\$490,000
2014	\$295,596,000	\$618,000
2015	\$263,520,000	\$551,000
2016	\$263,520,000	\$551,000
2017	\$263,520,000	\$551,000
Preference expires July 1, 2017		

2015-17 Biennium	\$527,040,000	\$1,102,000
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Source: JLARC staff analysis of DOR tax return data.

### Relation to the Fiscal Estimate

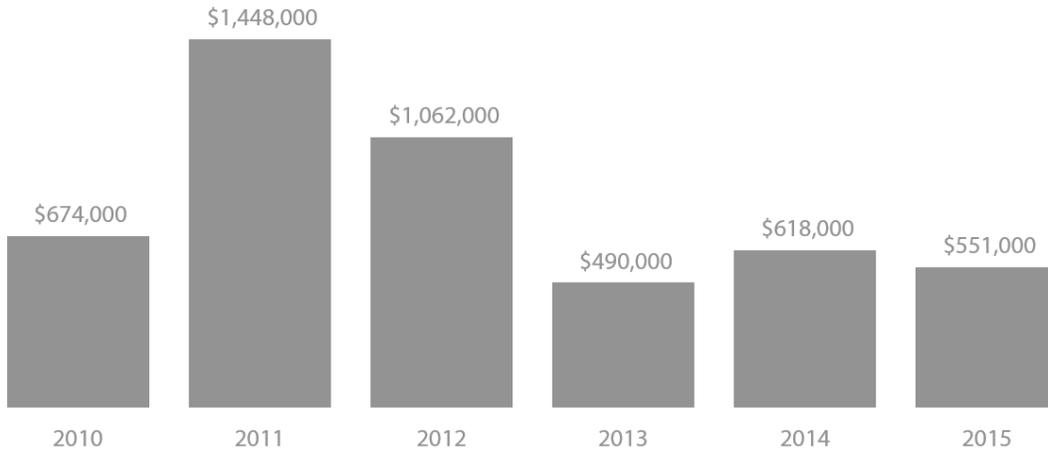
In the 2013 legislation, the Legislature directed JLARC to compare the actual fiscal impact of the preference to the fiscal estimate.

Fiscal estimates provided by the Department of Revenue (DOR) during the 2013 legislative session estimated extending the preference would result in a State General Fund loss of \$974,000 in Fiscal Year 2015.

DOR Estimate for Beneficiary Savings in 2015	2015 Actual Beneficiary Savings	Difference in dollars	Difference as percentage of estimate
\$974,000	\$551,000	\$-423,000	-43%

The actual amount saved by beneficiaries in 2015 was 43 percent less than estimated. However, beneficiary savings has fluctuated over the years.

### The amount of beneficiary savings from the preference has fluctuated widely over the past six years



Source: JLARC staff analysis of DOR tax return data.

### If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?

If the preference were terminated, the solar energy manufacturers currently benefiting would pay a greater amount of B&O tax. The effect on employment and the economy would depend on the extent to which these manufacturers could absorb this increased cost or pass it along to their customers. The manufacturers may have more difficulty passing along increased costs to their customers if prices for their products are set in national or international markets.

### Other States with Similar Preference?

### Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?

No state has an identical tax preference due to the unique nature of Washington’s B&O tax. However, a number of other states offer incentives for solar energy manufacturers. States vary considerably in what activities qualify for the incentives, structure, and employment requirements.

### Qualifying Activities

Other states offer a wide range of incentives for solar energy product manufacturers. Many include other renewable energy products such as wind and geothermal. Some also include manufacturers of products that increase energy efficiency.

## Structure of Incentives

Texas provides a **full exemption** from franchise tax to companies solely engaged in manufacturing, selling, or installing qualifying solar or wind energy devices. Massachusetts provides an income tax **deduction** on income from patents deemed useful for alternative energy equipment, or property made subject to these patents. Other states, such as Arizona and Montana, offer income tax **credits**.

Some states base their incentive amounts on **capital investments**. For instance, Arizona, New Mexico, and South Carolina offer incentives as a percentage of a business's qualifying investment. California offers a **sales and use tax exemption** on property used to design, manufacture, produce, or assemble alternative source products, which includes solar energy products.

## Employment Requirements

Several states require businesses to meet employment targets.

- New Mexico requires one new full-time employee for every \$500,000 of expenditures up to \$30 million and one new full-time employee for every \$1 million over \$30 million, so that a business investing \$50 million could be eligible for \$2.5 million in incentives, and would be required to create **80 new jobs**.
- South Carolina requires businesses to create one job per \$1 million they invest, and jobs must pay at least 125 percent of the state's average annual median wage. The same business investing \$50 million would be eligible for \$5 million in incentives and would be required to create 50 jobs.
- Virginia requires businesses to create at least 200 jobs for its grant program, which grants up to \$9 million and requires at least \$50 million in investment.
- Mississippi requires businesses to create 250 new jobs and invest \$50 million in return for an exemption from all income, franchise, sales, and use taxes for ten years.

## Applicable Statutes

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### Intent Statement

**Findings—Intent—2013 2nd sp.s. c 13:**"(1) The legislature finds that to attract and maintain clean energy technology manufacturing businesses, a competitive business climate is crucial. The legislature further finds that specific tax preferences can facilitate a positive business climate in Washington. The legislature further finds that businesses in the solar silicon industry have had to reduce employment due to global conditions. Therefore, the legislature intends to extend a preferential business and occupation tax rate to manufacturers and wholesalers of specific solar energy material and parts to maintain and grow jobs in the solar silicon industry.

(2) The joint legislative audit and review committee, as part of its tax preference review process, must assess the actual fiscal impact of this tax preference in relation to the fiscal estimate for the tax preference and assess changes in employment for firms claiming the preferential tax rate." [2013 2nd sp.s. c 13 § 901.]

### RCW 82.04.294

#### **Tax on manufacturers or wholesalers of solar energy systems. (Expires June 30, 2017.)**

(1) Upon every person engaging within this state in the business of manufacturing solar energy systems using photovoltaic modules or stirring converters, or of manufacturing solar grade silicon, silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers to be used exclusively in components of such systems; as to such persons the amount of tax with respect to such business is, in the case of manufacturers, equal to the value of the product manufactured, or in the case of processors for hire, equal to the gross income of the business, multiplied by the rate of 0.275 percent.

(2) Upon every person engaging within this state in the business of making sales at wholesale of solar energy systems using photovoltaic modules or stirring converters, or of solar grade silicon, silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers to be used exclusively in components of such systems, manufactured by that person; as to such persons the amount of tax with respect to such business is equal to the gross proceeds of sales of the solar energy systems using photovoltaic modules or stirring converters, or of the solar grade silicon to be used exclusively in components of such systems, multiplied by the rate of 0.275 percent.

(3) Silicon solar wafers, silicon solar cells, thin film solar devices, solar grade silicon, or compound semiconductor solar wafers are "semiconductor materials" for the purposes of RCW 82.08.9651 and 82.12.9651.

(4) The definitions in this subsection apply throughout this section.

(a) "Compound semiconductor solar wafers" means a semiconductor solar wafer composed of elements from two or more different groups of the periodic table.

(b) "Module" means the smallest nondivisible self-contained physical structure housing interconnected photovoltaic cells and providing a single direct current electrical output.

(c) "Photovoltaic cell" means a device that converts light directly into electricity without moving parts.

(d) "Silicon solar cells" means a photovoltaic cell manufactured from a silicon solar wafer.

(e) "Silicon solar wafers" means a silicon wafer manufactured for solar conversion purposes.

(f) "Solar energy system" means any device or combination of devices or elements that rely upon direct sunlight as an energy source for use in the generation of electricity.

(g) "Solar grade silicon" means high-purity silicon used exclusively in components of solar energy systems using photovoltaic modules to capture direct sunlight. "Solar grade silicon" does not include silicon used in semiconductors.

(h) "Stirling converter" means a device that produces electricity by converting heat from a solar source utilizing a stirling engine.

(i) "Thin film solar devices" means a nonparticipating substrate on which various semiconducting materials are deposited to produce a photovoltaic cell that is used to generate electricity.

(5) A person reporting under the tax rate provided in this section must file a complete Annual Survey with the department under RCW 82.32.585.

(6) This section expires June 30, 2017.

[2013 2nd sp.s. c 13 § 902; 2011 c 179 § 1; 2010 c 114 § 109; 2009 c 469 § 501; 2007 c 54 § 8; 2005 c 301 § 2.]

## Recommendations

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### Legislative Auditor Recommendation

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**The Legislature should review and clarify the B&O tax preference for solar energy and silicon product manufacturers because the intent statement appears narrower than the types of businesses that qualify for the preference. In clarifying, the Legislature should provide a performance statement and relevant metrics such as a jobs target to measure the preference's effectiveness.**

- In 2013, the Legislature stated its intent for the preference was to “maintain and grow jobs in the solar silicon industry.” However, in addition to the state’s one solar silicon manufacturer, the preference also applies to manufacturers of solar energy systems and other components. These include some products that do not use solar silicon such as stirling converters. Is the Legislature’s concern focused narrowly on jobs for the solar silicon manufacturer or more broadly on the wider range of manufacturers that may benefit from the preference? An earlier statement of intent addressed solar electric industry businesses.
- It is unclear whether the preference is achieving its objective of retaining and expanding jobs in the solar silicon industry. Overall job numbers have fluctuated. The state’s solar silicon manufacturer has idled its facility for part of 2016 due to a trade dispute between the United States and China. The company has resumed production but notes that access to Chinese markets continues to be restricted.
- The Legislature has not yet provided targets on the number and quality of jobs it intends from the preference or other relevant metrics. To help future reviews, if there are job targets for multiple groups, the Legislature should consider specifying separate targets for each group.
- Testimony for the 2013 legislation suggested that the extension of the preference’s expiration date might help the solar silicon manufacturer weather the volatility of the trade dispute. The Legislature has at least one precedent (B&O tax preference for beef processors) of linking the expiration of a preference to the reopening of overseas markets.

The tax preference expires June 30, 2017.

**Legislation Required:** Yes

**Fiscal Impact:** Depends on legislative action.

## **Letter from Commission Chair**

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Available December 2016.

## **Commissioners' Recommendation**

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Available December 2016.

## **Agency Response**

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If applicable, available December 2016.

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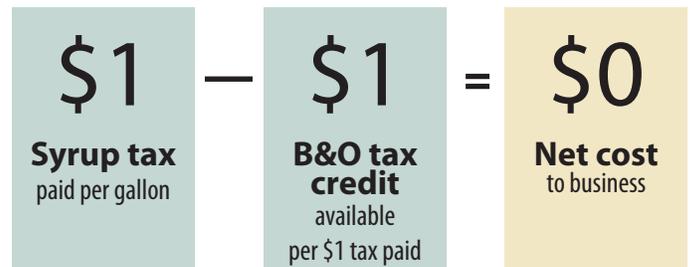
# Beverage Syrup Taxes Paid

JULY 2016

Inferred Objectives	Results
Provide tax relief to the restaurant industry by offsetting syrup taxes paid	Mixed: Some but not all get tax relief
Fund the Violence Reduction and Drug Enforcement (VRDE) Account	No longer necessary: Account eliminated in 2009

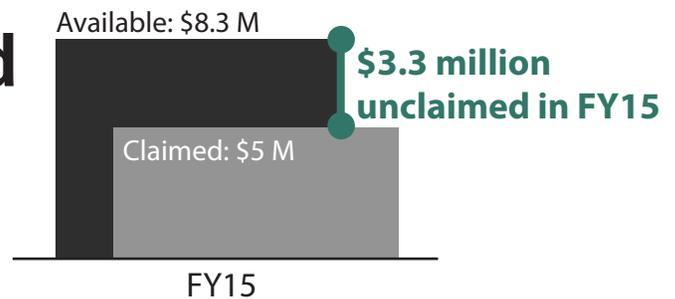
## B&O tax credit available to offset syrup taxes paid

Eligible businesses: Full-service and fast food restaurants, convenience stores, and others that buy syrup to make carbonated drinks to sell



## 40% of credit is unclaimed each year

Many restaurants and other businesses do not claim credit to get tax relief.

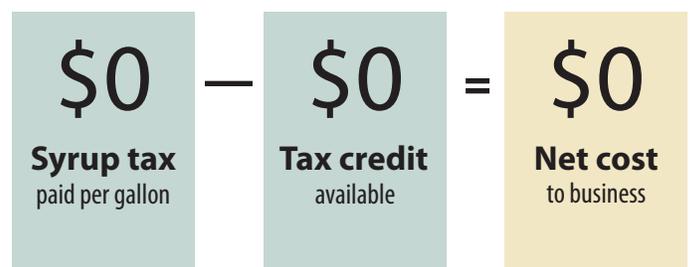


## VRDE account eliminated in 2009

Syrup tax revenues are no longer dedicated to funding violence reduction and drug enforcement, and are now deposited in the state General Fund.

## Eliminating the syrup tax would achieve the tax relief objective

This would make the B&O tax credit against syrup tax paid unnecessary.



**RECOMMENDATION: The Legislature should repeal the syrup tax and the associated B&O tax credit.**

The preference is not providing all of the intended tax relief for businesses that buy syrup and the Legislature made policy decisions to eliminate the VRDE account in 2009.

**For more information, contact:**

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The complete report is at [citizentaxpref.wa.gov](http://citizentaxpref.wa.gov).

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Syrup Taxes Paid | B&O Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
<p>Businesses that sell soft drinks they make using carbonated beverage syrup may take a credit against their B&amp;O tax for the amount of syrup tax they have paid on their purchases of carbonated beverage syrup.</p> <p>The syrup tax rate is \$1 per gallon of carbonated beverage syrup.</p> <p>The preference has no expiration date.</p>	<p><b>B&amp;O</b> RCW 82.04.4486</p>	<p>\$10 million</p>

Public Policy Objective
<p>The Legislature did not state the public policy objective for this preference. JLARC staff infer the public policy objective was to provide tax relief to the restaurant industry by offsetting their syrup tax liability while maintaining funding for the Violence Reduction and Drug Enforcement (VRDE) account.</p>

Recommendations
<p><b>Legislative Auditor’s Recommendation</b></p> <p><b>Repeal:</b> the syrup tax and the associated B&amp;O tax credit should be repealed because:</p> <ul style="list-style-type: none"> <li>• The syrup tax preference is not providing all of the intended tax relief for businesses that buy syrup; and</li> <li>• The Legislature made policy decisions to eliminate the VRDE account and no longer dedicate syrup tax revenues to violence reduction and drug enforcement.</li> </ul> <p><b>Commissioner Recommendation:</b> Available in October 2016</p>

### Details on this Preference

#### What is the Preference?

This preference is a business and occupation (B&O) tax credit for businesses selling soft drinks made using carbonated beverage syrup.

Businesses pay a separate syrup tax of \$1 per gallon on the soft drink syrup they purchase. Businesses are eligible to take a B&O tax credit for the amount of syrup tax they pay if the syrup is used to make soft drinks sold to customers.

Examples of this include restaurants selling glasses of soft drinks to customers, or fast food establishments and convenience stores selling drinks from a drink dispenser. The preference does not apply to pre-bottled soft drinks.

#### Legal History

##### Washington’s Syrup Tax

###### 1989

The Legislature passed the “Omnibus Alcohol and Controlled Substances Act,” which added new or additional taxes to sales of wine, beer, spirits, cigarettes, carbonated beverages, and syrups used to make carbonated beverages. Revenue from these taxes was to be deposited in a special account and directed toward programs to combat youth and adult alcohol and drug abuse.

The carbonated beverage tax originally applied to canned or bottled carbonated drinks at a rate of 0.084 cents per ounce (about one cent per 12 ounce container) and a syrup tax of \$0.75 per gallon applied to sales of syrup used to make such drinks. Both taxes were scheduled to expire July 1, 1995.

## 1994

In March, the Legislature made a number of changes to the carbonated beverage and syrup taxes, then referred the proposed law (Referendum 43) to voters for ratification or rejection in the November 1994 general election. The changes included:

- Eliminating the carbonated beverage tax (0.084 cents per ounce);
- Increasing the syrup tax rate from \$0.75 to \$1 per gallon;
- Repealing the July 1, 1995, expiration date for the syrup tax and the other remaining taxes imposed by the 1989 Omnibus Act; and
- Renaming the fund into which the syrup tax receipts were deposited to the “Violence Reduction and Drug Enforcement (VRDE) Account.”

In November, Washington voters approved Referendum 43 and enacted all of the above changes.

## 1997, 1998

For two successive years, the Legislature passed bills that would have reduced syrup taxes on restaurants. The 1997 bill cut the syrup tax rate in half (to \$0.50 per gallon) and made up the difference with an appropriation from the State General Fund to the VRDE account. The 1998 bill created a B&O tax credit equal to 50 percent of the syrup tax paid by businesses.

In both cases, the Governor vetoed the portion of the bill reducing their taxes, noting the legislation was not consistent with voters’ wishes in Referendum 43 to fund programs to address youth violence and drug enforcement.

## 2006

The Legislature enacted this preference, a B&O tax credit for syrup taxes paid by businesses that purchased syrup and sold carbonated beverages made with it. All businesses that bought syrup to make carbonated drinks continued to pay the \$1.00 per gallon syrup tax, with the syrup tax revenues deposited into the VRDE account. However, businesses that **sold** the carbonated beverages they made with the syrup could claim a credit against their B&O tax equal to the amount of syrup tax they had previously paid.

The B&O tax credit was phased in over four years, beginning July 1, 2006 (see below). The preference has not been altered since enacted.

Percent Syrup Tax Paid Credited Against B&O Tax	Effective Period
25%	7/01/2006 through 6/30/2007
50%	7/01/2007 through 6/30/2008
75%	7/01/2008 through 6/30/2009
100%	7/01/2009 and after

In legislative hearings, the Department of Revenue questioned the policy of crediting one tax against another, noting that this tended to hide the true incidence of the tax and increase the complexity of the tax system. Representatives of the Washington Restaurant Association noted that this structure maintained VRDE account funding, while also providing tax relief to the industry.

The fiscal note provided to the Legislature estimated that, when fully phased in, the total B&O credits taken would equal the amount of syrup tax collected in each fiscal year and that the B&O tax credit would fully reimburse all businesses for the amount of syrup tax they had paid.

## 2009

To consolidate accounting funds, the Legislature eliminated the VRDE account and several other dedicated accounts and directed all revenue sources that had previously funded them (including the syrup tax) to be deposited into the State General Fund.

## Other Relevant Background

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### Definitions

“Syrup” means a concentrated liquid that is added to carbonated water to produce a carbonated beverage.

“Carbonated beverage” includes any nonalcoholic liquid intended for human consumption that contains carbon dioxide, whether obtained by natural or artificial means.

### 2010 Carbonated Beverage Tax

In 2010, the Legislature enacted a temporary carbonated beverage tax of \$0.02 per 12 ounces. The tax was part of a larger bill that imposed sales tax on candy and bottled water to help close a budget gap, and was to be in effect from June 1, 2010, to June 30, 2013.

In November 2010, Washington voters approved Initiative 1107, which repealed the carbonated beverage tax, the sales tax on candy and bottled water, and other tax changes made by the Legislature earlier that year. The carbonated beverage tax was only in effect from June 1 to November 30, 2010. The 2010 legislative action and initiative did not involve the syrup tax.

### Other Tax Preferences Directed to Restaurants

Additional tax preferences are available to restaurants or food service businesses. Beneficiaries may also qualify for broader tax preferences.

#### Tax Preferences Specifically Directed to Food Service Businesses

Preference	Tax Type	Enacted	JLARC Staff Review?
Purchases of food or food ingredients that become part of a meal sold by a restaurant	Sales and use tax exemption	1977	Exempted from JLARC review
Free meals provided by restaurants to their employees	B&O tax exemption; Sales and use tax exemptions	2011, clarified in 2015	Not yet reviewed by JLARC staff
Returnable containers for beverages and food	Sales and use tax exemption	1974	Expedited review in 2010
Flavor-imparting items	Sales and use tax exemptions	2013; expires 2017	<u>JLARC staff review in 2016</u>

Source: JLARC staff analysis of tax law.

### Public Policy Objectives

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#### What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?

The Legislature did not state the public policy objective for this preference when it was enacted in 2006.

JLARC staff infer the public policy objective was to **provide tax relief** to help the restaurant industry by offsetting their syrup tax liability while **maintaining funding for the Violence Reduction and Drug Enforcement (VRDE) account**.

These inferred objectives are based on statements made in 2006 committee hearings by the prime sponsor and Washington Restaurant Association representatives.

This preference was enacted prior to the Legislature’s requirement to provide a performance statement for each preference.

#### Are Objectives Being Met?

#### What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?

In terms of providing tax relief, the preference is not providing tax relief to all the eligible businesses that pay syrup tax. The tax credit is consistently underutilized.

The objective to maintain funding for the Violence Reduction and Drug Enforcement (VRDE) account is no longer relevant due to policy decisions the Legislature has made. The Legislature has repealed the account and no longer dedicates syrup tax revenues to pay for violence reduction and drug enforcement.

### Provide Tax Relief

When the Legislature enacted the preference in 2006, the fiscal note estimated that, when fully phased in, the tax credit would completely offset syrup tax revenues. The Department of Revenue (DOR) assumed that all businesses that could claim the credit would do so.

Instead, the tax credits claimed by qualifying businesses have consistently been less than the total syrup tax collected. In each fiscal year since 2010, about 40 percent of the syrup tax paid has not been claimed as a B&O tax credit.

### B&O Tax Credit Not Offsetting About 40% of Syrup Tax Revenues (\$ in Millions)

Fiscal Year	Syrup Tax Collected	B&O Credit Claimed by Beneficiaries	Difference (remains in general fund)	% Syrup Tax Not Offset by Credit
2010	\$8.4	(\$4.9)	\$3.5	42%
2011	\$8.1	(\$5.1)	\$3.0	37%
2012	\$9.2	(\$5.2)	\$4.0	44%
2013	\$8.2	(\$5.0)	\$3.2	39%
2014	\$8.2	(\$5.1)	\$3.1	38%
2015	\$8.3	(\$5.0)	\$3.3	40%

Source: JLARC staff analysis of DOR tax return data for syrup tax credit – FY 2010 – 2015; DOR data on total syrup tax collected – FY 2010 – 2015.

In Fiscal Year 2015, more than 2,300 businesses used the credit to offset \$5 million worth of B&O tax. That is juxtaposed with over 14,000 restaurants in Washington.

Possible reasons for the gap between the total syrup tax paid and the B&O credit claimed by beneficiaries include:

- DOR has documented persistent errors with the B&O tax credit, with qualifying businesses often not claiming the credit and some non-qualifying businesses trying to use it. Both DOR and Washington Restaurant Association representatives suggest this could be a lack of awareness by restaurants that are eligible for the credit.
- Only businesses that sell carbonated beverages they make with syrup directly to customers are eligible to use the B&O tax credit. Those not qualifying to use the preference include individuals who purchase syrup to make carbonated beverages for their own consumption, and businesses that provide carbonated beverages free of charge to employees or others.

### Maintain Funding for VRDE account

This inferred objective is no longer relevant because of policy decisions made by the Legislature.

In 2006, the Legislature made the policy decision to have no net increase in state funds from the syrup tax. The fiscal note for the 2006 legislation creating the preference assumed the tax credit would completely offset syrup tax revenues when fully phased in.

In 2009, the Legislature eliminated the VRDE account into which syrup tax revenues had been deposited. Since that time, syrup tax revenues have been deposited into the State General Fund and no longer dedicated to pay for violence reduction and drug enforcement.

### To what extent will continuation of the tax preference contribute to these public policy objectives?

While continuing the preference will provide tax relief to some restaurants and other businesses that purchase syrup to make carbonated beverages they sell to customers, it is not meeting the inferred objective of fully offsetting the syrup tax paid by businesses.

The inferred objective of maintaining funding for the VRDE account is no longer relevant due to policy decisions by the Legislature.

## **If the public policy objectives are not being fulfilled, what is the feasibility of modifying the tax preference for adjustment of the tax benefits?**

The Legislature could achieve the inferred public policy objective of providing tax relief to businesses paying the syrup tax by eliminating the syrup tax altogether. This would make the B&O tax credit against syrup tax paid unnecessary.

## **Beneficiaries**

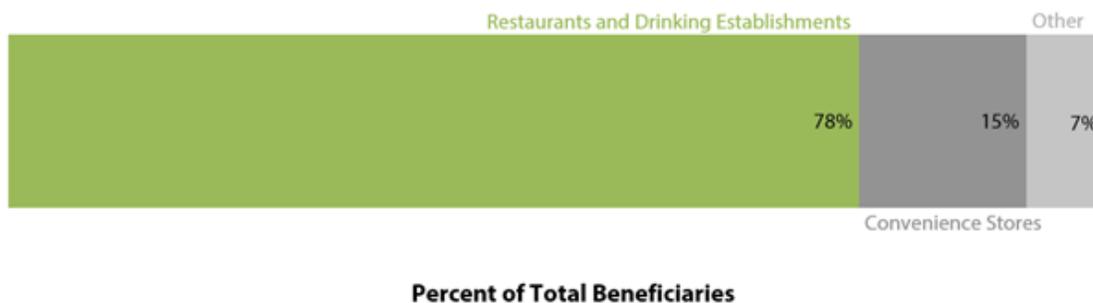
### **Who are the entities whose state tax liabilities are directly affected by the tax preference?**

#### **Direct Beneficiaries**

Direct beneficiaries are businesses that pay syrup tax and take a tax credit against B&O tax they owe. To be eligible for the credit, the businesses must use the syrup to make soft drinks that they sell to customers for immediate consumption.

In Fiscal Year 2015, 2,326 businesses benefited from this preference.

#### **78% of Beneficiaries in FY 2015 Were Restaurants or Drinking Establishments**



Source: JLARC staff analysis of Department of Revenue B&O tax credit detail for Fiscal Year 2015.

The preference does not apply to all businesses that pay the syrup tax.

- Businesses that use syrup to make carbonated beverages for their own use or that are not sold directly to consumers are not eligible.
- Wholesalers that sell syrup to non-taxable entities, such as the federal government or tribal customers, must pay the tax on behalf of the non-taxable entities. The wholesalers are prohibited from using the credit because they only sell syrup, not the beverages made with the syrup.

#### **Indirect Beneficiaries**

Customers of businesses claiming the tax credit may be indirect beneficiaries to the extent the credit is passed on in the carbonated beverage prices charged by restaurants and others.

## **Revenue and Economic Impacts**

### **What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?**

JLARC staff identified the actual B&O credits claimed by direct beneficiaries for Fiscal Years 2014 and 2015 from Department of Revenue tax return data. The actual beneficiary savings for Fiscal Year 2015 was \$5,004,000. JLARC staff estimate the beneficiary savings for the 2017-2019 Biennium at \$10 million.

**Estimated 2017-19 Direct Beneficiary Savings for B&O Tax Credit for Syrup Taxes Paid**  
2016 Preliminary Tax Preference Performance Reviews - Page 140

Fiscal Year	B&O Tax Credit Claimed
2014	\$5,075,000
2015	\$5,004,000
2016	\$5,000,000
2017	\$5,000,000
2018	\$5,000,000
2019	\$5,000,000
2017-19 Biennium	\$10,000,000

Source: Fiscal Years 2014-15 JLARC staff analysis of Department of Revenue tax return data. No growth in tax preference due to historical lack of growth for preference and predicted future declines in soda pop sales.

**If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

If the preference were terminated, current beneficiaries could no longer claim a B&O tax credit for syrup tax they paid. The median credit value taken in Fiscal Year 2015 was \$419. All of the 2,326 businesses using the B&O tax credit used it for the full amount of syrup tax they paid.

The effect of such a termination on employment and the economy would depend on the extent to which certain businesses that sell carbonated beverages could absorb the increased B&O tax or pass it along to their customers.

**Other States with Similar Preference?**

**Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?**

Two other states (Arkansas and West Virginia) and one city (Chicago) impose a tax on syrup used to make carbonated beverages. JLARC staff found no preferences (credits, exemptions, etc.) to reduce or eliminate the syrup tax in those three jurisdictions.

**JLARC Staff Identified Four Jurisdictions with a Carbonated Beverage Syrup Tax**

Jurisdiction	Syrup Tax on . . .	Who Pays?	Rate	Preference Provided?
Washington	Syrup used to make carbonated beverages	Retailers when they purchase from wholesalers	\$1.00/gallon for syrup	Yes. B&O tax credit for full amount of syrup tax paid
Arkansas	Syrups, powders, and other base items used to make soft drinks	Manufacturers, wholesalers, distributors	\$2.00/gallon for syrup	None found
West Virginia	Syrups and dry mixtures used to make soft drinks	Manufacturers, wholesalers, distributors, retailers	\$0.80/gallon for syrup	None found
City of Chicago	Syrup or concentrate used to make soft drinks	Retailers when they purchase from wholesalers	9% of syrup price	None found

## Applicable Statutes

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### RCW 82.04.4486

#### Credit—Syrup taxes paid by buyer.

(1) In computing the tax imposed under this chapter, a credit is allowed to a buyer of syrup to be used by the buyer in making carbonated beverages that are sold by the buyer if the tax imposed by RCW 82.64.020 has been paid in respect to the syrup. The amount of the credit shall be equal to twenty-five percent from July 1, 2006, through June 30, 2007, fifty percent from July 1, 2007, through June 30, 2008, seventy-five percent from July 1, 2008, through June 30, 2009, and one hundred percent after June 30, 2009, of the taxes imposed under RCW 82.64.020 in respect to the syrup purchased by the buyer.

(2) Credit under this section shall be earned, and claimed against taxes due under this chapter, for the tax reporting period in which the syrup was purchased by the person claiming credit under this section. The credit shall not exceed the tax otherwise due under this chapter for the tax reporting period. Unused credit may be carried over and used in subsequent tax reporting periods, except that no credit may be claimed more than twelve months from the end of the tax reporting period in which the credit was earned. No refunds shall be granted for credits under this section.

(3) No credit is available under this section for taxes paid under RCW 82.64.020 before July 1, 2006.

(4) For the purposes of this section, "carbonated beverage," "previously taxed syrup," and "syrup" have the same meanings as provided in RCW 82.64.010.

[ 2006 c 245 § 1.]

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## Recommendations

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### Legislative Auditor Recommendation

#### Legislative Auditor Recommendation

The Legislature should repeal the syrup tax and the associated B&O tax credit because:

- The syrup tax preference is not providing all of the intended tax relief for businesses that buy syrup; and
- The Legislature made policy decisions to eliminate the VRDE account and no longer dedicate syrup tax revenues to violence reduction and drug enforcement.

Eliminating the syrup tax would achieve the inferred objective of providing complete tax relief for businesses that buy syrup. This would be a more effective mechanism than the tax credit on syrup taxes paid, which is not providing tax relief to all businesses that pay syrup tax.

In 2006, the Legislature made the policy decision to have no net increase in state funds from the syrup tax. The fiscal note for the 2006 legislation to create the preference assumed the syrup tax credit would completely offset syrup tax revenues when fully phased in. The Legislature went a step further in 2009 and eliminated the VRDE account altogether. Syrup tax revenues are no longer dedicated to funding violence reduction and drug enforcement. Given these policy decisions by the Legislature, the syrup tax is no longer needed.

**Legislation Required:** Yes.

**Fiscal Impact:** Loss of about \$3 million per fiscal year.

### Letter from Commission Chair

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Available December 2016.

### Commissioners' Recommendation

Available December 2016.

### Agency Response

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If applicable, will be available December 2016.

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# Timber & Wood Products

JULY 2016

Inferred Objectives	Results
Reduce cost of doing business	Achieved
Retain good paying rural jobs	Unclear
Help the timber industry compete	Unclear

## Businesses paid lower tax rate and saved \$13.6M (FY 2015)

**0.4840%**  
*(Standard Rate)*

**0.3424%**  
*(Lower Rate, Including forest & fish surcharge)*

### Timber industry jobs declined but less in rural areas (2006 to 2014)

Urban Job Loss: -40%

Rural Job Loss: -24%

In rural counties, remaining timber industry jobs pay 57% more than average jobs

Source: Data from ESD, 2006-14

### Productivity per worker grew (2006 to 2013)

Wood products manufacturing: 78%

Paper products manufacturing: 1%

Forestry/Logging: 30%

Wood and paper products measured as GDP per job; forestry/logging measured as board feet per job.

Sources: DNR harvest reports, ESD data, BLS data, 2006-13

## Change in WA competitive position unclear

WA's rank for share of industry jobs fell compared to other states

Industry	WA State Rank	
	2006	2015
Wood Product Manuf.	13th	16th
Paper Product Manuf.	17th	21st
Forestry/Logging	8th	9th

Source: U.S. BLS, QCEW data, 2006-15

From 2006-13, business output grew for one industry and declined for another

Industry and Output	Change in Output	
	WA	Nation
Wood Product Manuf. GDP	+16%	-12%
Paper Product Manuf. GDP	-31%	-28%
Forestry/Logging Harvest	<i>no comparable data</i>	

Source: U.S. BLS, QCEW data, 2006-13

**RECOMMENDATION:** The Legislature should review and clarify its objectives and employment goals. The preference has reduced the cost of doing business, but other results are unclear.

For more information, contact:

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The complete report is at [citizentaxpref.wa.gov](http://citizentaxpref.wa.gov).

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Timber and Wood Products | B&O Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
<p>This review covers two tax preferences:</p> <ul style="list-style-type: none"> <li>• A <b>preferential B&amp;O tax rate</b> for various timber industry-related activities including:               <ul style="list-style-type: none"> <li>◦ Extracting timber;</li> <li>◦ Manufacturing or processing for hire timber into timber products or wood products;</li> <li>◦ Manufacturing timber products into other timber products or wood products;</li> <li>◦ Wholesale sales of timber cut by the seller, or certain timber or wood products manufactured by the seller; and</li> <li>◦ Sales of standing timber (but not land) where the timber is cut within 30 months of the sale.</li> </ul> </li> </ul> <p>The applicable B&amp;O tax rate is 0.3424%. This rate is comprised of the preferential B&amp;O tax rate (0.2904%) and a surcharge (0.052%).</p> <p>The preference is scheduled to expire July 1, 2024.</p> <ul style="list-style-type: none"> <li>• A <b>real estate excise tax (REET) exemption</b> for sales of standing timber (but not land) to be cut within 30 months of the sale.</li> </ul> <p>The preference has no expiration date.</p>	<p><b>B&amp;O RCW</b> 82.04.260(12)</p> <p><b>Real Estate Excise RCW</b> 82.45.195</p>	<p><b>Timber and Wood Products Reduced B&amp;O Tax Rate</b> \$30.6 million</p> <p><b>REET Exemption</b> \$978,000</p>

<b>Public Policy Objective</b>
<p>The Legislature did not state the public policy objective for these preferences.</p> <p><b>Timber and Wood Products Reduced B&amp;O Tax Rate</b> JLARC staff infer the public policy objectives were to:</p> <ul style="list-style-type: none"> <li>• Reduce the cost of doing business for the timber industry,</li> <li>• Which would help retain good paying jobs in rural areas, particularly manufacturing jobs; and</li> <li>• Help the timber industry compete nationally and internationally.</li> </ul> <p><b>Standing Timber REET Exemption</b> JLARC staff infer the public policy objective was to help Washington’s wood products and timber industry adjust to structural changes in the industry resulting from federal tax treatment changes and the stock market.</p>

### Recommendations

## Legislative Auditor's Recommendations

### Timber and Wood Products Reduced B&O Tax Rate

**Review and Clarify:** While it is reducing the cost of business, it is unclear how it is impacting employment and competitiveness. As part of the clarification, the Legislature should provide a performance statement identifying the public policy objectives and providing targets and metrics to measure whether the objectives have been achieved.

### Standing Timber REET Exemption

**Continue:** The exemption is achieving the inferred objective of helping Washington's wood products and timber businesses adjust to structural changes in the industry.

**Commissioner Recommendations:** Available in October 2016

## Details on this Preference

### What is the Preference?

This review covers two tax preferences provided for various activities related to Washington's timber and timber product manufacturing and wholesaling industries:

- A preferential business and occupation (B&O) tax rate for a number of different timber industry-related activities, including cutting trees, turning timber into timber products like dimensional lumber or pulp, and turning timber products into other products like paper; and
- A real estate excise tax (REET) exemption for sales of standing timber (but not land) to be cut within 30 months of the sale.

### A Variety of Timber and Wood Product Industry Activities are Eligible for the Preferential B&O Tax Rate

Activity	Preferential B&O Rate*	Rate Without the Preferences
Timber and Wood Products Activities Preferential B&O Tax Rate		
<b>Extracting timber</b> (e.g., cutting, felling or taking trees)	Base Rate	0.2904%
	<u>+ Surcharge</u>	<u>0.052%</u>
	<u>Total Rate</u>	<u>0.3424%</u>
<b>Manufacturing or processing for hire timber into timber products or wood products</b> (e.g., manufacturing timber into wood chips, sawdust, or dimensional lumber)	Base Rate	0.2904%
	<u>+ Surcharge</u>	<u>0.052%</u>
	<u>Total Rate</u>	<u>0.3424%</u>
<b>Manufacturing timber products into other timber products or wood products</b> (e.g., manufacturing wood chips into particle board; manufacturing pulp into paper or paper products)	Base Rate	0.2904%
	<u>+ Surcharge</u>	<u>0.052%</u>
	<u>Total Rate</u>	<u>0.3424%</u>
<b>Wholesale sales of:</b>  <ul style="list-style-type: none"> <li>• Timber cut by the seller</li> <li>• Timber products manufactured from timber or timber products by the seller</li> <li>• Wood products manufactured from timber or timber products by the seller</li> </ul>	Base Rate	0.2904%
	<u>+ Surcharge</u>	<u>0.052%</u>
	<u>Total Rate</u>	<u>0.3424%</u>

Sales of standing timber (but not land) that the buyer must cut within 30 months of the sale	Base Rate	0.2904%	Without preference, subject to combined state and local REET. Combined rate in most counties is 1.55% or 1.78%.
	+ Surcharge	0.052%	
	Total Rate	0.3424%	

(\*) While the preferential B&O tax rate is 0.2904 percent, the tax rate paid by businesses using the preference is actually **0.3424 percent** due to an additional **0.052 percent B&O tax surcharge**.

Source: JLARC staff analysis of RCW 82.04.260(12)(a)-(d).

The real estate excise tax (REET) exemption works in tandem with one part of the B&O preference. The preferences apply to the situation where an owner sells standing timber that the buyer must cut down within 30 months. Without the REET exemption, the seller of the timber would have to pay REET on the gross sales amount. The combined REET rate in most counties is 1.53 or 1.78 percent. With the REET exemption and the B&O preference, the timber seller pays B&O tax instead of REET on the gross sale amount, at the reduced rate of 0.2904 percent combined with the surcharge for a total rate of 0.3424 percent.

Both the preferential 0.2904 percent B&O tax rate and the 0.052 percent surcharge are scheduled to expire July 1, 2024. The standing timber REET exemption does not have a stated expiration date, but it applies only to standing timber sales subject to the preferential B&O tax rate. If the B&O tax preferential rate for sales of standing timber expires, the REET preference would no longer apply.

Most businesses using the B&O tax preference (except for those qualifying as small harvesters) are required to complete an Annual Survey with the Department of Revenue (DOR). The Annual Survey provides information on the amount of the tax preference realized by the business, as well as on their number of employees, employee wages, and benefits offered. Small harvesters are not required to file an Annual Survey or Annual Report.

## Legal History

### Prior to 2006

Before 2006, extracting, wholesale sales, and manufacturing of timber and wood products were taxed in the general manner prescribed under B&O tax law or REET.

### Tax Treatment and Rates Prior to 2006

Activity	Tax Treatment Prior to 2006
Sales of standing timber	State and local REET – combined rates varied, but rate for most counties was 1.53% or 1.78%
Extracting (severing) timber	Extracting B&O tax - 0.484%
Manufacturing timber into timber products or wood products	Manufacturing B&O tax - 0.484%
Manufacturing timber products into other timber products or wood products	Manufacturing B&O tax - 0.484%
Wholesale sales of timber extracted by, or timber products or wood products, form timber, or other timber products manufactured by the seller	Wholesaling B&O tax - 0.484%

Source: JLARC staff analysis of Title 82.04 RCW statutory history.

### 2006

The Legislature enacted a reduced B&O tax rate for the following activities:

- Extracting or extracting for hire timber
- Manufacturing or processing for hire of timber into timber products or wood products
- Selling timber by the extractor at wholesale
- Selling timber products or wood products manufactured by the seller at wholesale

The preference was phased in, with a **0.4235** percent rate applying for the first year (July 1, 2006, to June 30, 2007), and a **0.2904** percent rate applying after.

The Legislature added a surcharge of **0.052** percent to the **0.2904** preferential rate to help the state fund implementation of the *Forest and Fish Report*. The effective B&O tax rate after adding in the surcharge was **0.3424** percent. Application of the surcharge began in July 2007 and can be suspended based on criteria established in statute.

The Report's production was a joint effort by federal, state, and tribal governments, and the timber and fishing industries. The effort was intended to develop and implement laws, rules, and programs to comply with the Endangered Species Act, restore and maintain minimum riparian habitat to support a harvestable supply of fish, meet Clean Water Act standards, and keep the timber industry economically viable.

The Legislature established a July 1, 2024, expiration date for the preferential rate and surcharge. Businesses using the preferential rate were required to complete an Annual Survey with the Department of Revenue (DOR). The Survey provides information on the amount of the tax preference realized by the business, as well as on their number of employees, employee wages, and benefits offered.

## 2007

The Legislature added the real estate excise tax (REET) preference exempting sales of standing timber (but not the land) from REET when the timber was to be cut within 30 months of sale. These sales were instead subject to B&O tax at the preferential rate.

As part of the same bill, the Legislature expanded and modified the preferential 0.2904 B&O tax rate (and surcharge) in the following ways:

- Expanded the preferential rate (and surcharge) to apply to sales of standing timber sold separately from the land when the buyer cuts the timber within 30 months of the sale.
- Within the category of “manufacturing timber products into other timber or wood products”:
  - Added “manufacturing using short rotation hardwood, pulp from reclaimed paper or paper products” to the eligible activities, and
  - Eliminated “manufacturing products using recycled paper products” from eligibility.
- Defined “paper and paper products” and excluded books, newspapers, magazines, and other printed materials from eligibility.

## 2008

The Legislature expanded the preference to add “recycled paper” as qualifying timber products and “biocomposite surface products” as qualifying wood products. The provisions were made retroactive to July 1, 2007. The prime sponsor noted the legislation impacted only one known firm. The company thought the preference as enacted in 2006 applied to it, but were instructed otherwise by DOR.

## 2013

As directed by statute, DOR suspended the B&O tax surcharge from February 28, 2013, through June 30, 2013, (the remainder of the 2011-13 biennium) because receipts in the Forest and Fish Account fund exceeded the \$8 million biennial limit established in statute. During this period, beneficiaries paid the B&O tax rate of 0.2904 percent. The surcharge was reinstated July 1, 2013, re-establishing the effective rate at 0.3424 percent.

## Other Relevant Background

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### Definitions

Item	Defined in statute as:
Timber	Forest trees, standing or down, on private or publicly owned land. The definition specifically excludes Christmas trees cultivated through agricultural methods and short-rotation hardwoods.

<b>Timber products</b>	<ul style="list-style-type: none"> <li>• Logs, wood chips, sawdust, wood waste, and similar products obtained wholly from processing timber, short-rotation hardwoods, or both;</li> <li>• Pulp, including market pulp and pulp derived from recovered paper or paper products; and</li> <li>• Recycled paper, but only when used to manufacture biocomposite surface products.</li> </ul>
<b>Wood products</b>	Paper and paper products; dimensional lumber; engineered wood products such as particleboard, oriented strand board, medium density fiberboard, and plywood; wood doors; wood windows; and biocomposite surface products.
<b>Paper and paper products</b>  (A subset of wood products)	<p>Products made of interwoven cellulosic fibers held together largely by hydrogen bonding, including: newsprint; office, printing, fine, and pressure-sensitive papers; paper napkins, towels, and toilet tissue; kraft bag, construction and other kraft industrial papers; paperboard, liquid packaging containers, containerboard, corrugated, and solid-fiber containers including linerboard and corrugated medium; and related types of cellulosic products containing primarily, by weight or volume, cellulosic materials.</p> <p>Specifically excludes: books, newspapers, magazines, periodicals, and other printed publications, advertising materials, calendars, and similar printed materials.</p>
<b>Biocomposite surface products</b>	Surface material products containing, by weight or volume, more than 50% recycled paper and that also use nonpetroleum-based phenolic resin as a bonding agent.
<b>Recycled paper</b>	Paper and paper products with 50% or more of their fiber content from postconsumer waste.

Source: JLARC staff analysis of RCW 82.04.260(12)(e).

## B&O Tax Surcharge Funds Forest and Fish Support Account

Receipts from the surcharge (0.052 percent) are deposited into the Forest and Fish Support Account established under RCW 76.09.405. These funds are used to implement adaptive management and other recommendations to improve riparian habitat from the legislatively mandated *Forests and Fish Report*.

Statute requires the surcharge be suspended if either of the following events occur:

- Receipts from the surcharge total at least \$8 million during any fiscal biennium; or
- The Office of Financial Management certifies that the federal government has appropriated at least \$2 million for federally recognized Indian tribes in Washington in any federal fiscal year for participation in *Forest and Fish Report*-related activities.

## Other Tax Preferences Available to the Timber Industry, and Timber Product and Wood Product Manufacturers

	<b>Began in:</b>	<b>Type:</b>	<b>Restrictions on Use:</b>	<b>Items Impacted:</b>	<b>Expiration Date?</b>	<b>JLARC Staff Review</b>
Timber Property Tax Exemption	1971 (federal and private land)  2004 (state land)	State and local property taxes. (Timber is instead subject to 5% timber excise tax at the time it is harvested)	None	Timber on land is not subject to property tax	None	Expedited review in 2010

High Unemployment County Sales & Use Tax Deferral/ Waiver for Manufacturing Facilities	1985	Sales and use tax deferral and eventual exemption for construction and equipment purchased by new or expanding businesses in certain counties and all CEZs	Business must be located in a county with a high unemployment rate. Facility must stay operational seven years to receive full exemption	Construction of new structures and expansion of existing structures; industrial fixtures, equipment, and support facilities integral to the manufacturing operation	July 1, 2020	None currently scheduled
Rural County & Community Empowerment Zone (CEZ) New Jobs B&O Tax Credit	1986	B&O tax credit for manufacturers and other businesses that hire workers in rural counties or CEZs	Business must be located in rural county or CEZ. Business must increase its employment by at least 15% within one year of first hiring to take the credit	Provides up to a \$4,000 B&O tax credit for each new position created by manufacturing and other businesses that hire workers in rural counties or CEZs	None	Full review in 2013
Small Harvester B&O Tax Deduction	1990	B&O tax deduction for up to \$100,000 per year from gross receipts reported from timber harvesting activities	User must be a "small harvester" with 2 million board feet or less of harvested timber per calendar year	Eliminates B&O tax on the first \$100,000 of gross income, but only available to persons harvesting 2 million or less board feet per CY	None	Expedited review in 2015
Manufacturers' Machinery and Equipment Sales & Use Tax Exemption	1995	Sales and use tax exemption	Available to any manufacturer. Not available for hand-powered tools, items with useful life less than one year, or buildings	Purchases of machinery and equipment used in manufacturing, processing, repair and maintenance work	None	Exempt from review per RCW 43.136.045
Hog Fuel Sales & Use Tax Exemption	2009	Sales and use tax exemption for sales of hog fuel to produce electricity, steam, heat, or biofuel	If business closes a facility in WA and a job loss resulted, business must pay back last two years of exemptions claimed	Hog fuel is defined as wood waste and other wood residuals, including forest derived biomass; does not include firewood or wood pellets	June 30, 2024	Full review in 2011
Log Transportation Preferential Public Utility Tax (PUT) Rate	2009-2013 (expired) 2015 (permanent)	Reduced PUT rate (1.28%) for log transportation businesses	None	None	Legislature explicitly made permanent in 2015	Expedited review in 2011

Source: JLARC staff analysis of tax statutes and Department of Revenue tax incentives web site.

## Public Policy Objectives

### What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?

The Legislature did not state a public policy objective when it provided the B&O tax preferential rate for various timber industry-related activities or the real estate excise tax (REET) exemption for sales of standing timber. The preferences were enacted prior to the Legislature's requirement to provide a performance statement for each preference.

### Reduced B&O Tax Rate for Timber and Wood Products

JLARC staff infer the public policy objectives for the reduced B&O tax rate were to:

1. **Reduce the cost of doing business** for the timber industry,
2. Which would help **retain good paying jobs in rural areas**, particularly manufacturing jobs, and
3. **Help the timber industry compete nationally and internationally.**

These inferred objectives are based on statements made by the prime sponsors and industry representatives in 2006 and 2007 during legislative fiscal committee hearings. The Legislature did not identify any specific job targets or job quality measures.

### **Standing Timber REET Exemption**

JLARC staff infer the public policy objective was to **help Washington's wood products and timber industry** adjust to structural changes in the industry resulting from changes in federal tax treatment and the stock market. This is based on statements made by the prime sponsor and others in 2007 committee hearings.

The prime sponsor, as well as industry and Department of Revenue representatives, testified in legislative fiscal committee hearings that many large timber companies had changed their business structure to have separate corporate structures for their timber growing and their extracting and manufacturing activities. They indicated this restructuring was in response to federal tax changes and stock market pressures. Companies that restructured saw a change in tax treatment on timber sold from one related entity to another. Such sales became subject to REET. Previously such transactions made within a vertically integrated company had not been taxable under REET.

### **Are Objectives Being Met?**

#### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

There are mixed results for meeting the three inferred objectives of the **timber and wood products reduced B&O rate**.

The **standing timber REET exemption** is meeting its inferred objective of helping the timber industry adjust to structural changes in the industry by stabilizing the tax burden for these businesses as they restructured.

### **Reduced B&O Rate for Timber and Wood Products**

There are mixed results for meeting the three inferred objectives for the timber and wood products preferential B&O rate.

#### **1) Reduce Cost of Doing Business**

The preference is achieving the inferred objective of reducing the cost of doing business in Washington for various timber industry activities by providing a lower B&O tax rate of 0.2904 percent. This is the same B&O tax rate provided to the aerospace manufacturing and aluminum manufacturing industries. However, the actual tax rate paid by timber preference beneficiaries is higher than that paid by aerospace or aluminum manufacturers due to the 0.052 percent surcharge used to fund the Forest and Fish Account.

#### **2) Retain Good Jobs in Rural Counties**

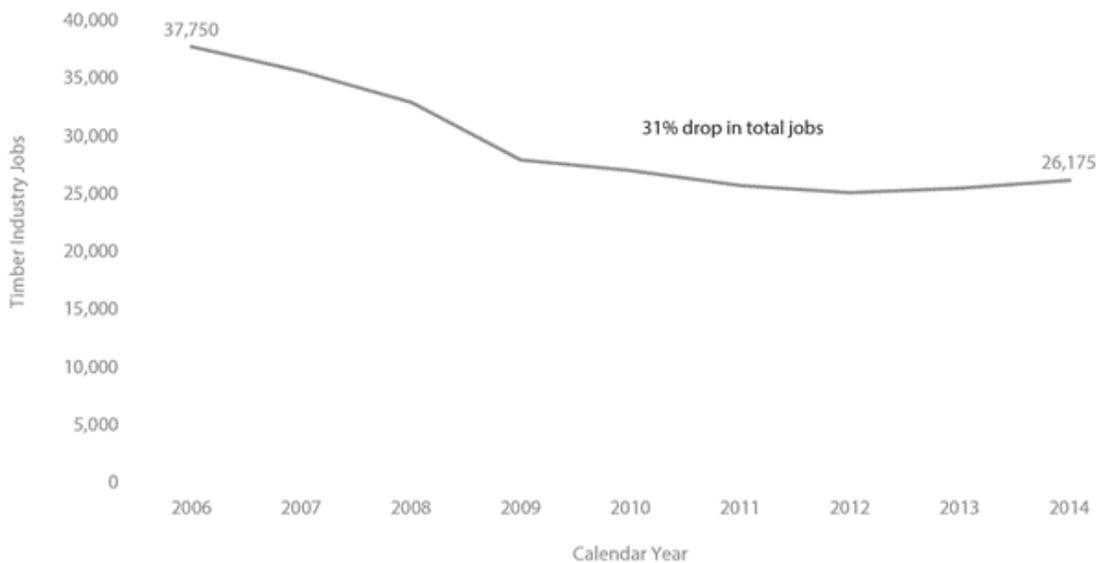
There are mixed results for the inferred objective of retaining good paying jobs in rural areas. Timber industry jobs decreased statewide from 2006 to 2014. This same trend was reflected in national timber industry job data.

Rural counties experienced less of a job loss than non-rural counties. Also, for rural counties, the average annual wage for timber industry-related jobs is higher than the average wage in those counties. For non-rural counties, the average annual wage for timber industry-related jobs was below the average wages for those counties.

### **Washington Timber Industry Jobs Declined 31 Percent Between 2006 – 2014**

JLARC staff analyzed Employment Security Department job data provided in general timber industry industrial classifications for logging, wood product manufacturing, and paper product manufacturing to track trends in timber industry-related jobs. From 2006 to 2014, there was a 31 percent overall loss of jobs in Washington in these industries. This trend is similar to the national rate of job loss for the same three timber industry-related industrial classifications, which was 27 percent from 2006 to 2014.

### **The Number of Timber Industry-Related Jobs Fell 31 Percent in Washington Between 2006 and 2014**



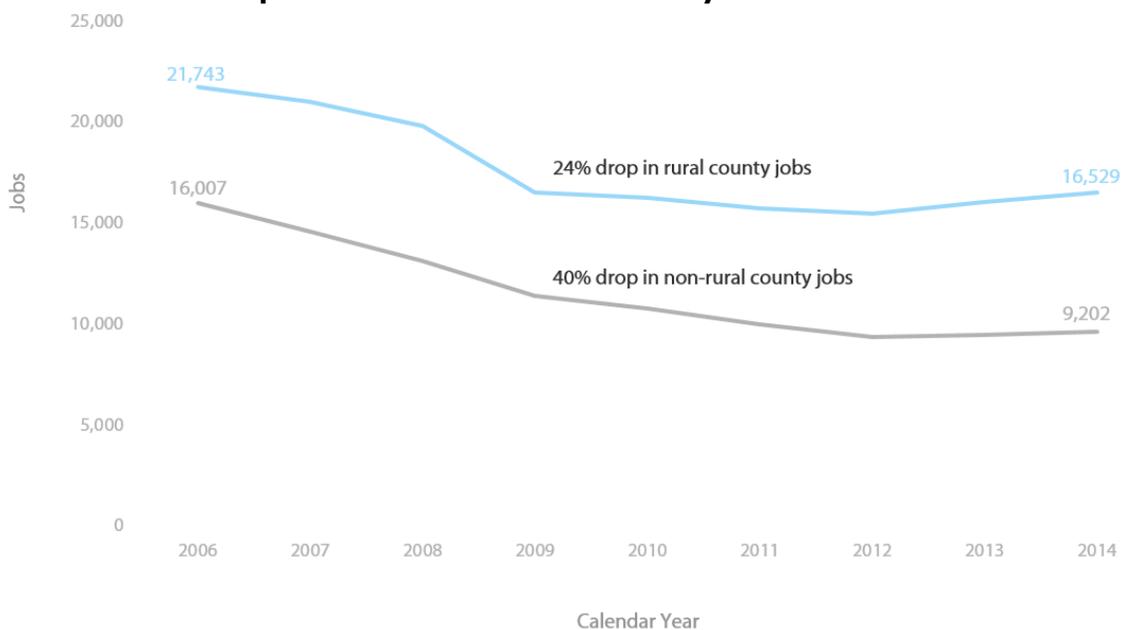
Source: JLARC staff analysis of Employment Security Department job monthly job detail January 2006 through December 2014 for jobs under NAICS codes forestry and logging (113\*), wood product manufacturing (321\*), and paper product manufacturing (322\*). Wholesaling job detail is not included because timber industry wholesaling cannot be separated from other wholesaling.

### Less Job Loss in Rural Counties

JLARC staff also analyzed the difference between jobs lost or retained in *rural counties* versus those in *non-rural* counties. A “rural county” has a population density less than 100 persons per square mile or is smaller than 225 square miles. The eight counties that do not qualify as rural are: Benton, Clark, King, Kitsap, Pierce, Snohomish, Spokane, and Thurston.

The rate of job loss in rural counties was less than in more urban areas. Timber industry-related jobs dropped by 40 percent in non-rural counties from 2006 through 2014. Rural counties experienced a drop of 24 percent for the same period.

### Rural Counties Experience Less Timber-Industry Job Loss Than Non-Rural Counties



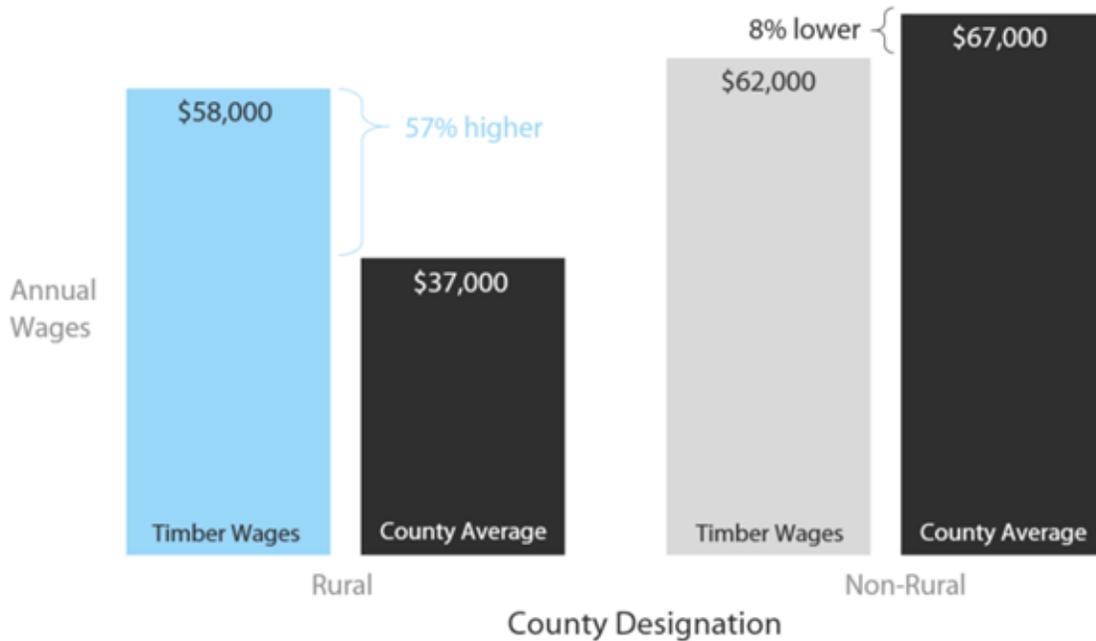
Source: JLARC staff analysis of Employment Security Department (ESD) job monthly job detail January 2006 through December 2014 for jobs under NAICS codes logging (113\*), wood product manufacturing (321\*), and paper product manufacturing (322\*), categorized into rural and non-rural counties. ESD jobs classified as master records under FIPS county code 900, 995, and 999 excluded. Wholesaling job detail not included. Nonrural counties determined by Office of Financial Management as: Benton, Clark, King, Kitsap, Pierce, Snohomish, Spokane, and Thurston.

### Timber Job Wages in Rural Counties Higher Than Average Wages

The prime sponsor and stakeholders testified in 2006 that the timber industry provided jobs with good wages in rural counties. JLARC staff examined wage detail for both rural and non-rural counties, comparing the annual wages for timber industry jobs to the average wages earned by all jobs in those counties.

In 2014, the last full year with available Employment Security wage data, the average annual timber industry wage in rural counties was 57 percent higher than the average wage earned in those counties (\$58,000 vs. \$37,000). However timber industry workers in the non-rural counties earned less than the average annual wage for those counties (\$62,000 vs. \$67,000).

**In 2014, Rural County Timber Industry Wages Were 57% Higher Than the Average Rural County Wage**



Source: JLARC staff analysis of Employment Security 2014 statewide wage data. Nonrural counties determined by Office of Financial Management as: Benton, Clark, King, Kitsap, Pierce, Snohomish, Spokane, and Thurston.

**Output per Timber Industry Worker Has Increased**

The analysis above shows that jobs in the timber industry have declined since 2006 when the B&O preference was enacted. Given the decline in jobs, JLARC staff explored worker productivity in Washington’s timber industry. Output per worker has increased.

The analysis considers three key segments of the timber industry:

- Wood product manufacturing;
- Paper product manufacturing; and
- Timber harvest.

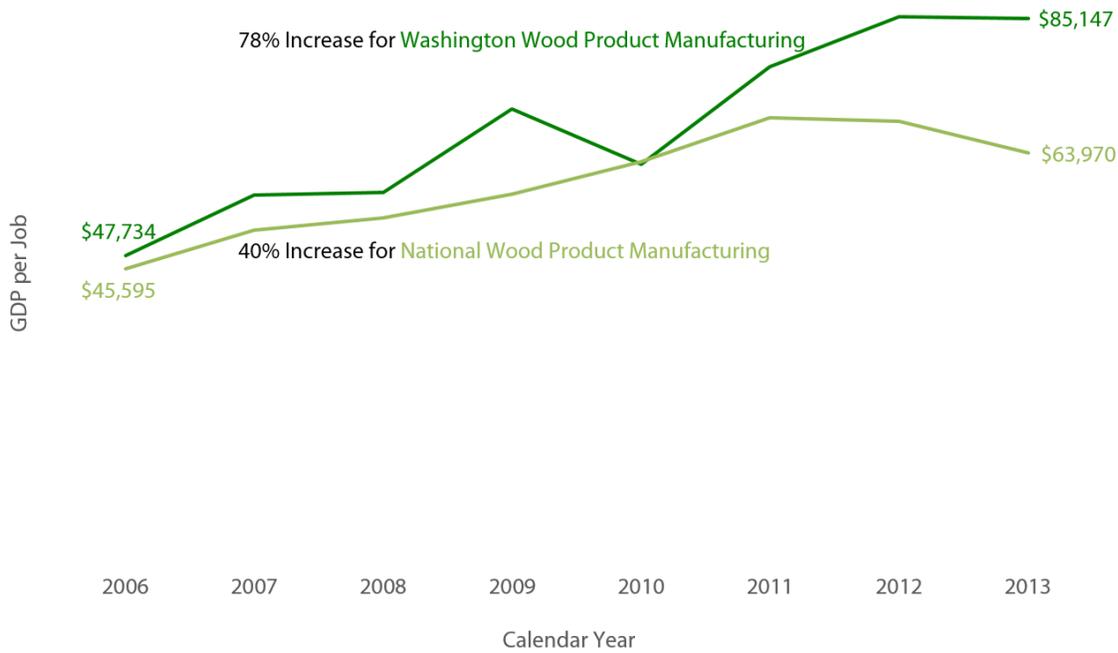
The worker productivity measure for wood and paper product manufacturing is gross domestic product (GDP) per job. GDP measures the value of goods and services produced. The worker productivity measure for timber harvest is the amount of timber harvested per logging job. The analysis looks at trends between 2006 and 2013 (the latest data available).

For the two segments where comparable federal information was available (wood product and paper product manufacturing), JLARC staff also examined national trends to see how Washington compares.

For wood product manufacturing,

- Wood product GDP in Washington increased 16 percent, in contrast to a 12 percent decline at the national level;
- Worker productivity increased at both the state and the national level, but more so in Washington. National GDP per job increased 40 percent, while GDP per job in Washington increased 78 percent.

**Washington GDP per Job Outpaced the National GDP per Job for Wood Product Manufacturing From 2006 to 2013 (controlled for inflation)**

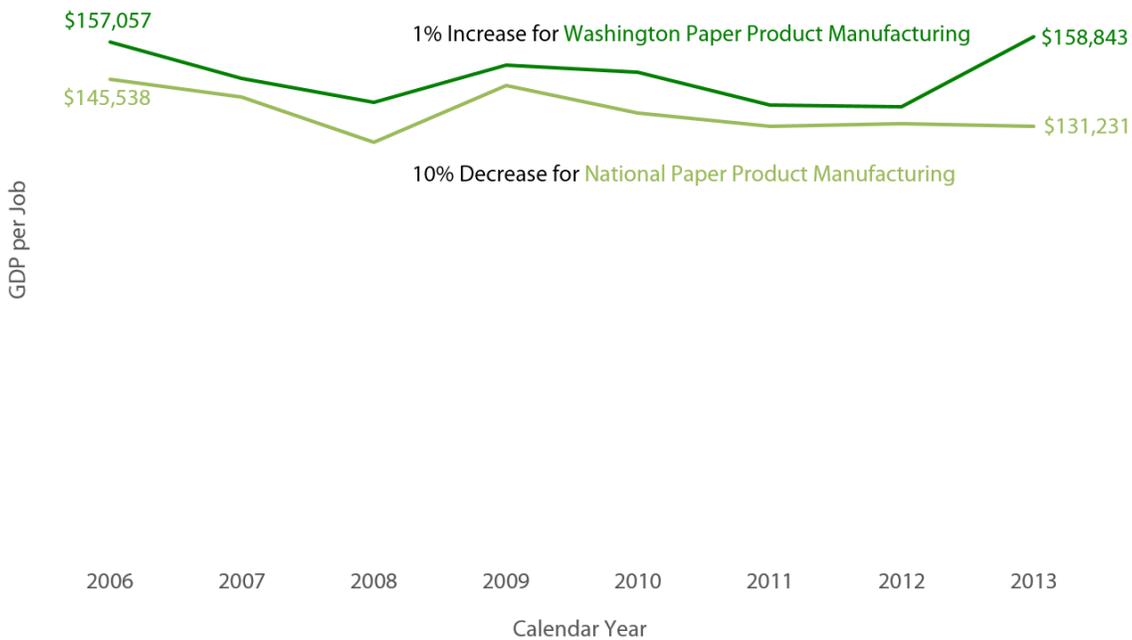


Source: JLARC staff analysis of Bureau of Labor and Statistics Washington State and U.S. gross domestic products for wood product manufacturing (NAICS 321\*), 2006 through 2013 in chained (2009) dollars.

For paper product manufacturing,

- Paper product GDP declined at both the national level (28 percent) and the state level (31 percent);
- Worker productivity increased at the state level and declined at the national level. National GDP per job decreased 10 percent, while GDP per job in Washington increased 1 percent.

### Washington GDP per Job Outpaced the National GDP per Job for Paper Manufacturing From 2006 to 2013 (controlled for inflation)



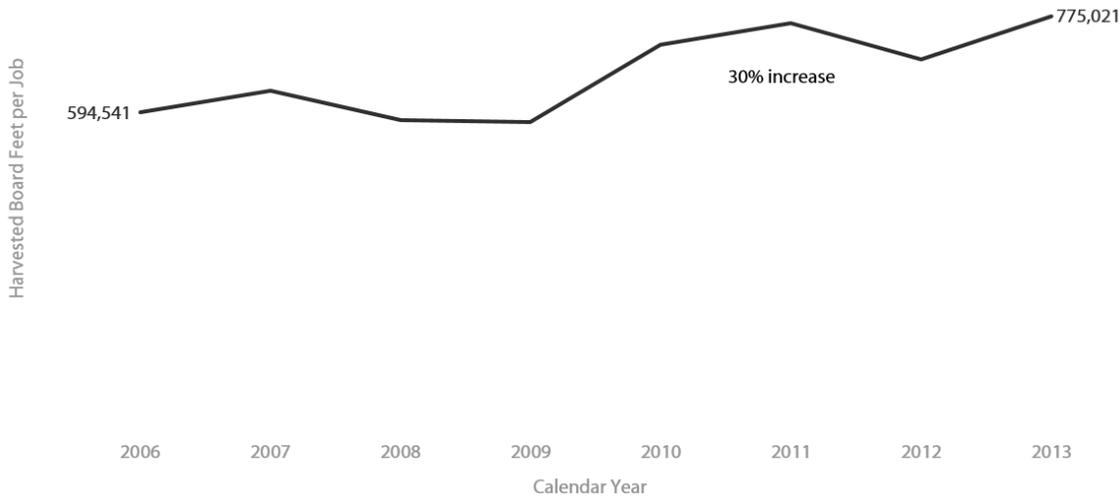
Source: JLARC staff analysis of Bureau of Labor and Statistics Washington State and U.S. gross domestic products for paper product manufacturing (NAICS 322\*), 2006 through 2013 in chained (2009) dollars.

For timber harvest,

- Statewide timber harvest declined 33 percent from 2006 to 2009, then slowly increased. As of 2013, the harvest level had not returned to 2006 levels;

- Following the same pattern as wood and paper products, worker productivity has increased. The amount of timber harvested per forestry and logging job increased 30 percent.

### Harvested Board Feet of Timber Per Logging Job Increased 30% from 2006 to 2013



Source: JLARC staff analysis of Department of Natural Resources state-wide timber harvest reports 2006 – 2013 and Employment Security Department job number for logging (NAICS 113\*) 2006-2013.

See tab [Technical Appendix 1](#) for additional detail and exhibits for the timber industry worker productivity analysis.

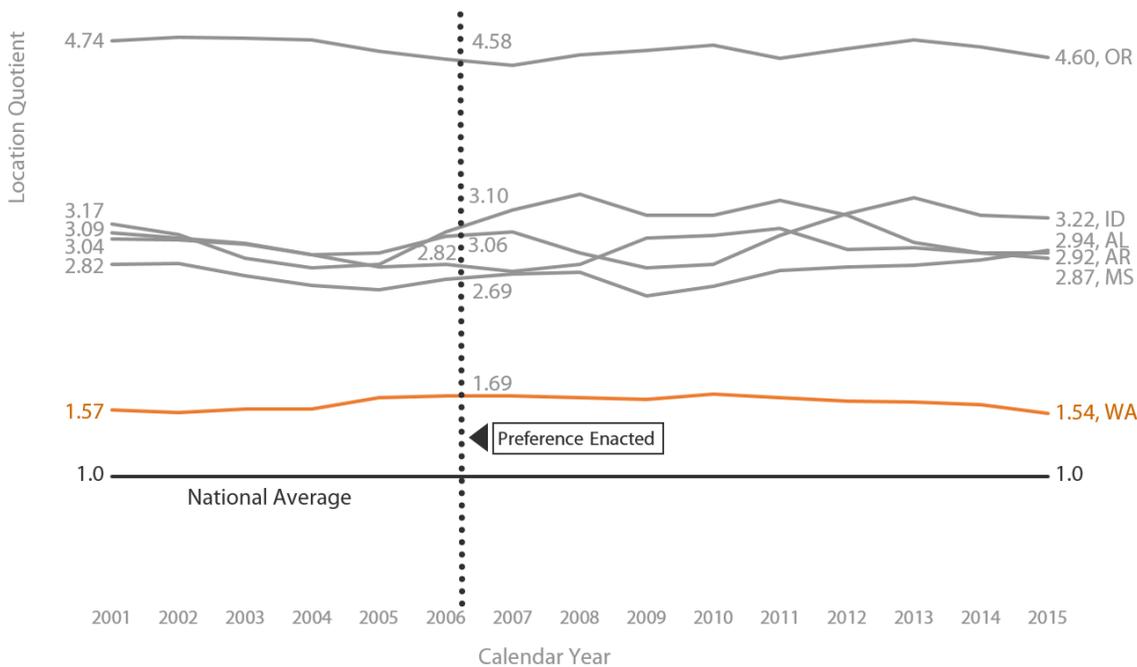
### 3) Help Washington’s Timber Industry Businesses Compete Nationally (and Internationally)

It is unclear if the preference has had an impact on Washington’s ability to compete nationally in timber industry-related activities.

JLARC staff analyzed Washington’s competitive position by measuring employment concentration using federal Bureau of Labor Statistics location quotients, which are available for wood product manufacturing, paper product manufacturing, and forestry and logging industries. Location quotients compare a state’s share of employment in an industry to the total national share of employment in that industry. A location quotient of 1.0 means an industry is equally concentrated in the state as in the nation. A location quotient above 1.0 means the state has a greater share of employment.

From 2001 to 2015, Washington’s location quotient has remained flat and consistently above the national average for the **wood products manufacturing industry**. Since the preference was enacted in 2006, Washington’s share of employment has declined. Washington’s employment concentration in 2015 was 16th, with the top three states being Oregon, Idaho, and Alabama.

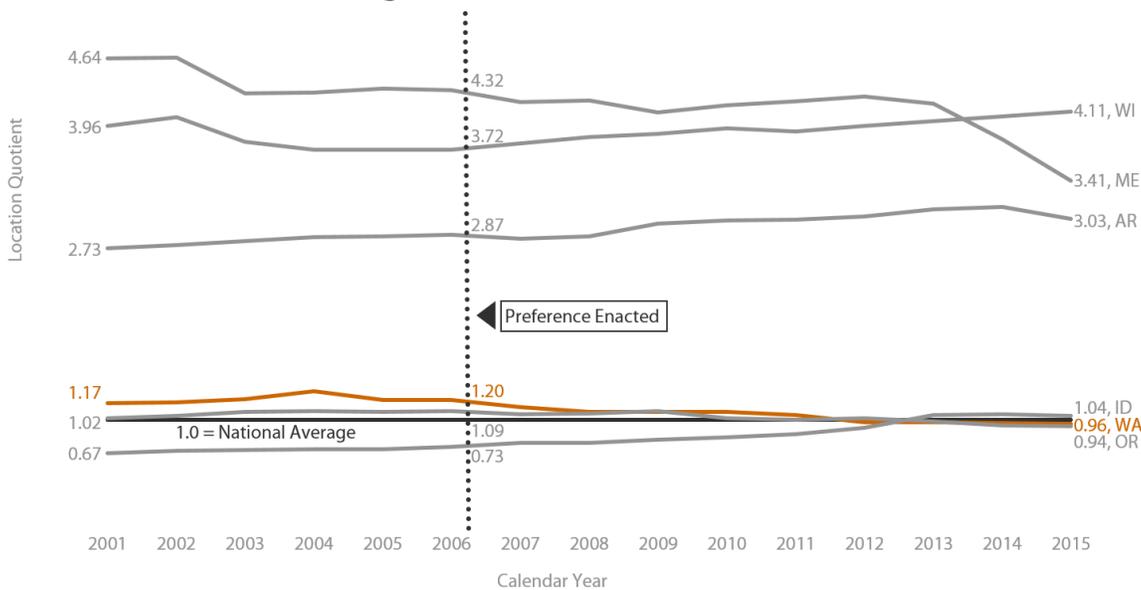
#### Washington’s Concentration of Wood Product Manufacturing Jobs Declined Since Tax Preference Enacted, but Still Above National Average



Source: JLARC staff analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages historic data for Calendar Years 2001-2015 for wood product manufacturing location quotient (NAICS 321).

For the **paper product manufacturing industry**, Washington's location quotient has declined from 2001 to 2015 from above the national average to slightly below it. Washington's ranking recently slipped below Idaho and has consistently been below the states with the greatest employment concentration (Wisconsin, Maine, and Arkansas). In 2015, Washington's concentration of employment was ranked 21st nationally, below Idaho (ranked 18th) and above Oregon (ranked 23rd).

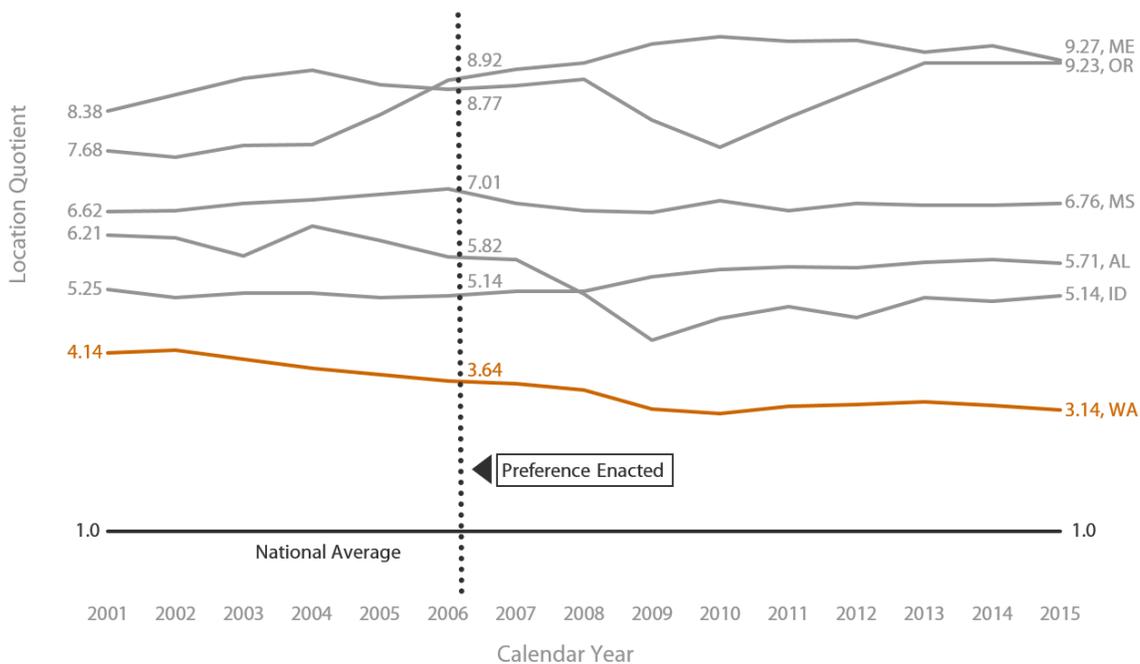
### Washington's Concentration of Paper Product Manufacturing Jobs Has Decreased to Below the National Average Since Tax Preference Enacted



Source: JLARC staff analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages historic data for Calendar Years 2001-2015 for paper product manufacturing location quotient (NAICS 322).

From 2001 to 2015, Washington's location quotient declined but remained above the national average for the **forestry and logging industry**. Washington's concentration of employment in the forestry and logging industry in 2015 was 9th, behind the top three states of Maine, Oregon, and Mississippi, and it was also behind Idaho (ranked 5th).

### Washington's Concentration of Forestry and Logging Jobs Declined Since Tax Preference Enacted, but Still Above National Average



Source: JLARC staff analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages historic data for Calendar Years 2001-2015 for forestry and logging location quotient (NAICS 113).

Location quotients are not available for comparisons with other countries.

## Standing Timber REET Exemption (and Preferential B&O Tax)

The preference is meeting its objective of helping Washington’s wood products and timber industry adjust to structural changes in the industry and the stock market.

In response to federal tax changes, a number of large timber companies restructured their companies to separate their timber growing from their extracting and manufacturing activities. However, this restructuring made standing timber sales from one related entity to another subject to real estate excise tax (REET). Previously these transactions within a vertically integrated company had not been taxable under REET.

The standing timber REET exemption continued the prior tax treatment that large timber companies had received when their timber growing and harvesting operations were in the same company. In addition, small timber owners who had previously paid REET on their sales of standing timber were now exempt. All of these businesses became subject to B&O tax on the sales, stabilizing the amount of tax they pay to be more consistent with the tax treatment before restructuring.

## To what extent will continuation of the tax preference contribute to these public policy objectives?

Continuation of the preferential B&O tax rate will continue to reduce the cost of doing business for beneficiaries of the tax preference. However, it is unclear to what extent continuation of the preference will contribute to retaining good jobs in rural areas or making Washington timber industry businesses competitive nationally or internationally.

Continuing the REET exemption for standing timber sales will continue to provide large timber companies with the same REET tax treatment they received prior to restructuring their companies. Smaller harvesters that paid REET prior to the preference also will continue to be exempt.

## Beneficiaries

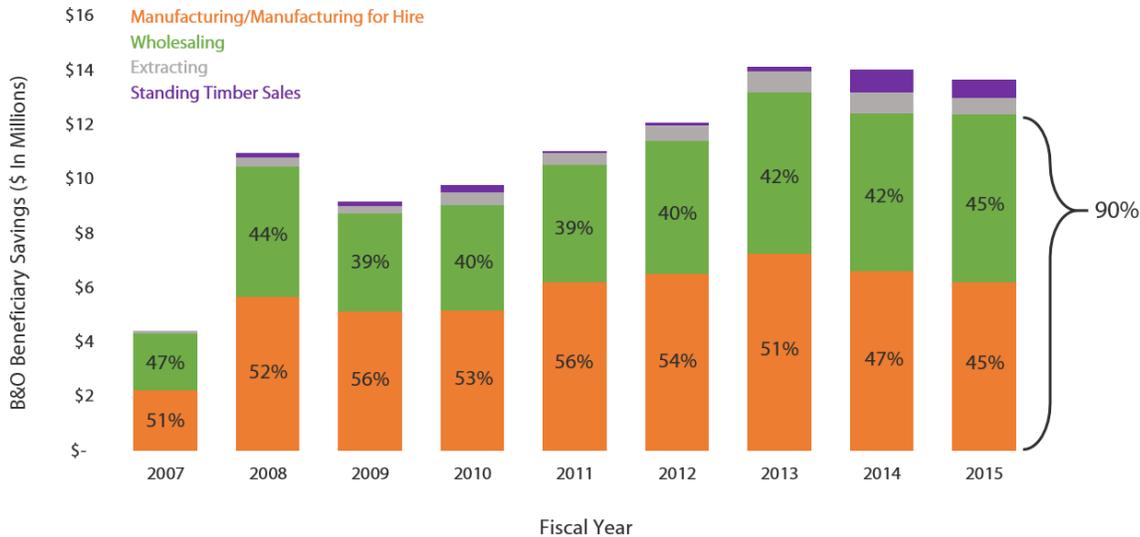
### Who are the entities whose state tax liabilities are directly affected by the tax preference?

Direct beneficiaries of the B&O tax preference are businesses involved in extracting timber, and manufacturing, and wholesaling timber, timber products, or wood products. In Fiscal Year 2015, 1,129 businesses used the B&O tax preference.

Direct beneficiaries of the standing timber sales REET preference are businesses that sell standing timber apart from the land for harvest within 30 months. DOR data indicates 51 businesses used this preference in Fiscal Year 2015.

Since the B&O preference was enacted, businesses that manufacture timber or wood products and that make wholesale sales of timber or wood products that they manufacture have accounted for over approximately 90 percent of the total amount of the value of the tax preference.

## Manufacturers and Wholesalers of Timber and Wood Products Historically Make Up Approximately 90% of B&O Tax Preference Savings



Source: JLARC staff analysis of Department of Revenue tax return data reporting on lines 300-304 for Fiscal Years 2007 through 2015.

## Revenue and Economic Impacts

### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

#### Preferential Timber and Wood Products B&O Tax Rate

JLARC staff estimate the direct beneficiary savings for the B&O preferential rate are \$13.6 million in Fiscal Year 2015 and \$30.6 million for the 2017-19 Biennium.

JLARC staff estimated the beneficiary savings by calculating the difference between the general B&O tax rate for extracting, manufacturing, and wholesaling (0.484 percent) and the sum of the preferential B&O tax rate (0.2904 percent) and the surcharge (0.052 percent).

#### Estimated 2017-19 Direct Beneficiary Savings for Timber and Wood Product Activities B&O Tax Preference

Fiscal Year	Total Taxable Sales	Total Beneficiary Savings
2014	\$9,392,640,000	\$14,036,000
2015	\$9,233,112,000	\$13,642,000
2016	\$9,806,499,000	\$13,886,000
2017	\$10,382,286,000	\$14,701,000
2018	\$10,786,768,000	\$15,274,000
2019	\$10,856,170,000	\$15,372,000
2017-19 Biennium	\$21,642,938,000	\$30,646,000

Source: JLARC staff analysis of Department of Revenue tax return data reporting on lines 300-304 for Fiscal Years 2014, 2015. Growth estimated using IHS February 2016 projected growth for industry production index for wood products for Fiscal Years 2016 – 2019.

#### Standing Timber Sales REET Exemption

JLARC staff estimate the direct beneficiary savings for the REET exemption are \$990,000 in Fiscal Year 2015 and \$978,000 for the 2017-19 Biennium. Timber sales can fluctuate widely from year to year. Therefore, to estimate beneficiary savings for 2016 through 2019, JLARC staff used the historic average taxable standing timber sales from 2007 through 2015. These historic averages are lower than recent years' sales.

**Estimated 2017-19 Direct Beneficiary Savings for Standing Timber Sales Real Estate Excise Tax Exemption**

Fiscal Year	Total Taxable Sales	State REET Exemption (1.28%)	Local REET Exemption (Average 0.45%)	LESS B&O Tax + Surcharge Paid (0.3424%)	Net Beneficiary Savings
2014	\$89,716,000	\$1,148,000	\$404,000	\$307,000	\$1,245,000
2015	\$71,320,000	\$913,000	\$321,000	\$244,000	\$990,000
2016	\$35,228,000	\$451,000	\$159,000	\$121,000	\$489,000
2017	\$35,228,000	\$451,000	\$159,000	\$121,000	\$489,000
2018	\$35,228,000	\$451,000	\$159,000	\$121,000	\$489,000
2019	\$35,228,000	\$451,000	\$159,000	\$121,000	\$489,000
2017-19 Biennium	\$70,455,000	\$902,000	\$318,000	\$242,000	\$978,000

Source: JLARC staff analysis of Department of Revenue tax return data reporting on line 304 for Fiscal Years 2014, 2015. Taxable sales for 2016-2019 estimated using 2007-2015 average taxable sales, as the number varies widely by year. Growth estimated using IHS February 2016 projected growth for industry production index for logging, Fiscal Years 2016 – 2019.

**If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?**

If the tax preference were terminated, current beneficiaries of the preferential rate would pay more B&O tax on their various extracting, manufacturing, and wholesaling activities. Businesses selling standing timber to be severed within 30 months would return to paying real estate excise tax on the gross sale amount, rather than B&O tax at a reduced rate.

The REMI analysis below estimates the potential effects that termination of these preferences would have on Washington’s employment and economy.

In addition, the 0.052 percent surcharge that is added to the preferential B&O tax rate would no longer be paid by beneficiaries. This would eliminate this funding source for the Forest and Fish Support Account.

**For those preferences enacted for economic development purposes, what are the economic impacts of the tax preferences compared to the economic impact of government activities funded by the tax?**

**Results from the REMI Analysis**

JLARC staff used Regional Economic Models, Inc.'s Tax-PI to estimate three measures of economic and fiscal impact for the timber and wood products B&O tax preferences. Specifically, we analyzed the effects of the tax preference on jobs, earnings, and state revenue for Calendar Years 2015 through 2024. This analysis includes both private and public sector economic impacts.

Tax-PI is an economic impact toll for evaluating the fiscal and economic effects and the demographic impacts of tax policy change.

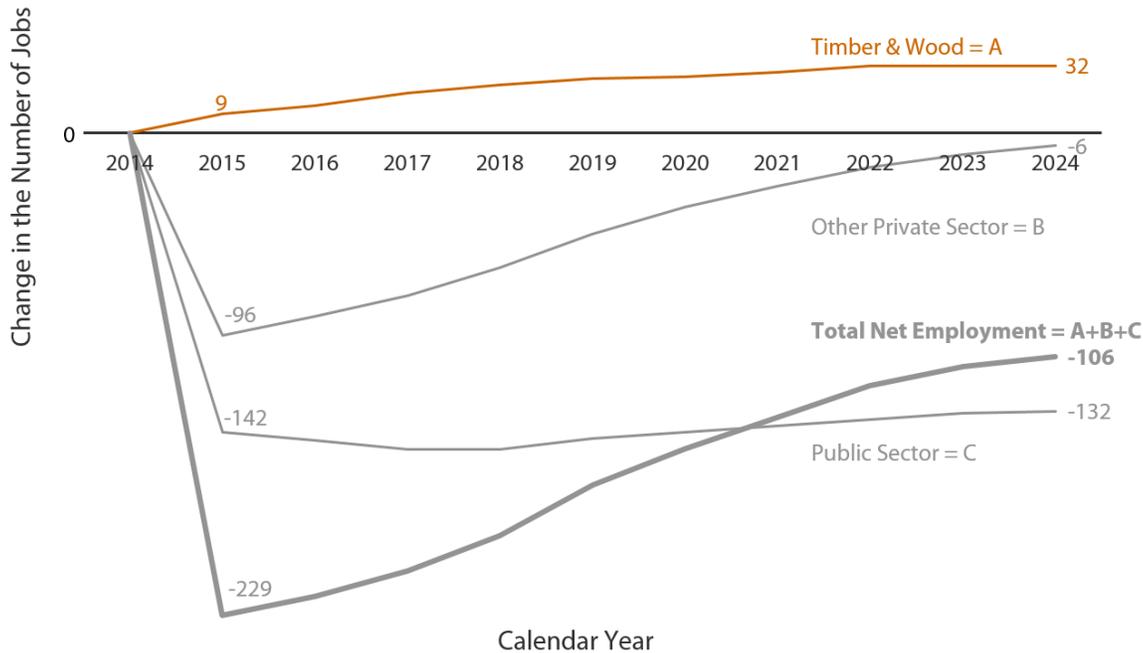
See **Technical Appendix 2** for an overview of the REMI model.

### 1. There is an estimated net decrease in jobs resulting from the tax preference

The exhibit below shows REMI's estimated jobs trends over a ten-year period related to the preferential B&O tax rate available for timber and wood products manufacturing activities. Each line shows the estimated change in employment, by category, related to the tax preference. A line above zero represents job gains and a line below zero represents job losses.

Overall, the net jobs trend statewide is negative, with an initial loss of 229 jobs in the first year and a loss of 106 jobs in 2024. The model estimates the timber and wood products industries experienced an initial increase of nine jobs in the first year and 32 jobs in 2024. Public sector employment drops by 142 jobs in the first year and stays near that level over the ten-year period. Finally, private non-farm employment, excluding timber and wood products employment, see an initial loss of 96 jobs and essentially recovers by 2024.

#### Timber Industry Gains 32 Jobs by 2024 Offset by Statewide Jobs Loss



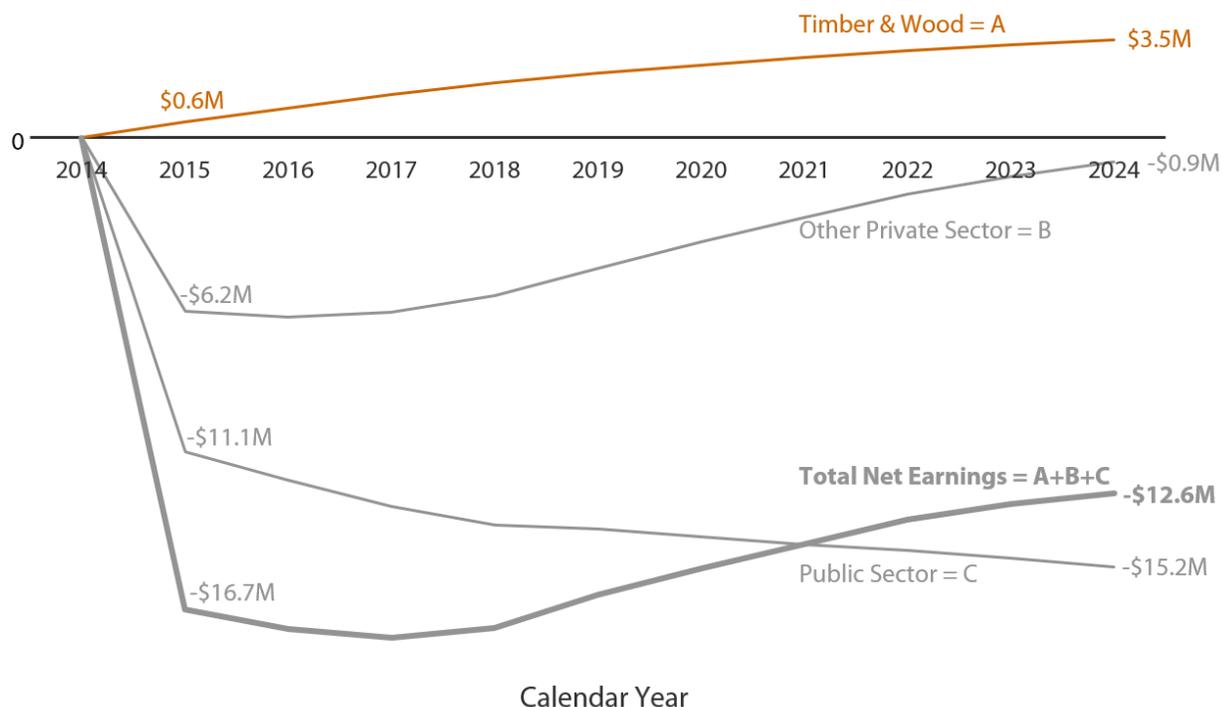
Source: JLARC staff analysis using REMI's Tax-PI modeling software.

### 2. There is an estimated net reduction in employee earnings resulting from the tax preference

The exhibit below shows REMI's estimated earnings trends broken down by the same four groupings as the previous exhibit.

Overall, the net change in earnings is negative. The largest single year decrease in statewide earnings is in 2017, with a loss in earnings totaling \$16.7 million. This loss is approximately \$5 million less in 2024. The timber and wood products industries see a gain in earnings of \$560,000 in the first year and \$3.5 million in 2024, the expiration date of the preference. Public sector employees see a decrease in earnings of \$11.1 million in the first year and \$15.2 million in 2024 whereas other private sector, excluding timber and wood products employees, see earnings decrease \$6.2 million in the first year and \$0.87 million in 2024.

#### Timber Industry Employee Earnings Grow by \$3.5 Million by 2024 but are Offset by Statewide Earnings Drop



Source: JLARC staff analysis using REMI's Tax-PI modeling software.

### 3. There is an estimated net reduction in tax revenue resulting from the tax preference

There is a net **reduction** in tax revenue to the state in addition to the initial loss due to the reduced B&O tax rate.

JLARC staff estimate that the tax preference results in a net annual reduction in all tax revenue of \$15.9 million, on average, through 2024. This estimate accounts for taxes associated with direct, indirect, and induced effects of the tax preference.

#### Estimated Reduction in Annual Tax Revenue Resulting from the B&O Preferential Rate (Annual Average, 2014-2024)

Tax Revenue Changes Due to Economic Activity Related to the Preference	Estimated 10-Year Average
Reduction in State Taxes Due to the Preferential Rate	(\$15,400,000)
Increase in State Taxes Due to Increased Timber Production	\$434,000
Change in State Taxes Due to Reduced Government Spending	(\$937,000)
Net Change in State Tax Revenue	(\$15,903,000)

Source: JLARC staff analysis using REMI's Tax-PI modeling software.

#### What Factors Help to Explain the Pattern of Results Reported?

The direct impact of the reduced B&O tax rate for timber and wood products industry-related activities on jobs is relatively small. This may be due to the small value of the tax preference recognized by each beneficiary.

In Fiscal Year 2014, for example, 1,117 taxpayers claimed the preference for a total savings of \$14 million. The median beneficiary savings for businesses reporting under the preferential manufacturing B&O tax classification was \$584. For businesses reporting under the preferential B&O extracting classification it was \$243 and for businesses reporting under the preferential B&O wholesaling classifications it was \$1,196, respectively.

Further, a reduction in state spending results in greater job loss because the activities funded by government spending are more labor intensive than the activities of wood and paper product manufacturing industries. For example, schools and prisons are less able to substitute machinery and equipment for teachers and prison guards. In the REMI model, labor compensation accounts for 54 percent of all public sector spending whereas labor compensation accounts for a smaller

amount of spending in the timber and wood products industries. In the logging industry about 45 percent of all spending is on labor whereas the same value for the wood products manufacturing industry ranges between 23 and 31 percent and for the paper products manufacturing industry it is between 14 and 24 percent.

In contrast to state and local government jobs, timber extracting and timber and wood product manufacturing activities are more capital intensive. The earlier analyses looking at GDP per job in Washington showed increases in the productivity of workers in the timber industry, despite fewer industry jobs over time.

The reduction in private non-farm employment is concentrated most heavily in the construction and retail trade sectors. State and local government spending on goods and services creates jobs in the private sector, such as health care and construction. Reductions in government spending may result in private sector job losses in sectors that sell goods and services to government. Over time these sectors do rebound, but this may be largely related to more people moving into the state over time.

## Other States with Similar Preference?

### Do other states have a similar tax preference and what potential public policy benefits might be gained by incorporating a corresponding provision in Washington?

JLARC staff reviewed tax preferences provided for timber-related business activities in states with a high concentration of employment in logging, wood product manufacturing, and paper product manufacturing.

There are no preferences similar to Washington’s reduced B&O tax rate. However, in each state reviewed there were numerous economic development programs designed to encourage businesses to locate or expand operations and increase employment. While not specifically designed for timber-industry-related activities, the following programs could apply to timber industry-related manufacturing businesses.

State	Economic Development Incentives
Alabama	<ul style="list-style-type: none"> <li>• <b>Income Tax Capital Credit</b> – up to 5% of capital costs each year for up to 20 years</li> <li>• <b>Property and Sales/Use Tax Abatement</b> – up to 20 years for new and expanding projects</li> <li>• <b>Income Tax Enterprise Zone Credit or Exemption</b></li> <li>• <b>Jobs Act Incentives</b> – annual cash refund up to 3% of gross payroll for up to 10 years and investment credit up to 5% of capital investment for up to 10 years on income or utility tax liability</li> <li>• <b>Various other financing programs</b></li> </ul>
Arkansas	<ul style="list-style-type: none"> <li>• <b>Create Rebate Program</b> – negotiated annual cash payments based on annual payroll for new, full-time, permanent employees. From 3.9 to 5% of new payroll</li> <li>• <b>Advantage AR Income Tax Credit</b> – from 1% to 4% for new, full-time, permanent jobs created each year for 5 years</li> <li>• <b>ArkPlus Income Tax Credit</b> – 10% of total investment in new location or expansion; up to 50% credited per year</li> <li>• <b>Various financing programs, infrastructure grants, discretionary targeted incentives</b></li> </ul>
Georgia	<ul style="list-style-type: none"> <li>• <b>Job Income Tax Credit</b> – between \$1,250 to \$4,000 per job; applies against up to 100% of tax</li> <li>• <b>Investment Income Tax Credit</b> – existing manufacturers making \$50,000+ capital investment in new/existing facility get 1% to 5% credit for up to 50% of tax due</li> <li>• <b>Ports Income Tax Credit</b> – businesses qualifying for Job or Investment Tax Credit and that increase imports or exports through a GA port by 10 TEUs can offset up to 50% of tax</li> <li>• <b>Quality Jobs Payroll Tax Credit</b> – businesses creating at least 50 jobs in a year that pay at least 110% of county average earn credit between \$2,500 to \$5,000 to apply against payroll withholding tax</li> <li>• <b>Optional Investment Income Tax Credit</b> – credit of between 6% to 10% for minimum investment between \$5 and \$20 million</li> </ul>

Idaho	<ul style="list-style-type: none"> <li>• <b>ID Business Advantage</b> – wide range of incentives (corp. income tax credits, sales tax rebates, property tax exemptions) for investing at least \$500,000 in new facilities and creating at least 10 new jobs averaging \$40,000/year with benefits</li> <li>• <b>Income Tax Reimbursement Incentive</b> – credit up to 30% for up to 15 years for businesses that expand or move to ID on new state tax revenues generated</li> <li>• <b>Property Tax Exemption</b> – full or partial exemption for up to 5 years for businesses investing at least \$3 million in new manufacturing facilities</li> <li>• <b>Investment Income Tax Credit</b> – 3% credit for businesses purchasing qualifying new equipment. Can offset up to ½ of state income tax</li> </ul>
Mississippi	<ul style="list-style-type: none"> <li>• <b>Advantage Jobs Program</b> – rebates a percentage of payroll tax to qualified manufacturers for up to 10 years</li> <li>• <b>Jobs Income Tax Credit</b> – credit equal to percentage of eligible payroll for each newly created job for up to a 5 year period or business can opt for job training grants</li> <li>• <b>On the Job Training Reimbursement</b> – colleges or training programs negotiate training and service plans and funding agreement to offset new employee training costs</li> <li>• <b>Sales/Use Tax Exemption for Construction/Expansion</b> – exemption for building materials, machinery and equipment for manufacturers and others that construct new or expand existing facilities</li> <li>• <b>Property Tax Exemption</b> – up to 10 years on real and personal property for locating or expanding in MI; at discretion of city or county</li> </ul>
Oregon	<ul style="list-style-type: none"> <li>• <b>Enterprise Zone Property Tax Abatement</b> – on local real and personal property for businesses locating in zones for 3 to 5 years</li> <li>• <b>Rural Enterprise Zone Facilities Property Tax Abatement</b> – on local real and personal property for 7 to 15 years (compared with 3 to 5)</li> <li>• <b>Strategic Investment Property Tax Exemption</b> – 15 year exemption on portion of large capital investments to locate or grow anywhere in OR; business must have national or international competition</li> <li>• <b>Construction in Process Property Tax Exemption</b> – unfinished facilities exempt from local tax for up to 2 years during construction; if in enterprise zone, broader exemption may apply</li> <li>• <b>OR Investment Advantage</b> – corporate income tax deduction for businesses establishing in eligible counties; job creation and other requirements apply</li> <li>• <b>Business Expansion Program and Small Manufacturing Business Expansion Program</b> – forgivable loans for existing businesses to expand equal to estimated increase in income tax revenue from new hiring. Certain job requirements apply to each program</li> </ul>

Source: JLARC staff analysis of various states' economic development programs and tax incentives.

## Technical Appendix 1: Timber-Industry Worker Productivity

### Timber Industry Worker Productivity -- Summary

Jobs in the timber industry have declined since 2006 when the B&O preference was enacted. Given the decline in jobs, JLARC staff explored worker productivity in Washington's timber industry. Output per worker has increased.

The analysis considers three key segments of the timber industry:

- Wood product manufacturing;
- Paper product manufacturing; and
- Timber harvest.

The worker productivity measure for wood product and paper product manufacturing is GDP per job. Gross domestic product (GDP) measures the value of goods and services produced. The worker productivity measure for timber harvest is the amount of timber harvested per logging job. The analysis looks at trends between 2006 and 2013 (the latest data available).

For the two segments where information was available (wood product and paper product manufacturing), JLARC staff also examined national trends to see how Washington compares.

For wood product manufacturing,

- Wood product GDP in Washington increased 16 percent, in contrast to a 12 percent decline at the national level;
- Worker productivity increased at both the state and the national level, but more so in Washington. National GDP per job increased 40 percent, while GDP per job in Washington increased 78 percent.

For paper product manufacturing,

- Paper product GDP declined at both the national level (28 percent) and the state level (31 percent);
- Worker productivity increased at the state level and declined at the national level. National GDP per job decreased 10 percent, while GDP per job in Washington increased 1 percent.

For timber harvest,

- Statewide timber harvest declined 33 percent from 2006 to 2009, then slowly increased. As of 2013, the harvest level had not returned to 2006 levels;
- Following the same pattern as wood and paper products, worker productivity has increased. The amount of timber harvested per logging job increased 30 percent.

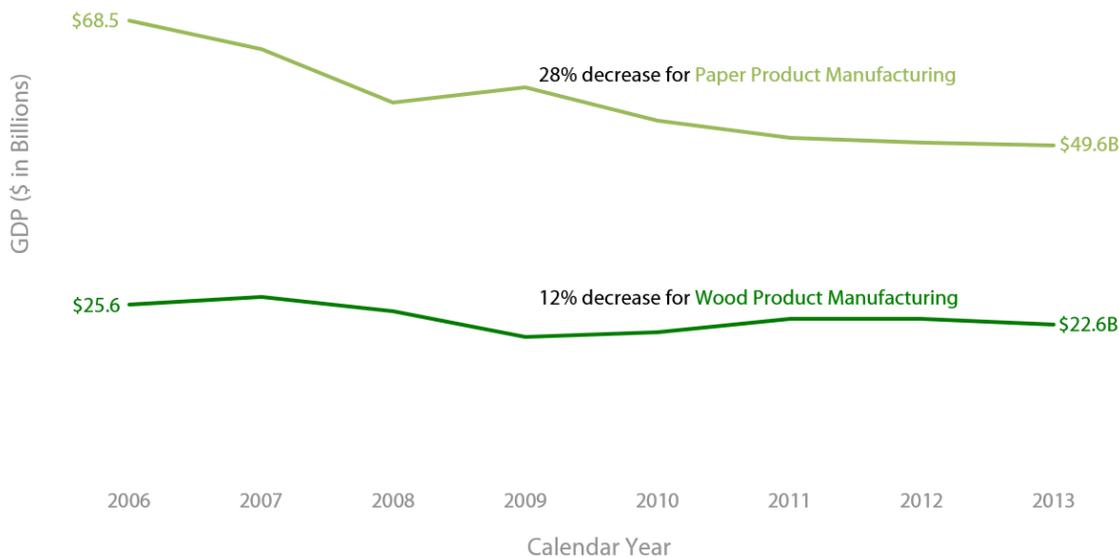
## Detail: GDP and GDP per Job for Wood Product and Paper Product Manufacturing

Industry-wide, Washington’s wood product manufacturing industry sector is faring better than the nation as a whole whereas paper product manufacturing is approximately even with the nation as a whole. While jobs are down both in-state and nationally, Washington’s production level has decreased, by a smaller percentage than the national production level.

From 2006 to 2013, the U.S. GDP for all industries increased 5 percent.

However, the national GDP for paper product manufacturing dropped by 28 percent, and the national GDP for wood product manufacturing dropped 12 percent during the same period.

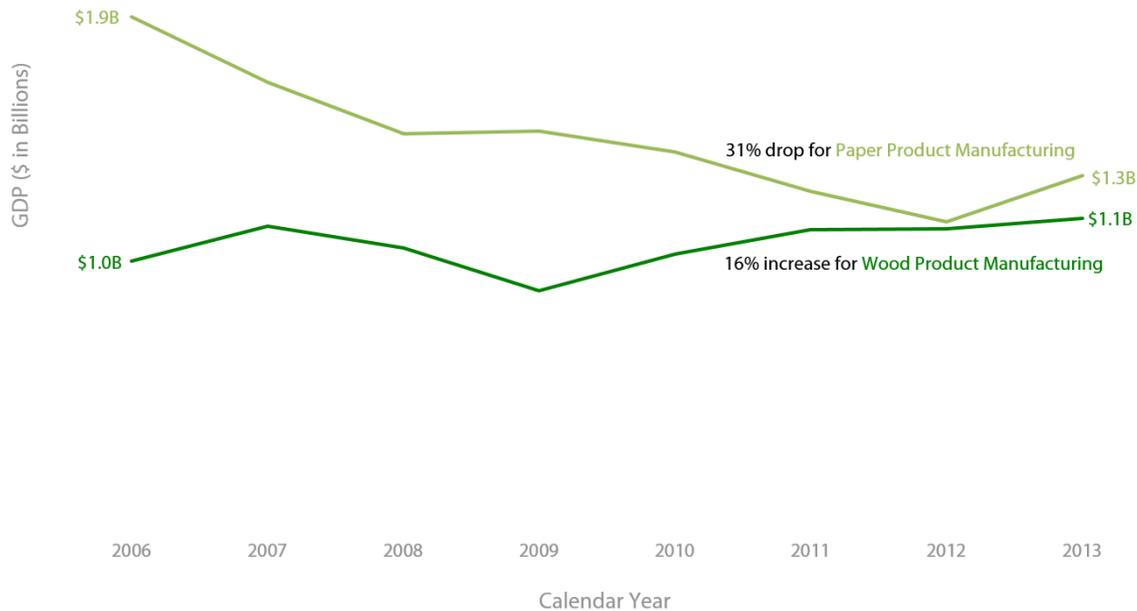
### U.S. Gross Domestic Product for Both Wood Product and Paper Product Manufacturing Fell From 2006 to 2013 (controlled for inflation)



Source: JLARC staff analysis of Bureau of Labor and Statistics U.S. gross domestic product for wood product manufacturing (NAICS 321\*) and paper product manufacturing (NAICS 322\*), 2006 through 2013 in chained (2009) dollars.

At the state level, Washington also saw a drop in GDP for paper product manufacturing. Counter to the national trend, Washington had an increase in GDP for wood product manufacturing. From 2006 to 2013, Washington's GDP for all industries increased 12 percent from \$335.9 billion to \$374.7 billion. The Washington GDP for paper product manufacturing dropped by 31 percent, while the state's wood product manufacturing GDP increased by 16 percent.

### Washington's GDP for Paper Product Manufacturing Drops While Wood Products Manufacturing GDP Increases From 2006 to 2013 (controlled for inflation)



Source: JLARC staff analysis of Bureau of Labor and Statistics Washington State gross domestic product for wood product manufacturing (NAICS 321\*) and paper product manufacturing (NAICS 322\*), 2006 through 2013 in chained (2009) dollars.

### Gross Domestic Product per Job

JLARC staff also looked at the GDP per job on a national and the state level, to see how Washington compared to the national production per job in wood product and paper product manufacturing industries. We did this analysis in order to review the impact of the loss of jobs on wood product and paper product manufacturing production, both at the national level and in Washington. An increase in the GDP per job means that each job in that industry has increased its production.

### National GDP per Job

On a national level, the GDP per job for both wood product and paper product manufacturing increased from 2006 to 2013, indicating that each job in these industries is producing more than it was in 2006.

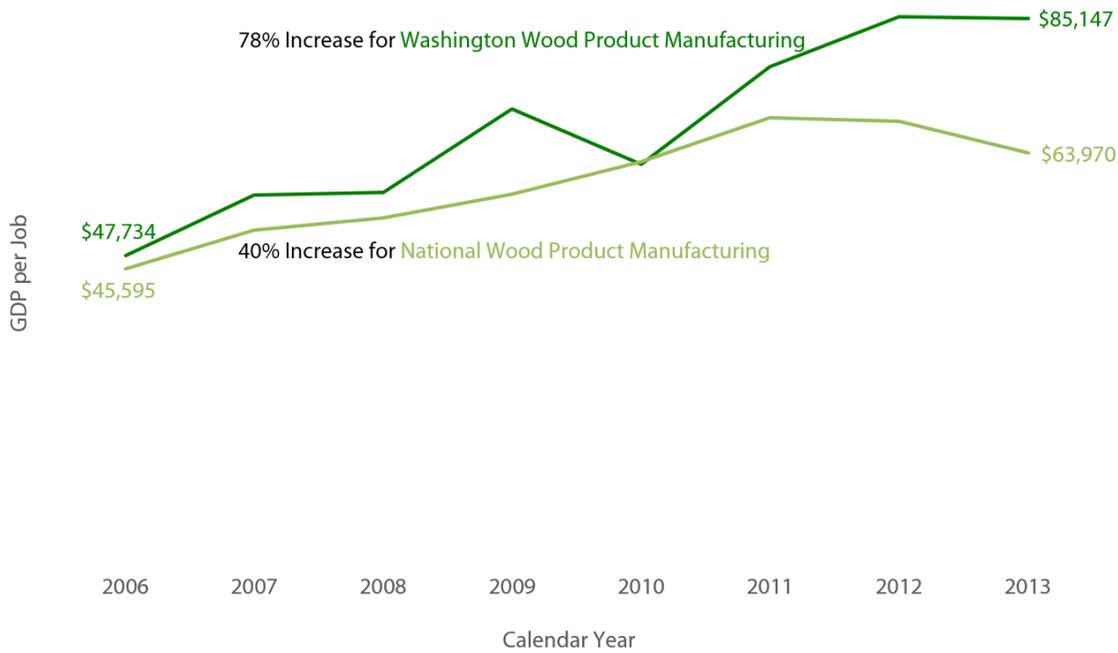
- U.S. GDP per job for wood product manufacturing increased 40 percent.
- U.S. GDP per job for paper product manufacturing decreased 10 percent.

### Washington GDP per Job

The GDP per job for both wood product and paper product manufacturing increased from 2006 to 2013, again indicating each job is producing more than it did in 2006.

- Washington's GDP per job for wood product manufacturing increased 78 percent – from \$47,734 to \$85,147.
- Washington's GDP for paper product manufacturing increased 1 percent – from \$157,057 to \$158,843 per job.

### Washington GDP Outpaced the National GDP per Job for Wood Product Manufacturing From 2006 to 2013 (controlled for inflation)



Source: JLARC staff analysis of Bureau of Labor and Statistics national and Washington State gross domestic product for wood product manufacturing (NAICS 321\*), 2006 through 2013 in chained (2009) dollars.

### Washington GDP per Job Outpaced the National GDP per Job for Paper Product Manufacturing From 2006 to 2013 (controlled for inflation)



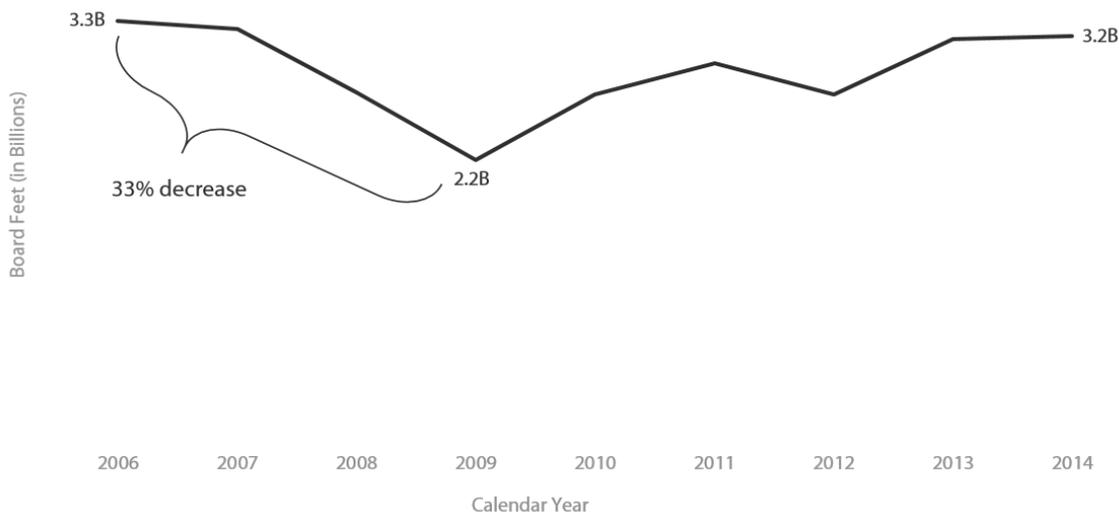
Source: JLARC staff analysis of Bureau of Labor and Statistics national and Washington State gross domestic product for paper product manufacturing (NAICS 322\*), 2006 through 2013 in chained (2009) dollars.

### Timber Harvest Levels and Worker Productivity

There was no data series from the federal Bureau of Labor Statistics that allowed for a national and state GDP comparison for this segment of the industry. JLARC staff were able to find state sources to describe statewide timber harvest levels and timber harvested per logging job.

Statewide timber harvest levels dropped by 33 percent from 2006 to 2009, and have slowly recovered since. The number of board feet harvested in 2014 was still below that harvested in 2006.

### Statewide Timber Harvests Decline and then Increase

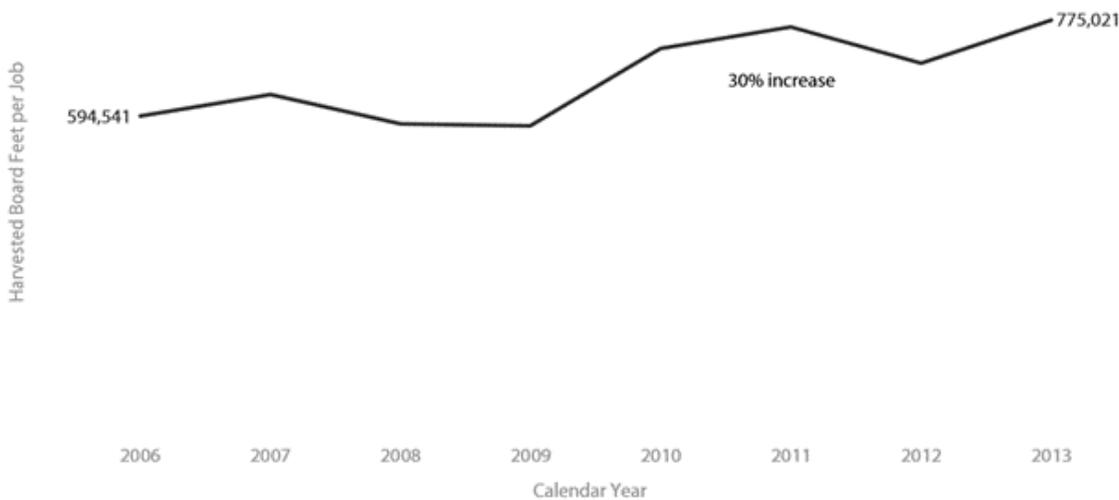


Source: JLARC staff analysis of Department of Natural Resources state-wide timber harvest reports 2006 – 2014.

Since GDP detail is not available for logging activities, so JLARC staff estimated a productivity measure by calculating the amount of timber harvested per job in the logging industry for calendar years 2006 to 2013. This may overestimate the productivity measure because the employment numbers may be low. Forestry and logging jobs tend to be understated in Employment Security data because a sizable component of foresters and loggers are self-employed or contractors.

As with timber industry manufacturing activities, the amount of timber harvested per forestry and logging job increased from 2006 to 2013 – in this case, 30 percent.

### Harvested Board Feet of Timber Per Logging Job Increased 30% from 2006 to 2013



Source: JLARC staff analysis of Department of Natural Resources state-wide timber harvest reports 2006 – 2013 and Employment Security Department job number for logging (NAICS 113\*), 2006-2013.

JLARC staff also analyzed the trends for paper product and wood product jobs and GDP per job nationally and in Washington using the REMI model. The overall trends were similar for periods 2006 through 2013.

## Technical Appendix 2: REMI Overview

### REMI Overview

JLARC staff used Regional Economic Models, Inc.’s (REMI) Tax-PI software (v 1.7.105) to model the economic impacts for three tax preference reviews in the 2016 report: trade-ins, timber, and data centers.

REMI software is used by 34 state governments and dozens of private sector consulting firms, research universities, and international clients.

### Model Is Tailored to Washington and Includes Government Sector

Tax-PI is an economic impact tool for evaluating the fiscal and economic effects and the demographic impacts of tax policy change. The software includes various features that make it particularly useful for analyzing the economic and fiscal impacts of tax preferences:

- REMI staff consulted with staff from the Office of Financial Management (OFM) and customized a statewide model to reflect Washington's economy;
- The model contains 160 industry sectors, based on the North American Industry Classification System (NAICS) codes;
- In contrast to other modeling software, Tax-PI includes state and local government as a sector. This permits users to see the trade-offs associated with tax policy changes (e.g., effects on the state's economy from both increased expenditures by businesses due to a tax preference along with decreased spending by government due to the revenue loss);
- For current revenue and expenditure data, users can input information to reflect their state's economic and fiscal situation. This allows JLARC staff to calibrate a state budget using up-to-date information from the Economic and Revenue Forecast Council (ERFC) and the Legislative Evaluation and Accountability Program (LEAP); and
- The model can forecast economic and revenue impacts multiple years into the future.

### **Results the Model Provides**

The REMI model accounts for the direct, indirect, and induced effects as they spread through the state's economy, which allows users to simulate the full impact of tax policy change over time.

- Direct effects are industry specific and capture how a target industry responds to a particular policy change (e.g., changes in industry employment following a change in tax policy);
- Indirect effects capture employment and spending decisions by businesses in the targeted industry's supply chain that provide goods and services; and
- Induced effects capture the in-state spending and consumption habits of employees in targeted and related industries.

The REMI model produces year-by-year estimates of the total statewide effects of a tax policy change. Impacts are measured as the difference between a baseline economic and revenue forecast and the estimated economic and revenue effects after the policy change.

### **What the Model Includes**

The REMI model is a macroeconomic impact model that incorporates aspects of four major economic modeling approaches: input-output, general equilibrium, econometric, and new economic geography. The foundation of the model, the inter-industry matrices found in the input-output models, captures Washington's industry structure and the transactions between industries. Layered on top of this structure is a complex set of mathematical equations used to estimate how private industry, consumers, and state and local governments respond to a policy change over time.

- The supply side of the model includes many economic variables representing labor supply, consumer prices, and capital and energy costs with elasticities for both the consumer and business sectors.
- Regional competitiveness is modeled via imports, exports, and output.
- Demographics are modeled using population dynamics (births, deaths, and economic and retirement migration) and includes cohorts for age, sex, race, and retirement.
- Demographic information informs the model's estimates for economic consumption and labor supply.
- The dynamic aspect comes from the ability to adjust variables over time as forecasted economic conditions change.

While the model is complex and forecasting involves some degree of uncertainty, Tax-PI provides a tool for practitioners to simulate how tax policy and the resulting industry changes affect Washington's economy, population, and fiscal situation.

## **Technical Appendix 3: REMI Analyses for Timber**

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This technical appendix provides background detail and supporting information for the JLARC staff analysis of the economic and revenue impacts associated with Washington's preferential B&O tax rate available to businesses conducting timber industry-related activities. These activities include extracting timber, manufacturing timber products or wood products, and wholesale sales of the same by the manufacturer. The appendix is divided into three sections:

- Section One titled **REMI Methodology** details how JLARC staff set-up and calibrated the Tax-PI program prior to using the model;
- Section Two titled **Jobs and Output for the Timber and Wood Products Industries in REMI tests the robustness of the historical job and output trends summarized in the tab "Are Objectives Being Met?"**; and
- Section three titled **Modeling the Economic Impact of the Preferential B&O Tax Rate for the Timber and Wood Products Industries in REMI** describes the scenario used to estimate the full impact of the B&O preference on the statewide economy and the state's revenue stream. The results of this analysis are presented in the Revenue and Economic Impacts tab.

## 1) REMI Methodology

### User Inputs in REMI

REMI's Tax-PI model allows users to model policy changes and analyze the estimated impacts to the Washington economy, both in terms of economic activity and government finances. (See [Technical Appendix 2](#) for an overview of the REMI model.)

Prior to running modeling scenarios, users must make a series of choices about how to set-up the modeling environment by building a state budget and calibrating the model accordingly. JLARC staff used the November 2015 revenue estimates produced by the Economic and Revenue Forecast Council (ERFC) and budgeted expenditures for FY 2014 and 2015, as reported by the Legislative Evaluation and Accountability Program (LEAP) Committee. This data represents the budget and revenue data in the model and serves as the "jump off" point for Tax-PI's economic and fiscal estimates. Because Tax-PI is a forecasting tool, JLARC staff was unable to model the economic impact of the tax preference beginning in 2006.

In addition to establishing a budget and inputting expected revenue values, users must specify whether government expenditures are determined by demand or revenue. "By demand" imposes a level of government spending in future years that is necessary to maintain the same level-of-service as the final year in which budget data is entered whereas "by revenue" ties government expenditures to estimated changes in revenue collections.

Users may also elect to impose a balanced budget restriction or leave the model unconstrained. The balanced budget feedback forces revenue and expenditures to be equivalent and thus may impose some limitations on economic activity.

By setting expenditures to be determined by demand, users avoid making assumptions about how policymakers may alter spending priorities in the future. In addition, users essentially establish the current budget allocation as carry-forward levels for each expenditure category.

JLARC staff ran the reported scenario with expenditures set to be determined by demand and with the balanced budget feedback option turned on.

### Data for the REMI Model

The REMI model comes with historical economic and demographic data back to 1990. The data comes from federal government agencies such as the U.S. Census Bureau, U.S. Energy Information Administration, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. As described above, current revenue and expenditure data for Washington comes from ERFC and LEAP, respectively. The data used to build the modeling scenario described in section three is from JLARC staff estimations of beneficiary savings, based on Department of Revenue (DOR) tax records.

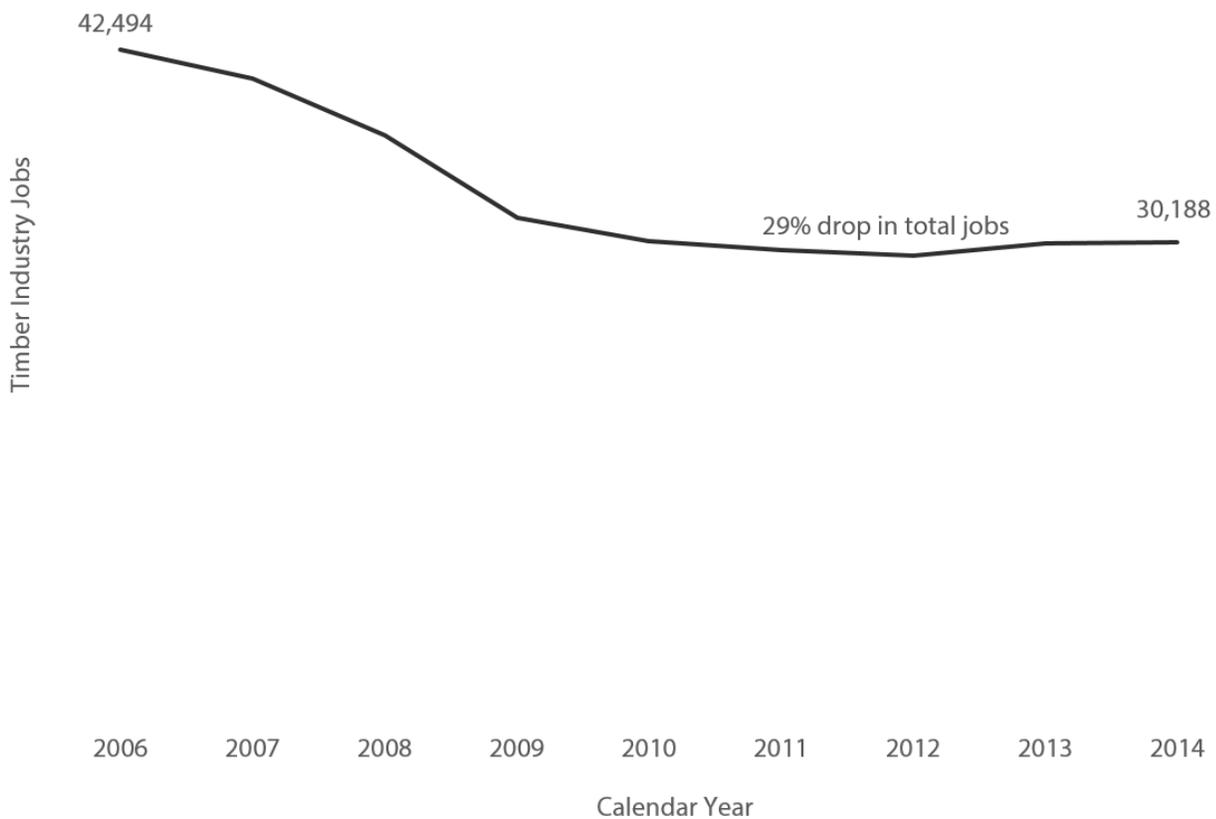
## 2) Jobs and Output for the Timber and Wood Products Industries in REMI

JLARC staff used REMI's historical data to test the robustness of the patterns identified for jobs and output in the timber industry. The REMI model uses data from different sources than the JLARC staff analysis in the tab "Are Objectives Being Met?" (For more details, see the note at the end of this section.)

### Timber Industry Jobs Declined in Washington Between 2006 and 2014

In terms of timber industry-related jobs in Washington, the REMI model shows a decline similar to what is described in the main report for the years 2006 through 2014. This pattern holds for jobs at both state and national levels.

### REMI Analysis Shows Decline in Statewide Timber Jobs From 2006 to 2014



Source: JLARC staff analysis of REMI data for jobs using NAICS codes for logging (1133), wood products manufacturing (3211, 3212, and 3219) and paper products manufacturing (3221 and 3222).

### **GDP and GDP per Job for Wood Product and Paper Product Manufacturing in REMI**

JLARC staff examined the output and productivity of the timber industry using REMI’s historical data for the same years examined in the main report. We found similar patterns for three of the four GDP trends and three of the four GDP per job trends discussed in the main report.

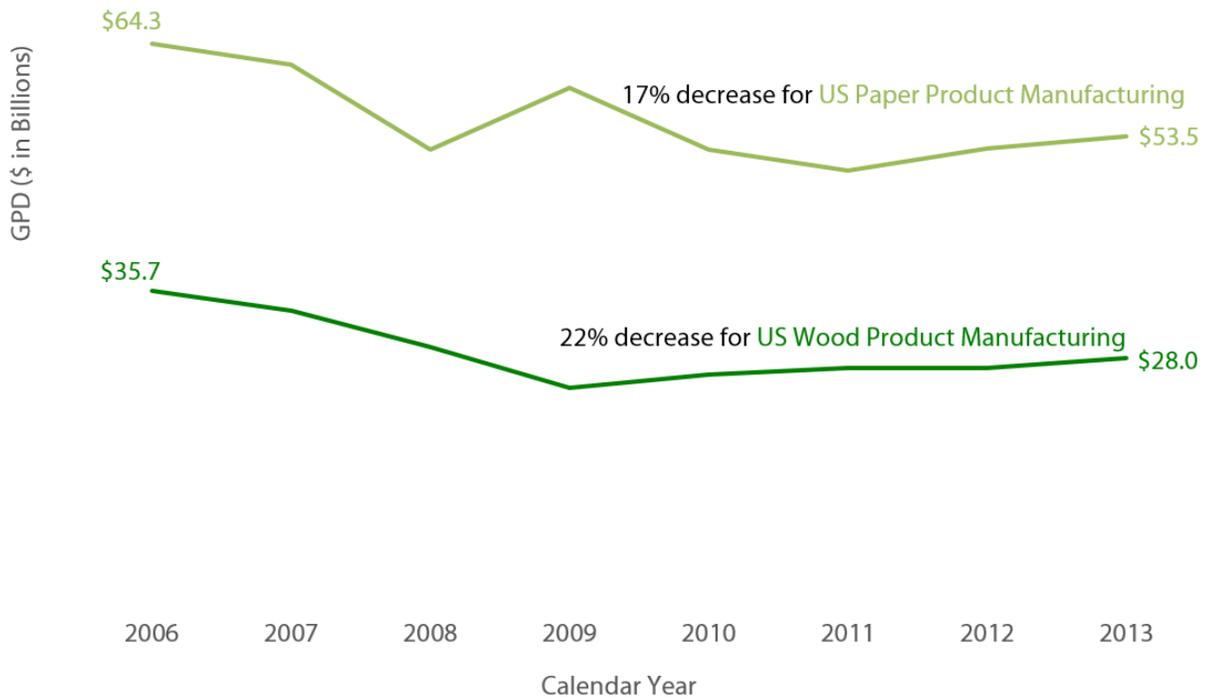
### **National GDP**

In the REMI model, GDP captures the market value of goods and services produced by labor and property in the United State, regardless of nationality. From 2006 to 2013, the U.S. GDP for all industries increased 12 percent.

REMI captures industry-level GDP for the wood product and paper product manufacturing industries using "value-added." This metric captures the gross output of an industry or sector less its intermediate inputs.

Similar to what is presented in the main report, both the wood product and paper product manufacturing industries showed reductions in GDP from 2006 to 2013.

### **REMI Analysis Shows Decline in U.S. Gross Domestic Product for Wood Product and Paper Product Manufacturing From 2006 to 2013 (Fixed 2009 Dollars)**



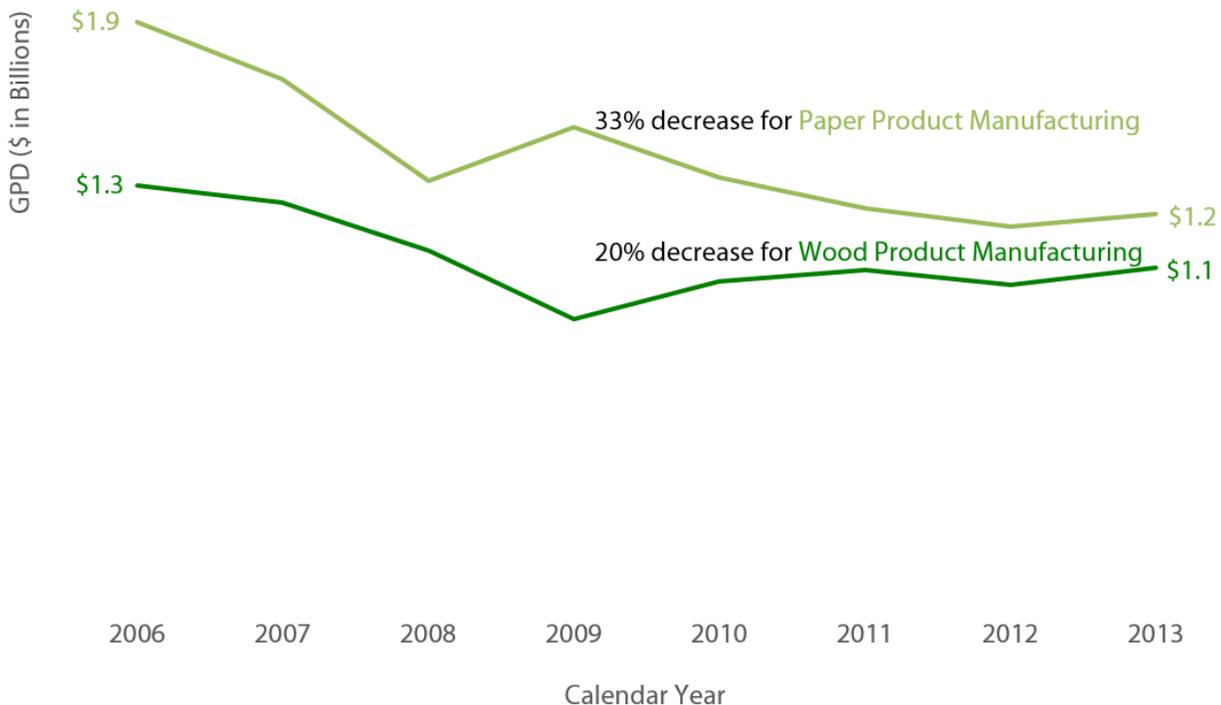
Source: JLARC staff analysis of REMI’s historical data for GDP using NAICS codes for wood products manufacturing (3211, 3212, and 3219) and paper products manufacturing (3221 and 3222).

### State GDP

At the state level, Washington also saw a drop in paper product and wood product manufacturing. According to REMI, the Washington GDP for paper product manufacturing decreased 33 percent while the state’s wood product manufacturing GDP decreased 20 percent.

The downturn in GDP for the wood product manufacturing in REMI is significantly different than the 16 percent increase identified in the main report. This difference is likely due to different data sources, which are discussed below.

### REMI Analysis Shows Decline in Washington Gross Domestic Product for Wood Product and Paper Product Manufacturing From 2006 to 2013 (Fixed 2009 Dollars)



Source: JLARC staff analysis of REMI’s historical data for GDP using NAICS codes for wood products manufacturing (3211, 3212, and 3219) and paper products manufacturing (3221 and 3222).

## GDP per Job for Wood Product and Paper Product Manufacturing in REMI

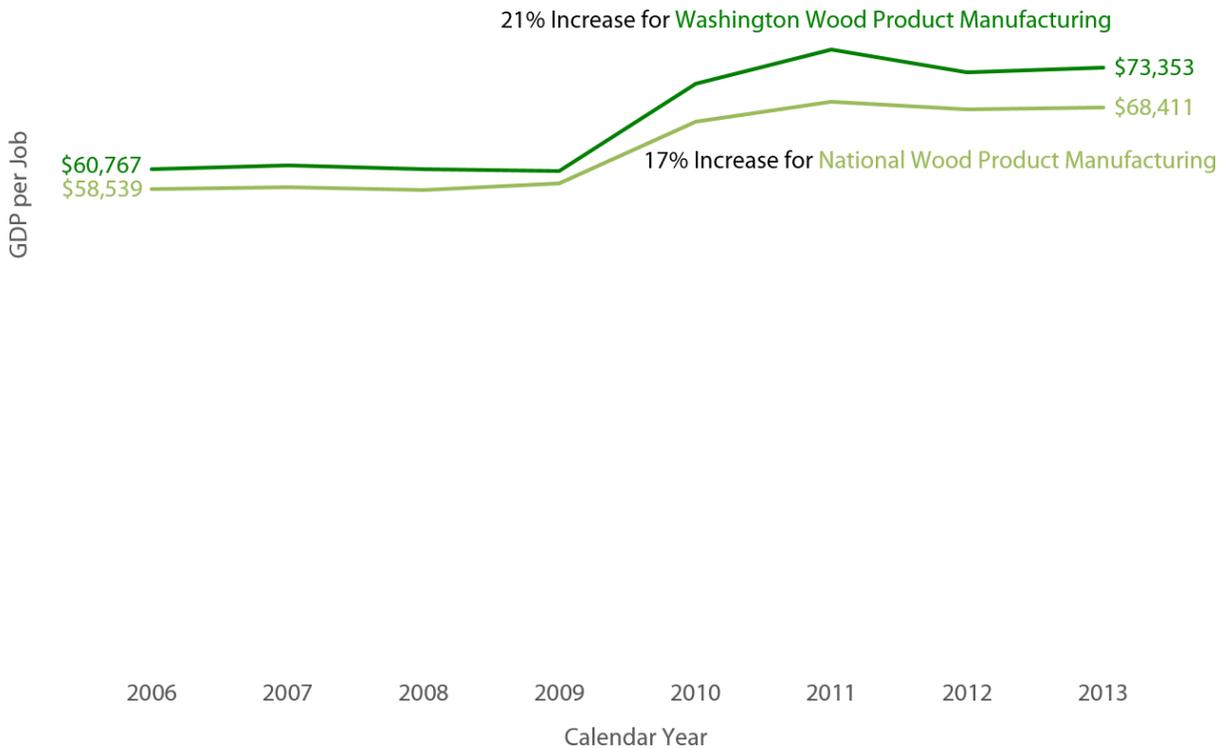
### National GDP per Job

At the national level, the REMI analysis finds the same trend of increasing GDP per job for the wood product manufacturing industry. This indicates each job is producing more than it was in 2006. The GDP per job for the paper product manufacturing industry increased by three percent according to the REMI model, but decreased by 10 percent according to the BEA data summarized in the main report. This difference is likely due to different data sources, which are discussed below.

### State GDP per Job

In Washington, the GDP per job increased 21 percent for wood product manufacturing but is largely unchanged for paper product manufacturing between 2006 and 2013. These trends are consistent with what is summarized in the main report.

### REMI Analysis Shows Washington GDP per Job Outpaced the National GDP per Job for Wood Product Manufacturing From 2006 to 2013 (Fixed 2009 Dollars)



Source: JLARC staff analysis of REMI's historical data for GDP and jobs using NAICS codes for wood products manufacturing (3211, 3212, and 3219) and paper products manufacturing (3221 and 3222).

### REMI Analysis Shows Washington GDP per Job Outpaced the National GDP per Job for Paper Product Manufacturing (Fixed 2009 Dollars)



Source: JLARC staff analysis of REMI’s historical data for GDP and jobs using NAICS codes for wood products manufacturing (3211, 3212, and 3219) and paper products manufacturing (3221 and 3222).

Finally, we did not duplicate the timber harvest and worker productivity analysis because the REMI model does not contain comparable information on board feet of timber harvested.

**Notes about Data Sources**

**Different Approaches in Reporting Employment**

The employment and wage numbers used in the main report are from administrative data collected and maintained by the Washington Employment Security Department (ESD) and reported to the U.S. Department of Labor’s Bureau of Labor Statistics (BLS). This data captures workers covered by state unemployment insurance and federal workers covered by unemployment compensation for federal employees. It omits some workers in the labor market, including self-employed and sole proprietors. This is an important distinction as the self-employed make-up a growing segment of the logging industry. Logging is included in the employment trend depicted in the statewide timber employment chart, but not in the GDP and GDP per job charts.

The REMI model, on the other hand, uses employment data from the U.S. Department of Commerce’s Bureau of Economic Analysis (BEA). BEA makes a number of adjustments to employment and wage data for occupations not covered by the BLS system (see BEA’s [FAQ](#) for further details).

Understanding the distinction between BEA and BLS employment data is important for two reasons. First, the BEA jobs numbers tend to be higher as they capture a wider selection of employment, including sole proprietors. However, it may count a person holding multiple jobs as a number greater than one, whereas the BLS data counts a person one time regardless of the number of jobs performed. Second, while BEA provides a more comprehensive picture, it has an approximate two-year lag behind BLS data, which is regularly updated throughout the year and receives more attention in the press. According to REMI, BEA employment data operates as a unit of demand related to the tasks a worker performs within a job rather than a job itself.

**Different Approaches in Reporting GDP**

The GDP numbers reported in the main report are from BEA data. The GDP and value-added numbers in the REMI model come from BLS data. There are three primary reasons why REMI does not use BEA data:

- Industry-level value-added data, by state, is currently available from BEA only for 1997-2012. Historical data in the REMI model goes back to 1990;
- The industry detail from BEA is not sufficient for the REMI model due to the large number of sectors included in the model; and
- BEA uses the same price deflator for every state whereas the REMI model uses a region-specific price deflator.

In reporting “real GDP” and “real GDP per job” using both BEA data and REMI data, we are relying on two different methods to control for inflation. This is due to different options available from our data sources.

To understand the difference between the two approaches, it is important to note that GDP data may be reported either in **nominal dollars** or **real dollars**. Nominal GDP reflects the sum of the value of all goods and services produced over a 12 month period. A change in the nominal GDP value from one year to the next may be attributable to changes in prices, changes in the volume of good and services produced, or some combination of these two changes. Real GDP removes the impact of price changes so that GDP captures changes in the volume or quantity of goods and services produced.

There are different ways to adjust GDP to control for inflation:

- A **fixed weighting method** multiplies the price of each commodity in a fixed base year (e.g., 2009) by the quantity produced in each individual year (e.g., 2006 through 2013) to calculate its contribution to overall GDP.
- A **chained weighting method** adjusts the relative price weights in each year rather than comparing prices to those in a fixed base year. This is done because over time, relative changes in prices and resulting changes in purchases can distort the measure of output under a fixed-year weighting method.

The GDP data from BEA in the full report uses chained weighting whereas the REMI output reported above relies on the fixed weighting method.

### 3) Modeling the Economic Impact of the Preferential B&O Tax Rate for the Timber and Wood Products Industry Using REMI

JLARC staff modeled the impact of the timber and wood products industry B&O preferences on three outcomes: jobs, wages, and state revenue. Economic and fiscal activity are estimated through the expiration date of the preference in Calendar Year 2024.

#### Modeling Assumptions: How JLARC Staff Built the REMI Scenario

JLARC staff followed a two-step approach to modeling the economic and fiscal impacts of the timber and wood products B&O preferences:

- Reduced production costs for six distinct timber and wood products manufacturing sectors included in the REMI model, and
- Reduced government spending by an amount equivalent to the taxpayer savings.

#### Timber and Wood Products Industries Included in REMI

NAICS	Industry Description
1133	Logging
3211	Sawmills and wood preservation
3212	Veneer, plywood, and engineered wood product manufacturing
3219	Other wood product manufacturing
3221	Pulp, paper, and paperboard mills
3222	Converted paper product manufacturing

These six industries are the same industries examined earlier in Section Two of this Technical Appendix and in [\*\*Technical Appendix 1\*\*](#).

JLARC staff used **production costs** to model the tax preference. In the model, this variable affects the cost of doing business without directly changing the relative costs of inputs (labor, capital, and fuel). JLARC staff allocated all of the savings to the production costs for the timber and wood products manufacturing industries. Adjusting production costs in this manner assumes that savings from the tax preference are funneled back into the primary business activity. This assumption provides an upper bound estimate for economic activity related to the tax treatment as it concentrates the benefit of the tax preference in production-related activities in Washington. In REMI, reductions in production costs increase in-state business activity.

JLARC staff calculated **estimated beneficiary savings** based on DOR tax return data and used these values to reduce each industry’s production costs. The beneficiary savings were shared across the timber and wood products industries in proportion to each industry’s projected output, as estimated in REMI. In Tax-PI, **output** is defined as “the amount of

production, including all intermediate goods purchased as well as value added (compensation and profit).” This can also be thought of as the total of self-supply and all exports (multiregions, rest of nation, and rest of world).

We also **reduced government spending** by an amount equivalent to the reduction in production costs for each year in the analysis. The reduction of production costs and government spending, by the same amount is a method for estimating the total economic and fiscal impact of a change in tax policy.

## **Reporting the Results: What is Included in Employee Earnings**

The REMI model includes multiple compensation and earnings variables, all of which show a similar pattern. In the main report we show **earnings by place of work** because an increasing number of people working in the logging industry are self-employed or sole proprietors. This indicator captures the "sum of wages and salaries, supplements to wages and salaries, and proprietors' income."

## **Applicable Statutes**

### **RCW 82.04.260**

#### **Tax on manufacturers and processors of various foods and by-products—Research and development organizations—Travel agents—Certain international activities—Stevedoring and associated activities—Low-level waste disposers—Insurance producers, surplus line brokers, and title insurance agents—Hospitals—Commercial airplane activities—Timber product activities—Canned salmon processors.**

(1) Upon every person engaging within this state in the business of manufacturing:

(a) Wheat into flour, barley into pearl barley, soybeans into soybean oil, canola into canola oil, canola meal, or canola by-products, or sunflower seeds into sunflower oil; as to such persons the amount of tax with respect to such business is equal to the value of the flour, pearl barley, oil, canola meal, or canola by-product manufactured, multiplied by the rate of 0.138 percent;

(b) Beginning July 1, 2025, seafood products that remain in a raw, raw frozen, or raw salted state at the completion of the manufacturing by that person; or selling manufactured seafood products that remain in a raw, raw frozen, or raw salted state at the completion of the manufacturing, to purchasers who transport in the ordinary course of business the goods out of this state; as to such persons the amount of tax with respect to such business is equal to the value of the products manufactured or the gross proceeds derived from such sales, multiplied by the rate of 0.138 percent. Sellers must keep and preserve records for the period required by RCW 82.32.070 establishing that the goods were transported by the purchaser in the ordinary course of business out of this state;

(c)(i) Beginning July 1, 2025, dairy products; or selling dairy products that the person has manufactured to purchasers who either transport in the ordinary course of business the goods out of state or purchasers who use such dairy products as an ingredient or component in the manufacturing of a dairy product; as to such persons the tax imposed is equal to the value of the products manufactured or the gross proceeds derived from such sales multiplied by the rate of 0.138 percent. Sellers must keep and preserve records for the period required by RCW 82.32.070 establishing that the goods were transported by the purchaser in the ordinary course of business out of this state or sold to a manufacturer for use as an ingredient or component in the manufacturing of a dairy product.

(ii) For the purposes of this subsection (1)(c), "dairy products" means:

(A) Products, not including any marijuana-infused product, that as of September 20, 2001, are identified in 21 C.F.R., chapter 1, parts 131, 133, and 135, including by-products from the manufacturing of the dairy products, such as whey and casein; and

(B) Products comprised of not less than seventy percent dairy products that qualify under (c)(ii)(A) of this subsection, measured by weight or volume.

(iii) The preferential tax rate provided to taxpayers under this subsection (1)(c) does not apply to sales of dairy products on or after July 1, 2023, where a dairy product is used by the purchaser as an ingredient or component in the manufacturing in Washington of a dairy product;

(d)(i) Beginning July 1, 2025, fruits or vegetables by canning, preserving, freezing, processing, or dehydrating fresh fruits or vegetables, or selling at wholesale fruits or vegetables manufactured by the seller by canning, preserving, freezing, processing, or dehydrating fresh fruits or vegetables and sold to purchasers who transport in the ordinary course of business the goods out of this state; as to such persons the amount of tax with respect to such business is equal to the value of the products manufactured or the gross proceeds derived from such sales multiplied by the rate of 0.138 percent. Sellers must keep and preserve records for the period required by RCW 82.32.070 establishing that the goods were transported by the purchaser in the ordinary course of business out of this state.

(ii) For purposes of this subsection (1)(d), "fruits" and "vegetables" do not include marijuana, useable marijuana, or marijuana-infused products;

(e) Until July 1, 2009, alcohol fuel, biodiesel fuel, or biodiesel feedstock, as those terms are defined in RCW 82.29A.135; as to such persons the amount of tax with respect to the business is equal to the value of alcohol fuel, biodiesel fuel, or biodiesel feedstock manufactured, multiplied by the rate of 0.138 percent; and

(f) Wood biomass fuel as defined in RCW 82.29A.135; as to such persons the amount of tax with respect to the business is equal to the value of wood biomass fuel manufactured, multiplied by the rate of 0.138 percent.

(2) Upon every person engaging within this state in the business of splitting or processing dried peas; as to such persons the amount of tax with respect to such business is equal to the value of the peas split or processed, multiplied by the rate of 0.138 percent.

(3) Upon every nonprofit corporation and nonprofit association engaging within this state in research and development, as to such corporations and associations, the amount of tax with respect to such activities is equal to the gross income derived from such activities multiplied by the rate of 0.484 percent.

(4) Upon every person engaging within this state in the business of slaughtering, breaking and/or processing perishable meat products and/or selling the same at wholesale only and not at retail; as to such persons the tax imposed is equal to the gross proceeds derived from such sales multiplied by the rate of 0.138 percent.

(5) Upon every person engaging within this state in the business of acting as a travel agent or tour operator; as to such persons the amount of the tax with respect to such activities is equal to the gross income derived from such activities multiplied by the rate of 0.275 percent.

(6) Upon every person engaging within this state in business as an international steamship agent, international customs house broker, international freight forwarder, vessel and/or cargo charter broker in foreign commerce, and/or international air cargo agent; as to such persons the amount of the tax with respect to only international activities is equal to the gross income derived from such activities multiplied by the rate of 0.275 percent.

(7) Upon every person engaging within this state in the business of stevedoring and associated activities pertinent to the movement of goods and commodities in waterborne interstate or foreign commerce; as to such persons the amount of tax with respect to such business is equal to the gross proceeds derived from such activities multiplied by the rate of 0.275 percent. Persons subject to taxation under this subsection are exempt from payment of taxes imposed by chapter 82.16 RCW for that portion of their business subject to taxation under this subsection. Stevedoring and associated activities pertinent to the conduct of goods and commodities in waterborne interstate or foreign commerce are defined as all activities of a labor, service or transportation nature whereby cargo may be loaded or unloaded to or from vessels or barges, passing over, onto or under a wharf, pier, or similar structure; cargo may be moved to a warehouse or similar holding or storage yard or area to await further movement in import or export or may move to a consolidation freight station and be stuffed, unstuffed, containerized, separated or otherwise segregated or aggregated for delivery or loaded on any mode of transportation for delivery to its consignee. Specific activities included in this definition are: Wharfage, handling, loading, unloading, moving of cargo to a convenient place of delivery to the consignee or a convenient place for further movement to export mode; documentation services in connection with the receipt, delivery, checking, care, custody and control of cargo required in the transfer of cargo; imported automobile handling prior to delivery to consignee; terminal stevedoring and incidental vessel services, including but not limited to plugging and unplugging refrigerator service to containers, trailers, and other refrigerated cargo receptacles, and securing ship hatch covers.

(8) Upon every person engaging within this state in the business of disposing of low-level waste, as defined in RCW 43.145.010; as to such persons the amount of the tax with respect to such business is equal to the gross income of the business, excluding any fees imposed under chapter 43.200 RCW, multiplied by the rate of 3.3 percent.

If the gross income of the taxpayer is attributable to activities both within and without this state, the gross income attributable to this state must be determined in accordance with the methods of apportionment required under RCW 82.04.460.

(9) Upon every person engaging within this state as an insurance producer or title insurance agent licensed under chapter 48.17 RCW or a surplus line broker licensed under chapter 48.15 RCW; as to such persons, the amount of the tax with respect to such licensed activities is equal to the gross income of such business multiplied by the rate of 0.484 percent.

(10) Upon every person engaging within this state in business as a hospital, as defined in chapter 70.41 RCW, that is operated as a nonprofit corporation or by the state or any of its political subdivisions, as to such persons, the amount of tax with respect to such activities is equal to the gross income of the business multiplied by the rate of 0.75 percent through June 30, 1995, and 1.5 percent thereafter.

(11)(a) Beginning October 1, 2005, upon every person engaging within this state in the business of manufacturing commercial airplanes, or components of such airplanes, or making sales, at retail or wholesale, of commercial airplanes or components of such airplanes, manufactured by the seller, as to such persons the amount of tax with respect to such business

is, in the case of manufacturers, equal to the value of the product manufactured and the gross proceeds of sales of the product manufactured, or in the case of processors for hire, equal to the gross income of the business, multiplied by the rate of:

(i) 0.4235 percent from October 1, 2005, through June 30, 2007; and

(ii) 0.2904 percent beginning July 1, 2007.

(b) Beginning July 1, 2008, upon every person who is not eligible to report under the provisions of (a) of this subsection (11) and is engaging within this state in the business of manufacturing tooling specifically designed for use in manufacturing commercial airplanes or components of such airplanes, or making sales, at retail or wholesale, of such tooling manufactured by the seller, as to such persons the amount of tax with respect to such business is, in the case of manufacturers, equal to the value of the product manufactured and the gross proceeds of sales of the product manufactured, or in the case of processors for hire, be equal to the gross income of the business, multiplied by the rate of 0.2904 percent.

(c) For the purposes of this subsection (11), "commercial airplane" and "component" have the same meanings as provided in RCW 82.32.550.

(d) In addition to all other requirements under this title, a person reporting under the tax rate provided in this subsection (11) must file a complete annual report with the department under RCW 82.32.534.

(e)(i) Except as provided in (e)(ii) of this subsection (11), this subsection (11) does not apply on and after July 1, 2040.

(ii) With respect to the manufacturing of commercial airplanes or making sales, at retail or wholesale, of commercial airplanes, this subsection (11) does not apply on and after July 1st of the year in which the department makes a determination that any final assembly or wing assembly of any version or variant of a commercial airplane that is the basis of a siting of a significant commercial airplane manufacturing program in the state under RCW 82.32.850 has been sited outside the state of Washington. This subsection (11)(e)(ii) only applies to the manufacturing or sale of commercial airplanes that are the basis of a siting of a significant commercial airplane manufacturing program in the state under RCW 82.32.850.

(12)(a) Until July 1, 2024, upon every person engaging within this state in the business of extracting timber or extracting for hire timber; as to such persons the amount of tax with respect to the business is, in the case of extractors, equal to the value of products, including by-products, extracted, or in the case of extractors for hire, equal to the gross income of the business, multiplied by the rate of 0.4235 percent from July 1, 2006, through June 30, 2007, and 0.2904 percent from July 1, 2007, through June 30, 2024.

(b) Until July 1, 2024, upon every person engaging within this state in the business of manufacturing or processing for hire:

(i) Timber into timber products or wood products; or (ii) timber products into other timber products or wood products; as to such persons the amount of the tax with respect to the business is, in the case of manufacturers, equal to the value of products, including by-products, manufactured, or in the case of processors for hire, equal to the gross income of the business, multiplied by the rate of 0.4235 percent from July 1, 2006, through June 30, 2007, and 0.2904 percent from July 1, 2007, through June 30, 2024.

(c) Until July 1, 2024, upon every person engaging within this state in the business of selling at wholesale: (i) Timber extracted by that person; (ii) timber products manufactured by that person from timber or other timber products; or (iii) wood products manufactured by that person from timber or timber products; as to such persons the amount of the tax with respect to the business is equal to the gross proceeds of sales of the timber, timber products, or wood products multiplied by the rate of 0.4235 percent from July 1, 2006, through June 30, 2007, and 0.2904 percent from July 1, 2007, through June 30, 2024.

(d) Until July 1, 2024, upon every person engaging within this state in the business of selling standing timber; as to such persons the amount of the tax with respect to the business is equal to the gross income of the business multiplied by the rate of 0.2904 percent. For purposes of this subsection (12)(d), "selling standing timber" means the sale of timber apart from the land, where the buyer is required to sever the timber within thirty months from the date of the original contract, regardless of the method of payment for the timber and whether title to the timber transfers before, upon, or after severance.

(e) For purposes of this subsection, the following definitions apply:

(i) "Biocomposite surface products" means surface material products containing, by weight or volume, more than fifty percent recycled paper and that also use nonpetroleum-based phenolic resin as a bonding agent.

(ii) "Paper and paper products" means products made of interwoven cellulosic fibers held together largely by hydrogen bonding. "Paper and paper products" includes newsprint; office, printing, fine, and pressure-sensitive papers; paper napkins, towels, and toilet tissue; kraft bag, construction, and other kraft industrial papers; paperboard, liquid packaging containers, containerboard, corrugated, and solid-fiber containers including linerboard and corrugated medium; and related types of cellulosic products containing primarily, by weight or volume, cellulosic materials. "Paper and paper products" does not include books, newspapers, magazines, periodicals, and other printed publications, advertising materials, calendars, and similar types of printed materials.

(iii) "Recycled paper" means paper and paper products having fifty percent or more of their fiber content that comes from postconsumer waste. For purposes of this subsection (12)(e)(iii), "postconsumer waste" means a finished material that would normally be disposed of as solid waste, having completed its life cycle as a consumer item.

(iv) "Timber" means forest trees, standing or down, on privately or publicly owned land. "Timber" does not include Christmas trees that are cultivated by agricultural methods or short-rotation hardwoods as defined in RCW 84.33.035.

(v) "Timber products" means:

(A) Logs, wood chips, sawdust, wood waste, and similar products obtained wholly from the processing of timber, short-rotation hardwoods as defined in RCW 84.33.035, or both;

(B) Pulp, including market pulp and pulp derived from recovered paper or paper products; and

(C) Recycled paper, but only when used in the manufacture of biocomposite surface products.

(vi) "Wood products" means paper and paper products; dimensional lumber; engineered wood products such as particleboard, oriented strand board, medium density fiberboard, and plywood; wood doors; wood windows; and biocomposite surface products.

(f) Except for small harvesters as defined in RCW 84.33.035, a person reporting under the tax rate provided in this subsection (12) must file a complete annual survey with the department under RCW 82.32.585.

(13) Upon every person engaging within this state in inspecting, testing, labeling, and storing canned salmon owned by another person, as to such persons, the amount of tax with respect to such activities is equal to the gross income derived from such activities multiplied by the rate of 0.484 percent.

(14)(a) Upon every person engaging within this state in the business of printing a newspaper, publishing a newspaper, or both, the amount of tax on such business is equal to the gross income of the business multiplied by the rate of 0.35 percent until July 1, 2024, and 0.484 percent thereafter.

(b) A person reporting under the tax rate provided in this subsection (14) must file a complete annual report with the department under RCW 82.32.534.

[2015 3rd sp.s. c 6 § 602; 2015 3rd sp.s. c 6 § 205. Prior: 2014 c 140 § 6; (2014 c 140 § 5 expired July 1, 2015); 2014 c 140 § 4; (2014 c 140 § 3 expired July 1, 2015); 2013 3rd sp.s. c 2 § 6; (2013 3rd sp.s. c 2 § 5 expired July 1, 2015); 2013 2nd sp.s. c 13 § 203; (2013 2nd sp.s. c 13 § 202 expired July 1, 2015); prior: (2012 2nd sp.s. c 6 § 602 expired July 1, 2015); 2012 2nd sp.s. c 6 § 204; 2011 c 2 § 203 (Initiative Measure No. 1107, approved November 2, 2010); 2010 1st sp.s. c 23 § 506; (2010 1st sp.s. c 23 § 505 expired June 10, 2010); 2010 c 114 § 107; prior: 2009 c 479 § 64; 2009 c 461 § 1; 2009 c 162 § 34; prior: 2008 c 296 § 1; 2008 c 217 § 100; 2008 c 81 § 4; prior: 2007 c 54 § 6; 2007 c 48 § 2; prior: 2006 c 354 § 4; 2006 c 300 § 1; prior: 2005 c 513 § 2; 2005 c 443 § 4; prior: 2003 2nd sp.s. c 1 § 4; 2003 2nd sp.s. c 1 § 3; 2003 c 339 § 11; 2003 c 261 § 11; 2001 2nd sp.s. c 25 § 2; prior: 1998 c 312 § 5; 1998 c 311 § 2; prior: 1998 c 170 § 4; 1996 c 148 § 2; 1996 c 115 § 1; prior: 1995 2nd sp.s. c 12 § 1; 1995 2nd sp.s. c 6 § 1; 1993 sp.s. c 25 § 104; 1993 c 492 § 304; 1991 c 272 § 15; 1990 c 21 § 2; 1987 c 139 § 1; prior: 1985 c 471 § 1; 1985 c 135 § 2; 1983 2nd ex.s. c 3 § 5; prior: 1983 1st ex.s. c 66 § 4; 1983 1st ex.s. c 55 § 4; 1982 2nd ex.s. c 13 § 1; 1982 c 10 § 16; prior: 1981 c 178 § 1; 1981 c 172 § 3; 1979 ex.s. c 196 § 2; 1975 1st ex.s. c 291 § 7; 1971 ex.s. c 281 § 5; 1971 ex.s. c 186 § 3; 1969 ex.s. c 262 § 36; 1967 ex.s. c 149 § 10; 1965 ex.s. c 173 § 6; 1961 c 15 § 82.04.260; prior: 1959 c 211 § 2; 1955 c 389 § 46; prior: 1953 c 91 § 4; 1951 2nd ex.s. c 28 § 4; 1950 ex.s. c 5 § 1, part; 1949 c 228 § 1, part; 1943 c 156 § 1, part; 1941 c 178 § 1, part; 1939 c 225 § 1, part; 1937 c 227 § 1, part; 1935 c 180 § 4, part; Rem. Supp. 1949 § 8370-4, part.]

NOTES:

Reviser's note: This section was amended by 2015 3rd sp.s. c 6 § 205 and by 2015 3rd sp.s. c 6 § 602, each without reference to the other. Both amendments are incorporated in the publication of this section under RCW 1.12.025(2). For rule of construction, see RCW 1.12.025(1).

Expiration date—2015 3rd sp.s. c 6; 2012 2nd sp.s. c 6 § 602: "Section 602 of this act expires July 1, 2015." [2015 3rd sp.s. c 6 § 603; 2012 2nd sp.s. c 6 § 704.]

## **RCW 82.45.195**

### **Exemptions—Standing timber sales.**

A sale of standing timber is exempt from tax under this chapter if the gross income from such sale is taxable under RCW 82.04.260(12)(d).

[ 2014 c 97 § 308; 2010 1st sp.s. c 23 § 518; 2007 c 48 § 7.]

NOTES:

Reviser's note: This section was amended by 2015 3rd sp.s. c 6 § 205 and by 2015 3rd sp.s. c 6 § 602, each without reference to the other. Both amendments are incorporated in the publication of this section under RCW 1.12.025(2). For rule of construction, see RCW 1.12.025(1).

Expiration date—2015 3rd sp.s. c 6; 2012 2nd sp.s. c 6 § 602: "Section 602 of this act expires July 1, 2015." [2015 3rd sp.s. c 6 § 603; 2012 2nd sp.s. c 6 § 704.]

## Recommendations

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### Legislative Auditor Recommendation

#### Timber and Wood Products Reduced B&O Rate

**The Legislature should review and clarify the timber and wood products preferential B&O rate because while it is reducing the cost of business, it is unclear how it is impacting employment and competitiveness. As part of the clarification, the Legislature should provide a performance statement identifying the public policy objectives and providing targets and metrics to measure whether the objectives have been achieved.**

- The preference is meeting the inferred objective of reducing the cost of doing business in Washington for the timber industry by providing a lower B&O tax rate.
- Results for the inferred objective of retaining good jobs in rural areas are mixed:
  - The overall number of timber industry jobs in Washington has declined since the preference was enacted in 2006, but the decline has been less in rural counties than in nonrural counties;
  - For the timber industry jobs that remain in rural counties, wages are higher than the average wage for those counties;
  - Output per worker has increased.
- It is unclear if the preference has had any impact on Washington's ability to compete nationally in the timber industry. For the period 2001 to 2014, Washington's location quotient remained unchanged for wood product manufacturing. The state's location quotient declined for both paper product manufacturing and for forestry and logging jobs.
- The B&O preference is scheduled to expire in 2024. JLARC staff will likely review the preference again prior to that date. The Legislature has yet to state public policy objectives for either preference. Providing a tax preference performance statement that identifies the objectives along with any targets and metrics would facilitate future review.

The Legislative Auditor's 2014 guidance document for drafting performance statements provides information on what detail to include.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislative action.

#### Standing Timber REET Exemption

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**The Legislature should continue the real estate excise tax exemption for standing timber sales because it is achieving the inferred objective of helping Washington's wood products and timber businesses adjust to structural changes in the industry.**

**Legislation Required:** No.

**Fiscal Impact:** None.

### Letter from Commission Chair

Available December 2016.

### Commissioners' Recommendation

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Available December 2016.

## **Agency Response**

If applicable, will be available December 2016.

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# Trade-in Values

JULY 2016

Inferred Objectives	Results
Reduce the amount of taxes paid	Achieved
Stimulate sales to offset loss of revenue	Unmet
Make WA consistent with other states	Achieved

## Consumers saved \$239M in sales/use tax by trading in like items (FY 2015 data)

A trade-in reduces the sale price of a like item (e.g., a car for a car). Consumers pay tax on the lower price.

Many items are eligible for trade-in credit:

82% was saved in vehicle sales alone

Source: JLARC staff analysis, FY 2015 data

## Lost revenue not offset by taxes on additional vehicle sales

The preference causes overall \$182M decrease in sales tax revenue

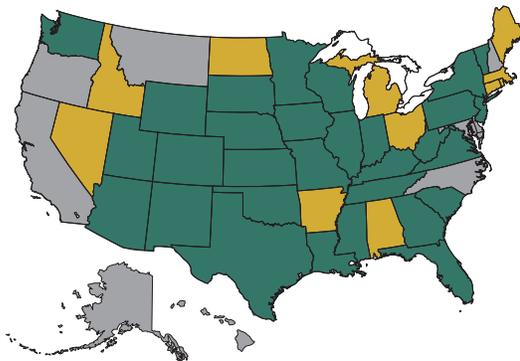


JLARC estimate of savings for FY16 based on auto sales and taxes.

\$31M

Possible \$31M increase in revenue from additional sales not enough to offset losses

## 41 states offer similar exemptions



### 30 have broad exemptions like WA

Any like-property can be traded in

### 11 are more restrictive

Only some property can be traded in (e.g., trade-in on new cars only)

### Others

Either no sales tax or no exemption

**RECOMMENDATION: The Legislature should review and clarify this preference.** The preference reduces consumers' taxes and is consistent with other states. While it may stimulate some additional sales, these sales do not replace the revenue lost due to the tax preference.

For more information, contact:

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The complete report is at [citizentaxpref.wa.gov](http://citizentaxpref.wa.gov).

# JLARC Preliminary Report: 2016 Tax Preference Performance Reviews

## Trade-Ins | Sales and Use Tax

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### Summary of this Review

The Preference Provides	Tax Type	Estimated Biennial Beneficiary Savings
<p>A reduction in the sales and use tax paid when purchasing an item (e.g., a vehicle or boat) if the person trades in an item of “like kind” to the seller at the time of purchase.</p> <p>The reduction is accomplished by subtracting the value of the trade-in item when determining the price that is used to calculate sales or use tax.</p> <p>The preference has no expiration date.</p>	<p>Sales &amp; Use RCW 82.08.010(1) (a)</p>	<p>\$591.4 million</p>

Public Policy Objective
<p>This preference was enacted via Washington’s initiative process rather than legislative action. The initiative language adopted by Washington voters specifically stated the purpose was to reduce the amount on which sales tax is paid by excluding the trade-in value of certain property from the amount that is taxable.</p> <p>JLARC staff infer two additional objectives:</p> <ul style="list-style-type: none"> <li>• Make Washington consistent with other states that allowed a trade-in credit; and</li> <li>• "Stimulate sales" and "offset any possible loss of revenue" caused by the preference (phrases noted in the 1984 voter’s pamphlet).</li> </ul>

Recommendations
<p><b>Legislative Auditor’s Recommendation</b></p> <p><b>Review and Clarify:</b> While the preference is achieving the inferred objectives of reducing consumers’ taxes and making Washington’s tax treatment consistent with other states, it is not achieving the inferred objective of stimulating enough additional sales to replace lost revenue.</p> <p><b>Commissioner Recommendation:</b> Available in October 2016</p>

### Details on this Preference

#### What is the Preference?

A person pays less in sales or use tax when purchasing an item (for example, a vehicle, airplane, or a boat) if the person trades in an item of “like-kind” to the seller at the time of the purchase. The reduction in sales or use tax is accomplished by “excluding” (subtracting) the value of the trade-in item when determining the price that is used to calculate sales or use tax.

#### How Does the Trade-In Tax Preference Work?

	New Car	\$30K
	Trade In	(Sales price not subtracted)
Sales price used to calculate sales tax		\$30K
(Average Sales Tax Rate)		x 9.3%
<b>Sales Tax Due</b>		<b>\$2,790 tax</b>

### Sales Tax Calculation Without Preference

	New Car	\$30K
	– Trade In	(10K)
Sales price used to calculate sales tax		\$20K
(Average Sales Tax Rate)		x 9.3%
<b>Sales Tax Due</b>		<b>\$1,860 tax</b>

### Sales Tax Calculation With Preference

**Tax Savings in This Example \$930**

Source: JLARC staff analysis of RCW 82.08.010(1)(a) and WAC 458-20-247.

The preference applies only to transactions involving goods, not services, and is limited to situations where:

- The buyer delivers the trade-in property to the seller at the time of sale (no future delivery);
- The trade-in property is considered as part of the payment for the purchase; and
- The trade-in property is “of a like-kind,” meaning a vehicle for a vehicle (pick-up traded in on sedan purchase), or an appliance for an appliance (electric stove traded in on a gas range).

## Legal History

### Pre-1984

People with a “like kind” good to trade in towards the purchase of an item paid the same in sales or use tax as purchasers without a trade-in.

### November 1984

Washington voters passed Initiative No. 464 (I-464), which allowed the value of trade-ins of like-kind items to be excluded when calculating the sales tax due on a purchase of goods. I-464 was strongly supported by Washington auto dealers. Other proponents included consumer groups, farm equipment dealers, and boat manufacturers and dealers. I-464 took effect December 6, 1984.

The Department of Revenue (DOR) filed a proposed emergency rule immediately after the initiative passed, clarifying the changes for businesses and consumers. The initiative language did not include a specific trade-in provision for use tax, but DOR interpreted the exclusion to also apply to use tax transactions.

The tax preference has not be substantively altered since it was enacted.

### 2004

As part of the bill related to the Streamlined Sales and Use Tax Agreement, the Legislature clarified that eligible trade-in property must be “separately stated” in the calculation that determines the selling price.

## Other Relevant Background

### Motor Vehicle Tax Also Calculated On Selling Price

In addition to reducing sales and use taxes, this preference also reduces collections of motor vehicle (MV) sales tax. Since 2003, people who buy or lease a motor vehicle in Washington pay a MV sales tax of 0.3 percent. Like sales and use taxes, the MV tax is calculated on the selling price of a motor vehicle. This preference reduces that selling price by subtracting the

value of the trade-in.

Revenue from the MV sales tax is deposited into the multimodal transportation account which is used for grants to aid local governments in funding projects such as park and ride lots, transit services, and capital projects to improve transportation system connectivity and efficiency.

### **Vehicle Sales Involving Trade-ins**

Auto industry publications indicate that, for U.S. vehicle sales in 2014:

- 48% of new vehicle sales involved trade-ins
- 29% of used vehicle sales involved trade-ins

## **Public Policy Objectives**

### **What are the public policy objectives that provide a justification for the tax preference? Is there any documentation on the purpose or intent of the tax preference?**

This preference was enacted via Washington’s initiative process rather than legislative action. Its adoption in 1984 preceded the 2013 legislative requirement to include a tax preference performance statement.

#### **Reduce the Amount on Which Sales Tax Is Paid**

The initiative language adopted by Washington voters specifically stated the purpose was “to reduce the amount on which sales tax is paid by excluding the trade-in value of certain property from the amount that is taxable.” The issue was also described as an inequity that could be remedied by calculating the sales tax on the “net” price (initial sale price less trade-in value).

#### **Additional Inferred Objectives**

JLARC staff infer two additional objectives of the preference based on voters’ pamphlet statements in support of I-464, as well as newspaper articles and editorials.

- **Make Washington consistent with other states** that allowed a trade-in credit; and
- **“Stimulate sales”** and **“offset any possible loss of revenue”** caused by the preference (quoting phrases from the voters’ pamphlet).

## **Are Objectives Being Met?**

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### **What evidence exists to show that the tax preference has contributed to the achievement of any of these public policy objectives?**

#### **Reduce the Amount on Which Sales Tax Is Paid**

The preference is achieving the stated, voter-approved public policy objective of reducing the amount of sales tax paid on purchases when property is traded in. It functions to reduce the “selling price” of such purchases, upon which the sales or use tax is calculated.

#### **Make Washington Consistent with Other States**

The preference **achieves** the additional inferred objective of making Washington’s tax treatment for trade-in property consistent with many other states that impose sales tax. Forty-one states provide a sales tax exemption on trade-ins, with eleven of these states providing some limits on the amount or type of trade-in. (See the **“Other States with Similar Tax Preference?”** tab).

#### **Stimulate Sales and Offset Loss of Revenue**

While the preference may have stimulated additional sales, **JLARC staff estimate the tax revenue generated from these sales does not offset the revenue lost** due to the preference.

The analysis presented here focuses on vehicle sales because 82 percent of reported trade-in value in Fiscal Year 2015 was from new and used vehicle transactions. JLARC staff did not estimate results for other types of trade-ins, but their relatively smaller size would not impact the overall conclusion.

To assess the likelihood that the preference stimulated sales and generated enough tax revenue to offset any revenue losses due to the preference, JLARC staff incorporated two factors:

- **Buyer responsiveness to vehicle price changes** – The preference can be viewed as a reduction in vehicle price. JLARC staff calculated estimated values of statewide increased vehicle sales using a range of estimates of how responsive potential vehicle buyers are to vehicle price changes.

Based on a review of economic research literature on vehicle sales, JLARC staff identified a range of possible price response rates. These rates are what economists refer to as “price elasticities of demand.”

The elasticities range from a low of negative 0.2 to a high of negative 2.0. At an elasticity of negative 2.0, a 1 percent reduction in vehicle prices would result in a 2 percent increase in demand for vehicles. This analysis measures the change in demand for vehicles as the change in the dollar amount of sales.

- **Statewide revenue increases from additional vehicle sales** – JLARC staff used the REMI model to estimate tax revenue gains from increased consumer expenditures on vehicle purchases involving a trade-in. The REMI model is a macroeconomic impact model of the state’s economy that accounts for changes in consumer expenditures, other indirect economic activities as a result of consumer expenditures, and total tax revenues from all activities. Use of the REMI model offers a comprehensive look at revenue gains beyond additional taxes on motor vehicles. JLARC staff used the model to estimate a tax revenue change for the elasticities in the range described above.

See **Technical Appendix tab 1** for more information about the REMI model and **Technical Appendix tab 2** for a step-by-step illustration of the calculations.

Below is a series of questions and answers based on the range of elasticities used in the analysis. These estimates are for Fiscal Year 2016. For all elasticities in the range, **the amount of sales tax revenue lost due to the preference exceeds the estimated amount of all tax revenue gained from increased sales.** This same result held in other fiscal years we modeled.

<b>Questions answered to reach the conclusion</b>	<b>If elasticity is -0.2</b>	<b>If elasticity is -2.0</b>
<b>FY 2016</b>		
<i>How much did the preference reduce the price of a vehicle?</i> Based on Department of Revenue and auto industry data concerning auto sales and trade-ins, a buyer saved an average of 3.6% on the price of a vehicle purchase involving a trade-in due to the reduction in sales tax.	3.6%	3.6%
<i>How much did this price reduction stimulate vehicle sales?</i> The estimate of additional sales for FY 2016 varies based on a range of assumptions of how responsive potential vehicle buyers are to a reduction in vehicle price.	\$26.4 million (estimate)	\$263.8 million (estimate)
<i>How much tax revenue was generated from these additional sales?</i> The estimate of how much additional tax revenue would be generated in FY 2016 is based on the results of the REMI model and the estimates of additional vehicle sales in the row above. It includes taxes on vehicle sales directly as well as taxes from the other indirect activities in the economy that occur when consumers increase spending.	\$3.1 million (estimate)	\$31.3 million (estimate)
<i>How much sales tax revenue was lost due to the preference?</i> The amount is based on an average for fiscal years 2013-2015 for vehicle transactions involving trade-ins, adjusted to FY 2016. The amount does not include trade-ins for other goods like airplanes, boats, farm machinery, or appliances.	\$182 million (estimate)	\$182 million (estimate)

*Does the additional tax revenue generated offset the sales tax revenue lost?*

Estimates of the sales tax revenue lost exceed estimates of tax revenue gains. Even with the most optimistic elasticity assumption (-2.0), sales tax revenue lost is \$150.7 million more than the tax revenue gained from additional sales.

No. Net loss of \$178.9 million

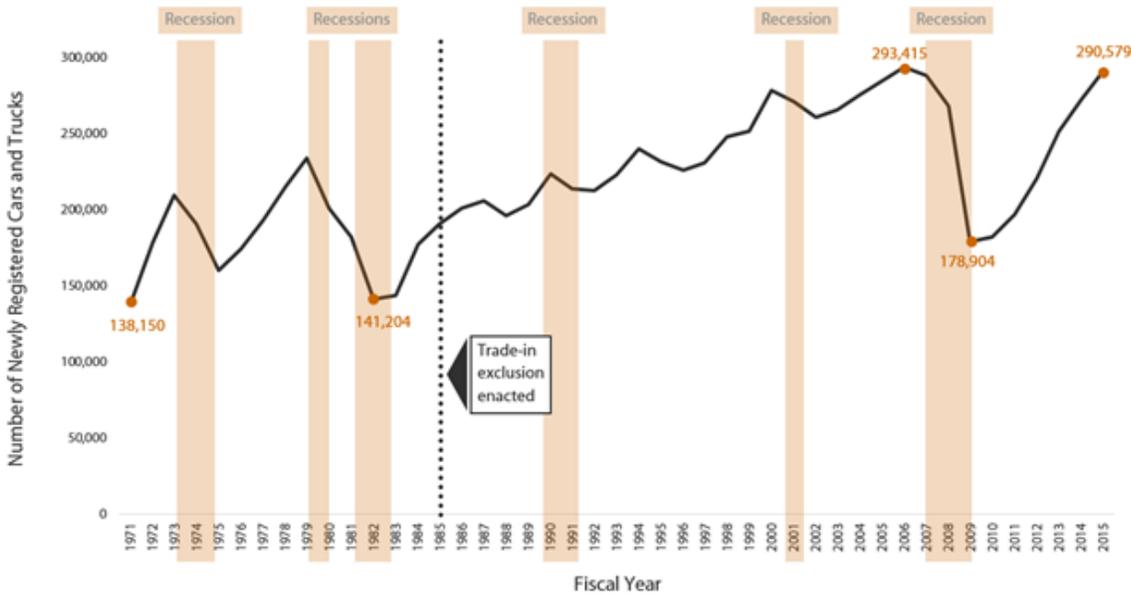
No. Net loss of \$150.7 million

Source: JLARC analysis of Department of Revenue tax return data for auto dealer total sales and trade in deductions, FY15. Total sales amount reduced by estimated percentage of dealership income due to parts and service sales. JLARC analysis of direct, indirect, and induced economic effects using REMI model.

**Other factors driving vehicle purchasing decisions**

Information from additional sources suggests that other factors may be bigger drivers of vehicle purchasing decisions than an average 3.6 percent reduction in price. For example, the number of newly registered vehicles (vehicles that have not previously been titled) in Washington varies with more general economic conditions.

**Number of Newly Registered Vehicles Rises and Falls with Washington’s Economic Trends**



Source: JLARC staff analysis of Economic Revenue Forecast Council data from Department of Licensing on new vehicle registrations, FYs 1971 through 2015, National Bureau of Economic Research data on recent economic cycles. Newly registered vehicles include new cars, and new or used cars brought in from out-of-state. It excludes used cars already registered in Washington.

**To what extent will continuation of the tax preference contribute to these public policy objectives?**

Continuing the tax preference will continue to reduce the amount on which sales tax is paid for purchases involving trade-ins and make Washington’s taxation consistent with many other states. While the preference may continue to stimulate some additional sales, it is unlikely to generate additional sales tax revenue to make up the difference in the tax loss due to the preference.

**Beneficiaries**

**Who are the entities whose state tax liabilities are directly affected by the tax preference?**

**Direct Beneficiaries**

The direct beneficiaries of this preference are people and businesses that purchase goods and trade in like-kind goods at the time of sale. Specific data is not available to determine the number of beneficiaries. For Fiscal Year 2015, new and used vehicles made up the majority (82 percent) of the value of like-kind goods traded in. Other purchases involving trade-ins included recreational vehicles, industrial and farm machinery and equipment, auto parts and tires, boats, motorcycles, and all-terrain vehicles.

### Indirect Beneficiaries

New and used automobile dealers are the largest indirect beneficiaries of the preference. The preference may encourage people considering the purchase of a new or used vehicle to do so through a dealership. The trade-in sales tax exclusion is only available if the buyer presents a like-kind item to trade in at the time of sale. People selling their existing vehicles independently do not generally benefit from the preference.

New and used motor vehicle dealers must obtain a license with the Department of Licensing (DOL). As of April 2016, DOL reports there were 400 new motor vehicle dealers and 1,498 used motor vehicle dealers licensed in Washington. JLARC staff identified 838 new and used vehicle sale businesses reporting trade-ins in Fiscal Year 2015.

## Revenue and Economic Impacts

### What are the past and future tax revenue and economic impacts of the tax preference to the taxpayer and to the government if it is continued?

JLARC staff estimate direct beneficiaries of the trade-in preference saved \$239.1 million in Fiscal Year 2015 and will save \$591.4 million for the 2017-19 Biennium due to this preference. JLARC staff used Department of Revenue tax return data and Department of Licensing registration data to estimate the beneficiary savings, which are comprised of three components:

1. State sales and use tax (6.5 percent)
2. Local sales and use tax (about 2.5 percent)
3. Additional motor vehicle sales tax (0.3 percent)

#### Estimated 2017-19 Direct Beneficiary Savings for Trade-in Sales and Use Tax Exclusion

Fiscal Year	State Sales/Use Tax	Local Sales/Use Tax	0.3% Motor Vehicle Tax	Total Beneficiary Savings
2014	\$161,765,000	\$61,058,000	\$5,957,000	\$228,780,000
2015	\$168,787,000	\$64,129,000	\$6,221,000	\$239,137,000
2016	\$176,008,000	\$67,668,000	\$6,488,000	\$250,164,000
2017	\$194,308,000	\$74,704,000	\$7,162,000	\$276,174,000
2018	\$204,882,000	\$78,769,000	\$7,552,000	\$291,204,000
2019	\$211,243,000	\$81,215,000	\$7,786,000	\$300,244,000
<b>2017-19 Biennium</b>	<b>\$416,125,000</b>	<b>\$159,984,000</b>	<b>\$15,338,000</b>	<b>\$591,448,000</b>

Source: JLARC staff analysis of Department of Revenue tax return trade in-deduction detail for all types of traded in goods, Fiscal Years 2014-2015. JLARC staff analysis of Department of Licensing use tax data for registered vehicles and vessels, Fiscal Years 2014-2015. Future growth using IHS consumer spending on new and used motor vehicles forecast from Economic and Revenue Forecast Council, Nov 2015.

### If the tax preference were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?

If the tax preference were terminated, individuals and businesses would pay more sales or use tax on purchases of goods where they trade in like-kind goods. Also, people and businesses would pay more motor vehicle sales tax on purchases of vehicles where they trade in a used vehicle

Vehicle dealers likely may see a reduction in sales from an increase in sales price, which could result in a decrease in the number of or amount spent on consumer vehicle purchases.



- In contrast to other modeling software, Tax-PI includes state and local government as a sector. This permits users to see the trade-offs associated with tax policy changes (e.g., effects on the state's economy from both increased expenditures by businesses due to a tax preference along with decreased spending by government due to the revenue loss);
- For current revenue and expenditure data, users can input information to reflect their state's economic and fiscal situation. This allows JLARC staff to calibrate a state budget using up-to-date information from the Economic and Revenue Forecast Council (ERFC) and the Legislative Evaluation and Accountability Program (LEAP); and
- The model can forecast economic and revenue impacts multiple years into the future.

## Results the Model Provides

The REMI model accounts for the direct, indirect, and induced effects as they spread through the state's economy, which allows users to simulate the full impact of tax policy change over time.

- Direct effects are industry specific and capture how a target industry responds to a particular policy change (e.g., changes in industry employment following a change in tax policy);
- Indirect effects capture employment and spending decisions by businesses in the targeted industry's supply chain that provide goods and services; and
- Induced effects capture the in-state spending and consumption habits of employees in targeted and related industries.

The REMI model produces year-by-year estimates of the total statewide effects of a tax policy change. Impacts are measured as the difference between a baseline economic and revenue forecast and the estimated economic and revenue effects after the policy change.

## What the Model Includes

The REMI model is a macroeconomic impact model that incorporates aspects of four major economic modeling approaches: input-output, general equilibrium, econometric, and new economic geography. The foundation of the model, the inter-industry matrices found in the input-output models, captures Washington's industry structure and the transactions between industries. Layered on top of this structure is a complex set of mathematical equations used to estimate how private industry, consumers, and state and local governments respond to a policy change over time.

- The supply side of the model includes many economic variables representing labor supply, consumer prices, and capital and energy costs with elasticities for both the consumer and business sectors.
- Regional competitiveness is modeled via imports, exports, and output.
- Demographics are modeled using population dynamics (births, deaths, and economic and retirement migration) and includes cohorts for age, sex, race, and retirement.
- Demographic information informs the model's estimates for economic consumption and labor supply.
- The dynamic aspect comes from the ability to adjust variables over time as forecasted economic conditions change.

While the model is complex and forecasting involves some degree of uncertainty, Tax-PI provides a tool for practitioners to simulate how tax policy and the resulting industry changes affect Washington's economy, population, and fiscal situation.

## Technical Appendix 2: Calculating Revenue Impacts

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### Three Approaches Support Conclusions about Revenue Loss

One inferred objective of the tax preference for trade-ins is to stimulate sales and offset any possible loss of revenue caused by the preference. The conclusion of this review: While the preference may have stimulated additional sales, **JLARC staff estimate the tax revenue generated from these sales does not offset the revenue lost** due to the preference.

This technical appendix provides more detail on the approaches and calculations JLARC staff used to reach that conclusion. The analyses focused on vehicle sales because 82 percent of reported trade-in value in Fiscal Year 2015 was from new and used vehicle transactions. JLARC staff evaluated net revenue impacts using three approaches:

#### 1. REMI Model – Single Elasticity in the Model

This approach mirrors REMI analyses JLARC staff have conducted on other tax preferences. It considers both the tax revenue gained from a reduction in consumer prices due to the preference and the tax revenue lost due to the preference and decreased government spending. In terms of how consumers respond to a change in vehicle prices, this approach used the value internal to the REMI model.

## 2. Sales Tax Revenue Changes – Range of Elasticities

In this approach, JLARC staff estimated sales tax revenue changes due to changes in vehicle sales and considered a range of estimates of how responsive potential vehicle buyers are to vehicle price changes. The degree of responsiveness – the “price elasticity of demand” – ranged from a low of negative 0.2 to a high of negative 2.0.

## 3. REMI Model – All Tax Revenue – Range of Elasticities

This approach combined both the REMI model and the range of elasticities reflecting consumer responsiveness to vehicle price changes. The approach considers all tax revenues, not just sales tax. The results presented in the “Are Objectives Being Met?” tab come from this combined approach.

The results from all three approaches support the conclusion that tax revenue generated by any additional vehicle sales does not offset the revenue lost due to the preference.

## Approach #1 – REMI Model – Single Elasticity in the Model

### User Inputs in REMI

REMI’s Tax-PI model allows users to model policy changes and analyze the estimated impacts to the Washington economy, both in terms of economic activity and government finances. (See [Technical Appendix 1](#) for an overview of the REMI model.)

Prior to running modeling scenarios, users must make a series of choices about how to set up the modeling environment by building a state budget and calibrating the model accordingly. JLARC staff used the November 2015 revenue estimates produced by the Economic and Revenue Forecast Council (ERFC) and budgeted expenditures for FY 2014 and 2015, as reported by the Legislative Evaluation and Accountability Program (LEAP) Committee. This data represents the budget and revenue data in the model and serves as the “jump off” point for Tax-PI’s economic and fiscal estimates. Because Tax-PI is a forecasting tool, JLARC staff was unable to model the economic impact of the tax preference beginning in 2006.

In addition to establishing a budget and inputting expected revenue values, users must specify whether government expenditures are determined by demand or revenue. “By demand” imposes a level of government spending in future years that is necessary to maintain the same level-of-service as the final year in which budget data is entered whereas “by revenue” ties government expenditures to estimated changes in revenue collections.

Users may also elect to impose a balanced budget restriction or leave the model unconstrained. The balanced budget feedback forces revenue and expenditures to be equivalent and thus may impose some limitations on economic activity.

By setting expenditures to be determined by demand, users avoid making assumptions about how policymakers may alter spending priorities in the future. In addition, users essentially establish the current budget allocation as carry-forward levels for each expenditure category.

JLARC staff ran the reported scenario with expenditures set to be determined by demand and with the balanced budget feedback option turned on.

### Data for the REMI Model

The REMI model comes with historical economic and demographic data back to 1990. The data comes from federal government agencies such as the U.S. Census Bureau, U.S. Energy Information Administration, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. As described above, current revenue and expenditure data for Washington comes from ERFC and LEAP, respectively. The data used to build the modeling scenario described in section three is from JLARC staff estimated beneficiary savings based on Department of Revenue (DOR) tax records.

### Modeling the Scenario

JLARC staff used REMI to evaluate the economic and revenue response to a change in the price of new and used vehicles. Specifically, JLARC staff modeled a scenario simulating the lowering of vehicle prices for consumers and decreasing government spending by the amount of the estimated beneficiary savings. The analysis compared the effects of increased tax revenue associated with increased consumer spending with the foregone tax revenue resulting from the preference and reduced government spending.

In this approach, JLARC staff changed the following policy variables in REMI:

- Decreased “Government Spending” by the estimated amount of beneficiary savings attributable to vehicle sales, calculated using DOR data showing the amount of trade-in deductions reported.
- Decreased the consumer price for the policy variables “New Motor Vehicles” and “Net Purchases of Used Motor Vehicles.”

Table 1 shows the REMI results for the changes to these three policy variables for Fiscal Years 2015-2020. The price change affected consumers' purchasing power for vehicles, and includes the substitution effect that simulates consumers changing demand for one good based on a change of price of another good. The reduction in the price of automobiles increased purchases of autos while decreasing purchases of other goods. In contrast, government spending declined.

<b>Table 1 - Policy Variable Changes (in Millions of Dollars)</b>						
<b>Fiscal Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Consumer Price - New Motor Vehicles</b>	-\$125.1	-\$126.6	-\$129.2	-\$131.1	-\$133.4	-\$136.7
<b>Consumer Price - Net Purchases of Used Motor Vehicles</b>	-\$49.9	-\$55.4	-\$62.0	-\$67.4	-\$71.9	-\$75.3
<b>Government Spending</b>	-\$175.0	-\$182.0	-\$191.2	-\$198.5	-\$205.3	-\$212.0

Source: JLARC staff analysis of DOR data, REMI model.

REMI then allows a user to calculate the net revenue changes associated with the effects shown in Table 1. Table 2 shows the estimated net revenue effect of the trade-in deduction for Fiscal Years 2015-2020. The REMI analysis includes the net revenue effect of lower consumer prices and lower government spending, while the beneficiary savings represents the foregone revenue due to the tax preference.

Although the vehicle price reduction did result in an increase in vehicle sales, and therefore an increase in sales tax revenue, the gain was more than offset by the loss of sales tax revenue due to the preference and the reduction in government spending.

<b>Table 2 - Net Revenue Effect (in Millions of Dollars)</b>						
<b>Fiscal Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Revenue Change - REMI Analysis</b>	\$12.2	\$25.6	\$27.6	\$29.0	\$30.2	\$31.4
<b>Revenue Decrease - Beneficiary Savings</b>	-\$175.0	-\$182.0	-\$191.2	-\$198.5	-\$205.3	-\$212.0
<b>Net Revenue Effect</b>	-\$162.8	-\$156.4	-\$163.6	-\$169.5	-\$175.1	-\$180.6

Source: JLARC staff analysis of DOR data, REMI model.

A limitation of this approach, however, is that REMI users are not able to change the price elasticity of demand for vehicles. Instead, this is a fixed value in the REMI model of approximately -1.65. As such, modeling the price change of new and used vehicles in REMI would use that elasticity. In order to evaluate the effects of the tax preference using various assumptions for the price elasticity of demand for vehicles, JLARC staff developed two different approaches, both of which used the concept of price elasticity of demand.

## **Approach #2 – Sales Tax Revenue Changes – Range of Elasticities**

Approach #2 focuses on sales tax revenues and introduces the concept of consumer responsiveness to changes in vehicle prices.

### **What is Price Elasticity of Demand?**

To approximate a potential response of vehicle sales to a tax preference that effectively reduces vehicle prices, JLARC staff used price elasticity of demand, the measure of responsiveness of the quantity demanded of a good or service to a change in its price. Specifically, the values of elasticities in this report refer to the percentage change in quantity demanded in response to a one percent change in price.

Price elasticities with an absolute value less than 1 are considered *inelastic* (purchases deemed essential and/or without adequate substitutions available) whereas absolute values greater than 1 are *elastic* (purchases may be delayed or substitutions are available). A value of 1 indicates unit elasticity or an equivalent percent change in quantity purchased relative to the percent change in price. The price elasticities of demand included in this analysis are negative, indicating a decrease in price would result in an increase in demand.

### **Price Elasticity of Demand for Automobiles**

The price elasticity of demand for vehicle purchases is not a definitively established amount, as there are many variables that potentially impact consumer behavior. For example, the elasticities associated with vehicle sales vary due to factors such as geography (urban vs. rural), make and model of automobile, and year (new vs. used). JLARC staff reviewed literature and found that various studies have arrived at a wide range of price elasticities of demand, and this analysis therefore presents a range of elasticities informed by that review.

JLARC staff approximated the effect that a price change resulting from a reduction in sales tax could have on demand for vehicles. Rather than assigning one elasticity for the estimate, JLARC staff calculated potential changes in demand and, consequently, vehicle purchases, based on the range of elasticities found in the literature. The range of elasticities used in this analysis is -0.2, -0.5, -0.8, -1.0, -1.2, -1.5, -1.8, -2.0. See the list of references at the end of this appendix for the literature JLARC staff reviewed in developing this range.

### Evaluating Change in Vehicle Price and Demand

Because the price elasticities of demand described above indicate responsiveness to changes in price, the next portion of the analysis required estimation of the percentage change in the price of vehicles that involved a trade-in that can be attributed to the trade-in deduction. This percentage change in vehicle prices is multiplied by the range of elasticities to estimate the percentage change in vehicle demand. This change, in turn, is multiplied by a base amount of taxable sales and to estimate the additional vehicle sales stimulated by the change in price.

To estimate the percentage change in price, JLARC staff used Fiscal Year 2013-2015 data reported to the Department of Revenue (DOR) by automobile dealerships for taxable sales and for reported deductions pursuant to the trade-ins tax preference.

1. The calculation begins with **taxable sales** reported by automobile dealerships to DOR.
2. The **taxable sales** amount includes parts and service sales, which is not part of the analysis. According to data from the National Automobile Association of America parts and service sales are 11.4 percent of total dealership sales.
3. Reducing **taxable sales** by 11.4 percent generates estimated **taxable vehicle sales**.
4. The **deduction** reported to DOR by automobile dealerships represents amounts deducted as they are not taxable pursuant to the trade-in deduction.
5. Adding **taxable vehicle sales** to the amount of the **deduction** results in estimated **total vehicle sales**.
6. **Taxable vehicle sales** is multiplied by 41.4 percent to estimate **total trade-in sales**.

To estimate the share of sales that involve a trade-in, JLARC staff relied on data from the National Automobile Association of America showing the share of vehicle sales that are new or used, and data from Edmunds.com concerning the percentage of new and used vehicle sales that involve a trade-in. Table 3 shows how these percentages are multiplied together for each category of sale, then added together to estimate at 41.4 percent the trade-in share of total vehicle sales.

Category	% of Sales	Trade-In Share	Total Share
New	65.0%	48%	31.2%
Used	35.0%	29%	10.1%
<b>Trade-In Share of Total Auto Sales</b>			<b>41.4%</b>

Source: National Automobile Association of America - NADA Data 2014; Edmunds.com - Used Market Report 2014.

7. To estimate the tax that would be due on vehicle sales absent the tax preference, **total trade-in sales** is multiplied by an estimated tax rate. The tax rate comprises three components, shown in table 4.

State	Local	MV Tax	Total
6.5%	2.48%	0.3%	<b>9.28%</b>

Source: DOR (Average local sales tax rate).

8. Total **trade-in vehicle cost** is estimated by adding **total trade-in sales** to total **trade-in sales tax**. The steps used to arrive at this total are shown in table 5.

	1	2	3	4	5	6	7	8

Fiscal Year	Taxable Sales	Parts/ Service Adj.	Taxable Vehicle Sales	Deduction	Total Vehicle Sales	Total Trade-in Sales	Total Trade-in Sales Tax	Total Trade-in Vehicle Cost
2013	\$9,050,005,038	-11.4%	\$8,018,304,464	\$1,816,820,555	\$9,835,125,019	\$4,067,035,106	\$377,420,858	\$4,444,455,964
2014	\$9,909,834,610	-11.4%	\$8,780,113,464	\$1,887,511,267	\$10,667,624,731	\$4,411,291,590	\$409,367,860	\$4,820,659,450
2015	\$10,802,529,048	-11.4%	\$9,571,040,737	\$1,955,421,731	\$11,526,462,468	\$4,766,439,412	\$442,325,577	\$5,208,764,989
Average	\$9,920,789,565	-11.4%	\$8,789,819,555	\$1,886,584,518	\$10,676,404,073	\$4,414,922,036	\$409,704,765	\$4,824,626,801

Source: DOR, National Automobile Association of America - NADA Data 2014.

9. Estimating the **price change percentage** that the **sales tax difference** represents begins with the **deduction** reported to DOR by automobile dealerships.
10. **This deduction is multiplied by the estimated tax rate** to estimate the **sales tax difference**. This number is the numerator used to calculate the **price change percentage**.
11. **Total trade-in vehicle cost** is the denominator used to calculate the **price change percentage**.
12. The number from step 10 is divided by the number from step 11 to estimate the **price change percentage**. The steps used to estimate this percentage are shown in table 6.

	9	10	11	12
Fiscal Year	Deduction	Sales Tax Difference	Total Trade-in Vehicle Cost	Price Change %
2013	\$1,816,820,555	-\$168,600,948	\$4,444,455,964	-3.79%
2014	\$1,887,511,267	-\$175,161,046	\$4,820,659,450	-3.63%
2015	\$1,955,421,731	-\$181,463,137	\$5,208,764,989	-3.48%
Average	\$1,886,584,518	-\$175,075,043	\$4,824,626,801	-3.63%

JLARC staff multiplied the **price change percentage** with the various price elasticities to estimate a range of **percent demand changes**, which are shown in table 7.

Fiscal Year	Price Change %	-0.20	-0.50	-0.80	-1.00	-1.20	-1.50	-1.65	-1.80	-2.00
2013	-3.79%	0.76%	1.90%	3.03%	3.79%	4.55%	5.69%	6.26%	6.83%	7.59%
2014	-3.63%	0.73%	1.82%	2.91%	3.63%	4.36%	5.45%	6.00%	6.54%	7.27%
2015	-3.48%	0.70%	1.74%	2.79%	3.48%	4.18%	5.23%	5.75%	6.27%	6.97%
Average	-3.63%	0.73%	1.81%	2.90%	3.63%	4.35%	5.44%	5.99%	6.53%	7.26%

These percentages were multiplied with **base taxable sales** to estimate a range of **marginal taxable sales**, shown in table 8.

Fiscal Year	Base Taxable Sales	-0.20	-0.50	-0.80	-1.00	-1.20	-1.50	-1.65	-1.80	-2.00
2013	\$3,315.7	\$25.2	\$62.9	\$100.6	\$125.8	\$150.9	\$188.7	\$207.5	\$226.4	\$251.6
2014	\$3,630.8	\$26.4	\$66.0	\$105.5	\$131.9	\$158.3	\$197.9	\$217.7	\$237.5	\$263.9
2015	\$3,957.8	\$27.6	\$68.9	\$110.3	\$137.9	\$165.5	\$206.8	\$227.5	\$248.2	\$275.8
Average	\$3,634.8	\$26.4	\$65.9	\$105.5	\$131.9	\$158.2	\$197.8	\$217.6	\$237.4	\$263.7

### Comparing Marginal Sales Tax Revenue to Revenue Lost Due to Preference

The exercise above led to an estimate of the increase in vehicle sales associated with each of the elasticities in the range.

The last step was to calculate the sales tax revenue gains for each of the increases in vehicle sales, then compare these to the sales tax revenue that is foregone due to the trade-in preference.

JLARC staff averaged the marginal sales estimated for Fiscal Years 2013, 2014, and 2015 for each value of elasticity above. Multiplying these values by a tax rate of 9.28 percent (Table 4) yields estimated marginal sales tax revenues.

The tax rate comprises the 6.5 percent state rate, an estimated average local sales tax rate of 2.48 percent, and a 0.3 percent motor vehicle tax pursuant to RCW 82.08.020(3) that is deposited in the multimodal transportation account.

The marginal revenue amounts are compared with the offsetting revenue cost of the preference, averaged for FY13-FY15, with a growth rate applied for FY16. The growth rate reflects growth in personal consumption expenditures for new and used vehicles in REMI’s baseline forecast.

The results of this analysis are shown in **Table 9**. For every elasticity in the range, the sales tax revenue lost exceeds any sales tax revenue gains.

Fiscal Year	Tax Rate	-0.20	-0.50	-0.80	-1.00	-1.20	-1.50	-1.65	-1.80	-2.00
2013	9.28%	\$2.33	\$5.84	\$9.34	\$11.67	\$14.01	\$17.51	\$19.26	\$21.01	\$23.35
2014	9.28%	\$2.45	\$6.12	\$9.79	\$12.24	\$14.69	\$18.36	\$20.20	\$22.04	\$24.49
2015	9.28%	\$2.56	\$6.40	\$10.24	\$12.80	\$15.35	\$19.19	\$21.11	\$23.03	\$25.59
<b>Average</b>	<b>9.28%</b>	<b>\$2.45</b>	<b>\$6.12</b>	<b>\$9.79</b>	<b>\$12.24</b>	<b>\$14.68</b>	<b>\$18.36</b>	<b>\$20.19</b>	<b>\$22.03</b>	<b>\$24.47</b>
Estd. Beneficiary Savings		-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0
<b>Net Revenue</b>		<b>-\$179.6</b>	<b>-\$175.9</b>	<b>-\$172.2</b>	<b>-\$169.8</b>	<b>-\$167.3</b>	<b>-\$163.6</b>	<b>-\$161.8</b>	<b>-\$160.0</b>	<b>-\$157.5</b>

### Approach #3 -- REMI Model – All Tax Revenue – Range of Elasticities

Approach #3 combines the range of elasticities from Approach #2 with use of the REMI model. Approach #2 is limited because it only captures potential marginal revenue attributable to the sales tax on vehicles, and not dynamic revenue impacts from other taxes or other economic activity supported by the additional vehicle purchases. JLARC staff used REMI to estimate this dynamic impact of the marginal auto sales. As in Approach #2, the marginal revenue amounts are compared with the offsetting revenue cost of the preference, averaged for FY13-FY15, with a growth rate applied for FY16. The results of this approach are summarized in the “**Are Objectives Being Met?**” tab, and they are shown in **Table 10**. For every elasticity in the range, the sales tax revenue lost exceeds any tax revenue gains.

Elasticity	-0.20	-0.50	-0.80	-1.00	-1.20	-1.50	-1.65	-1.80	-2.00
% Change in Price	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%
% Change in Demand	0.7%	1.8%	2.9%	3.6%	4.4%	5.4%	6.0%	6.5%	7.3%
Base Taxable Sales	\$3,634.8	\$3,634.8	\$3,634.8	\$3,634.8	\$3,634.8	\$3,634.8	\$3,634.8	\$3,634.8	\$3,634.8
Additional Sales from Increased Demand	\$26.4	\$65.9	\$105.5	\$131.9	\$158.3	\$197.8	\$217.6	\$237.4	\$263.8
Revenue from Additional Sales	\$3.1	\$7.8	\$12.5	\$15.6	\$18.8	\$23.4	\$25.7	\$28.1	\$31.3
Estimated Forgone Revenue	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0	-\$182.0
<b>Net Revenue</b>	<b>-\$172.0</b>	<b>-\$167.3</b>	<b>-\$162.6</b>	<b>-\$159.5</b>	<b>-\$156.3</b>	<b>-\$151.7</b>	<b>-\$149.4</b>	<b>-\$147.0</b>	<b>-\$143.8</b>

To build this simulation, JLARC staff amended the policy variable for personal consumption expenditures by the amount of marginal sales calculated for each elasticity value.

- The model includes policy variables for two types of automobile purchases, New Motor Vehicles and Net Purchases of Used Motor Vehicles. The marginal sales amount was distributed in proportion to REMI’s baseline personal consumption expenditures for these two variables.
- Because the personal consumption expenditures for these variables grow in the REMI’s baseline forecast, JLARC staff grew the marginal sales amounts by the same growth rates in out years.
- Revenue changes reflect only the increase in personal consumption expenditures, and do not show substitution effects on other consumption categories that would be expected if the change in automobile consumption were driven by a change in vehicle price.

- Revenue changes also do not reflect changes in revenue resulting from a reduction in government spending attributable to the revenue forgone due to the tax preference.

## References

- Dyckman, T. R..(1965). An Aggregate-Demand Model for Automobiles. *Journal of Business*, 38, 252-265. Retrieved from <http://www.jstor.org/stable/2351061>
- Gwartney, J., and Richard Stroup. (1997). *Economics: Private and Public Choice*, 8th edition. New York, New York: Dryden.
- Hymans, S. H.. (1970). Consumer Durable Spending: Explanation and Prediction. In Arthur N. Okun and George L. Perry (Eds.), *Brookings Papers on Economic Activity* (173-199). Washington, D.C.: The Brookings Institution. Retrieved from [http://www.brookings.edu/~media/Projects/BPEA/1970-2/1970b\\_bpea\\_hymans\\_ackley\\_juster.PDF](http://www.brookings.edu/~media/Projects/BPEA/1970-2/1970b_bpea_hymans_ackley_juster.PDF)
- Juster, F. T., and Paul Wachtel. (1972). Anticipatory and Objective Models of Durable Goods Demand. *American Economic Review*, 62, 564-579. Retrieved from <http://www.jstor.org/stable/1806099>
- Lave, C., and Kenneth Train. (Jan. 1979). A Disaggregate Model of Auto-Type Choice. *Transportation Research*, 13A, 1-9. Retrieved from [https://www.researchgate.net/publication/256509538\\_A\\_Disaggregate\\_Model\\_of\\_Auto-Type\\_Choice](https://www.researchgate.net/publication/256509538_A_Disaggregate_Model_of_Auto-Type_Choice)
- Levinsohn, J.. (1988). Empirics of Taxes on Differentiated Products: The Cast of Tariffs in the U.S. Automobile Industry. In Robert E. Baldwin (Ed.), *Trade Policy Issues and Empirical Analysis* (11-40). Chicago, Illinois: University of Chicago Press. Retrieved from <http://www.nber.org/chapters/c5846.pdf>
- McCarthy, P. S.. (1996). Market Price and Income Elasticities of New Vehicle Demands. *The Review of Economics and Statistics*, 78, 543-547. <http://doi.org/10.2307/2109802>
- Nerlove, M.. (1957). A Note on Long-Run Automobile Demand. *Journal of Marketing*, 22, 57-64. Retrieved from <https://archive.ama.org/archive/ResourceLibrary/JournalofMarketing/Pages/1957/22/1/6743726.aspx>
- Suits, D. B.. (1958). The Demand for New Automobiles in the United States 1929-1956. *The Review of Economics and Statistics*, 40, 273-280. <http://doi.org/10.2307/1927419>
- Suits, D. B.. (1961). Exploring Alternative Formulations of Automobile Demand. *The Review of Economics and Statistics*, 43(1), 66-69. <http://doi.org/10.2307/1926837>

## Applicable Statutes

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### RCW 82.08.010

#### Definitions.

For the purposes of this chapter:

(1)(a)(i) "Selling price" includes "sales price." "Sales price" means the total amount of consideration, except separately stated trade-in property of like kind, including cash, credit, property, and services, for which tangible personal property, extended warranties, digital goods, digital codes, digital automated services, or other services or anything else defined as a "retail sale" under RCW 82.04.050 are sold, leased, or rented, valued in money, whether received in money or otherwise. No deduction from the total amount of consideration is allowed for the following: (A) The seller's cost of the property sold; (B) the cost of materials used, labor or service cost, interest, losses, all costs of transportation to the seller, all taxes imposed on the seller, and any other expense of the seller; (C) charges by the seller for any services necessary to complete the sale, other than delivery and installation charges; (D) delivery charges; and (E) installation charges.

[ 2014 c 140 § 11; 2010 c 106 § 210; 2009 c 535 § 303; 2007 c 6 § 1302; (2007 c 6 § 1301 expired July 1, 2008); 2006 c 301 § 2; 2005 c 514 § 110; 2004 c 153 § 406; 2003 c 168 § 101; 1985 c 38 § 3; 1985 c 2 § 2 (Initiative Measure No. 464, approved November 6, 1984); 1983 1st ex.s. c 55 § 1; 1967 ex.s. c 149 § 18; 1963 c 244 § 1; 1961 c 15 § 82.08.010. Prior: (i) 1945 c 249 § 4; 1943 c 156 § 6; 1941 c 178 § 8; 1939 c 225 § 7; 1935 c 180 § 17; Rem. Supp. 1945 § 8370-17. (ii) 1935 c 180 § 20; RRS § 8370-20.]

## Recommendations

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### Legislative Auditor Recommendation

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#### Legislative Auditor Recommendation

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The Legislature should review and clarify the sales tax exemption for trade-ins because, while the preference is achieving the inferred objectives of reducing consumers' taxes and making Washington's tax treatment consistent with other states, it is not achieving the objective of stimulating enough additional sales to replace lost revenue.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislative action.

## **Letter from Commission Chair**

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Available December 2016.

## **Commissioners' Recommendation**

Available December 2016.

## **Agency Response**

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If applicable, will be available December 2016.

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