

PRELIMINARY REPORT:
2020 TAX PREFERENCE PERFORMANCE
REVIEWS

Microbrewers

LEGISLATIVE AUDITOR'S CONCLUSION:

\$7.2 million biennial preference created an estimated 2 to 6 jobs in the beverage manufacturing industry. Distributors receive 84% of direct preference savings, which is 0.17% of their gross income.

July 2020

The preference provides a beer tax exemption for a brewery's first 60,000 barrels sold

Washington imposes a tax on beer sales. Under this preference, breweries that produce fewer than two million barrels of beer per year are exempt from a \$4.78 per barrel component of the beer tax and instead pay an in-lieu tax of \$1.48. The preference applies to the first 60,000 barrels sold by the brewery.

Estimated Biennial Beneficiary Savings
\$7,187,000

Tax Type
Beer Tax
RCW 66.24.290(3)(b)
Applicable Statutes

Beer tax is paid during the first sale of beer. Washington breweries receive the preference when they sell beer directly to customers or retail locations. Beer distributors receive the preference when they purchase beer from a U.S. brewery that annually produces fewer than two million barrels.

The preference was enacted in 1993 and does not have an expiration date.

Washington's beer industry has changed since the preference was enacted in 1993

The Legislature did not state an intent for the preference when it was enacted in 1993. Based on stakeholder testimony, JLARC staff infer the intent was to provide tax relief to Washington microbreweries¹ as the industry emerged in the state.

In 1993, at least one large brewery in Washington produced more than two million barrels annually, and the microbrewery industry was emerging according to testimony. Large breweries left the state by 2003 and today the state has hundreds of smaller breweries.

Inferred Objective	Results
Provide tax relief to Washington microbreweries as the industry develops.	Unclear. 423 (89%) of Washington breweries use the preference and realize 16% of the savings. 27 beer distributors use the preference for sales of beer brewed in-state and out-of-state and realize 84% of the savings.

¹Limited production breweries that typically produce specialty beers and sell products locally.

Inferred Objective	Results
	The preference provides an economic benefit of less than 1% of beneficiaries' total gross income.

Recommendation

Legislative Auditor's Recommendation: Review and clarify

The Legislature should clarify the beer tax preference by including a performance statement, identify the intended beneficiaries, and ensure the preference directly targets those businesses.

The preference was enacted before the Legislature required a performance statement for new tax preferences. The Legislature should clarify its expectations for the preference by adding a performance statement that clearly states the public policy objectives and metrics to determine if the objectives have been met.

The Legislature should review the preference's requirements to ensure that it supports the intended beneficiaries.

You can find additional information in Recommendations.

Commissioners' Recommendation

Available on [Citizen Commission website](#) October 2020.

REVIEW DETAILS

1. Beer tax exemption for the first 60,000 barrels sold

Preference exempts beer sales from one component of Washington's beer tax

This preference provides an exemption from one component of Washington's beer tax for a brewery's first 60,000 barrels of beer sold each fiscal year. It applies to beer made by breweries that produce fewer than two million barrels of beer per calendar year. The preference was enacted in 1993 and does not have an expiration date.

Breweries and distributors using the preference pay a lower beer tax

Each state is responsible for regulating alcohol sales. There are multiple ways beer can be bought and sold before reaching the final customer.

1. **Breweries:** Washington allows breweries to self-distribute their beer to retailers, sell to distributors, and sell directly to customers from their breweries.
2. **Distributors:** Purchase beer from in-state and out-of-state breweries and sell to retail locations.
3. **Retailers:** Purchase beer from breweries or distributors and sell to the end customer.

4. **Customers:** Purchase beer directly from a brewery or a retail location, such as a restaurant, bar, or grocery store.

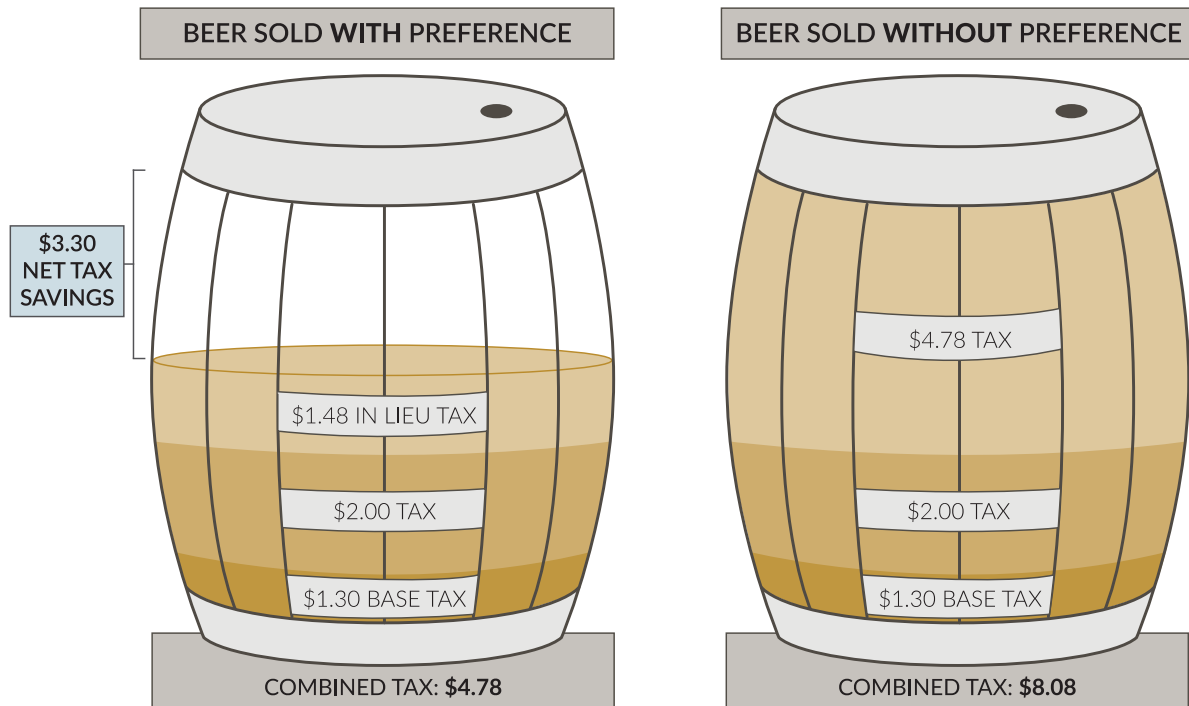
Beer sold in Washington is subject to a beer tax with multiple components: a \$1.30 base tax per barrel introduced in 1934; an additional \$2 tax imposed in 1989; and another \$4.78 tax imposed in 1993. The combined beer tax totals \$8.08 per barrel. This preference provides an exemption from the \$4.78 part of the tax.

Beer taxes are paid on the first sale transaction. The tax is paid by either:

- Breweries that self-distribute their beer or sell directly to customers on their premises, or
- Beer distributors that purchase beer directly from in-state or out-of-state breweries.

The preference provides an exemption from the \$4.78 component of the beer tax for a brewery's first 60,000 barrels sold. Instead of paying the \$4.78 part of the tax, breweries and beer distributors receiving the preference pay an in-lieu tax of \$1.48 per barrel. This means beer sold with the preference is taxed at \$3.30 less per barrel, a 41% reduction from the combined beer tax rate.

Exhibit 1.1: Beer sold with the preference is taxed at a combined rate of \$4.78 per barrel. Beer sold without the preference is taxed at a combined rate of \$8.08 per barrel.



Source: JLARC staff analysis of Washington State Liquor and Cannabis Board documentation and RCW 66.24.290.

Beer eligible for the preference is taxed at a combined rate of \$4.78 per barrel. This rate applies when *all* of the following occur:

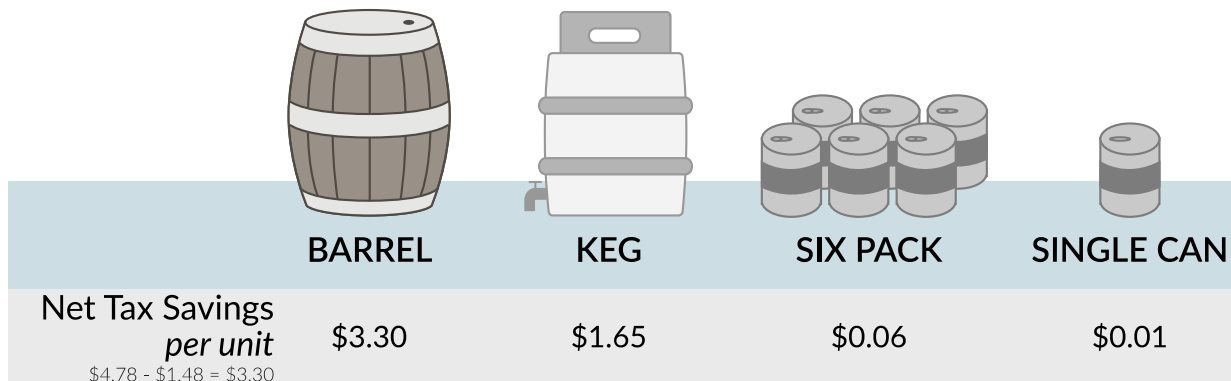
- The first 60,000 barrels of beer sold by a brewery.
- Beer produced by a brewery in the United States.
- Beer produced by a brewery making fewer than two million barrels in a calendar year.

Beer not eligible for the preference is taxed at a combined rate of \$8.08 per barrel. This rate applies when *any one* of the following occur:

- Beer produced outside the United States.
- Beer produced by a brewery making more than two million barrels in a calendar year.
- Beer that is more than 8% alcohol by weight.
- Beer sold by an out-of-state wholesaler².
- Beer sold by a brewery after it exceeds 60,000 barrels sold in a fiscal year.

A barrel of beer contains two kegs, or 55 six-packs. With the \$4.78 exemption under this preference and the \$1.48 in-lieu tax, the \$3.30 net tax savings per barrel is equivalent to six cents per six-pack, or one cent per 12-ounce can of beer.

Exhibit 1.2: The net savings per barrel is equivalent to six cents per six-pack, or one cent per 12-ounce can of beer



Source: JLARC staff analysis of RCW 66.24.290.

Federal beer taxes also apply to beer sales, as well as Washington sales tax on the final retail sale.

²An authorized representative licensed through the Washington State Liquor and Cannabis Board to sell domestic and foreign beer to Washington distributors for further sale in the state.

2. \$7.2 million estimated biennial beneficiary savings

The preference provides tax savings for breweries and distributors that sell beer in Washington

The Legislature did not state its intent when it enacted the preference in 1993. JLARC staff infer from statements made in committee hearings that it was intended to provide tax relief to small breweries as the microbrewery industry emerged in Washington.

Beneficiaries saved \$3.4 million in fiscal year 2019

In fiscal year 2019, beneficiaries saved an estimated net \$3.4 million with the preference. Of Washington's 472 breweries, 423 (89%) sold beer with the preference. Breweries that did not use the preference include those owned by large, controlled interests³ that brewed over two million barrels per year. Twenty-seven beer distributors also used the preference for beer purchased from in-state and out-of-state breweries.

Of the beer sold with the preference in fiscal year 2019, 46% was produced by Washington-based breweries and sold directly by the brewery or by a distributor. The other 54% of beer was produced by out-of-state breweries and purchased by beer distributors for sale in Washington.

Beer distributors realized 84% of the tax savings from the preference. Washington breweries directly realized 16% of the tax savings.

The breakdown of tax savings by beneficiary and brewery location in fiscal year 2019 shows:

- **16% - Washington brewery sales** by self-distribution or direct sales to customers.
- **30% - Distributor purchases** from Washington breweries.
- **54% - Distributor purchases** from out-of-state breweries.

The Legislature did not explicitly state who the preference is intended to benefit. Testimony from 1993 referred to small, neighborhood-based breweries emerging in the beer industry. It is unclear if the Legislature intended the preference to benefit beer distributors and out-of-state breweries.

Beneficiaries estimated to save \$7.2 million in the 2021-23 biennium

The estimated net beneficiary savings for the 2021-23 biennium is \$7.2 million.

JLARC staff estimated the beneficiary savings by calculating the amount beneficiaries did not pay due to the \$4.78 per barrel beer tax exemption. That amount was offset by the \$1.48 per barrel in-lieu beer tax. The net beneficiary savings is the difference between the two, at \$3.30 per barrel.

³A related group of breweries, such as a parent and subsidiaries.

Exhibit 2.1: Estimated net beneficiary savings of \$7.2 million in the 2021-23 biennium

Biennium	Fiscal Year	Net Barrels Taxed at Reduced Rate	Beer Tax Not Paid Due to the Preference	In-lieu Beer Tax Paid by Beneficiaries	Net Estimated Beneficiary Savings
2017-19 7/1/17-6/30/19	2018	986,000	\$4,717,000	\$1,462,000	\$3,255,000
	2019	1,015,910	\$4,858,000	\$1,506,000	\$3,352,000
2019-21 7/1/19-6/30/20	2020	1,036,228	4,955,000	\$1,536,000	\$3,419,000
	2021	1,056,953	\$5,054,000	\$1,566,000	\$3,488,000
2021-23 7/1/21-6/30/23	2022	1,078,092	\$5,156,000	\$1,598,000	\$3,558,000
	2023	1,100,000	\$5,258,000	\$1,630,000	\$3,629,000
	2021-23 Biennium	2,178,000	\$10,414,000	\$3,228,000	\$7,187,000

Source: JLARC staff analysis of production and tax payment data provided from Washington Liquor and Cannabis Board for fiscal years 2002-2019. Future growth estimated using average growth in production from 2017-2019.

3. Washington's beer industry has changed since 2001

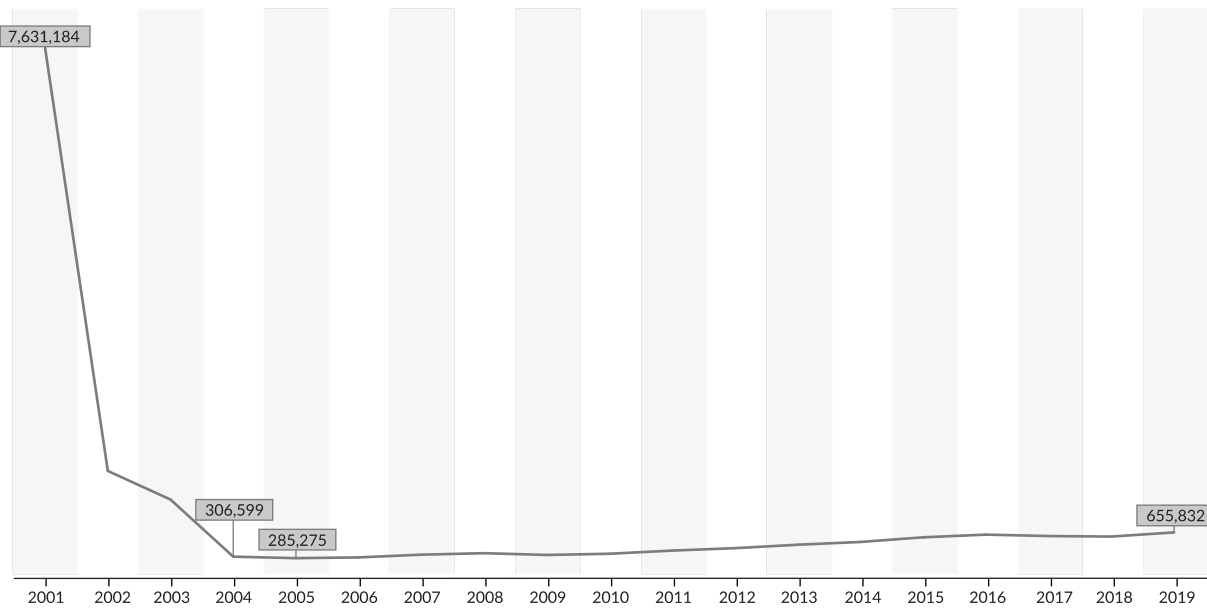
Washington now has more breweries and produces less beer than in 2001

Washington's beer industry has changed since the Legislature enacted the preference. Data is not available for state beer production levels prior to 2001. Today, the state has more breweries that collectively produce less beer than the state's larger breweries did in 2001.

Annual beer production below 1 million barrels since 2003

In fiscal year 2001 (the earliest year data was available from the Washington Liquor and Cannabis Board), Washington breweries produced over 7.6 million barrels of beer. By 2005, large beer producers had left the state and annual production dropped to less than 300,000 barrels. Annual beer production data indicates a gradual increase in beer produced by smaller Washington breweries since then.

Exhibit 3.1: Washington beer production declined after large breweries closed in 2003, and gradually increased since

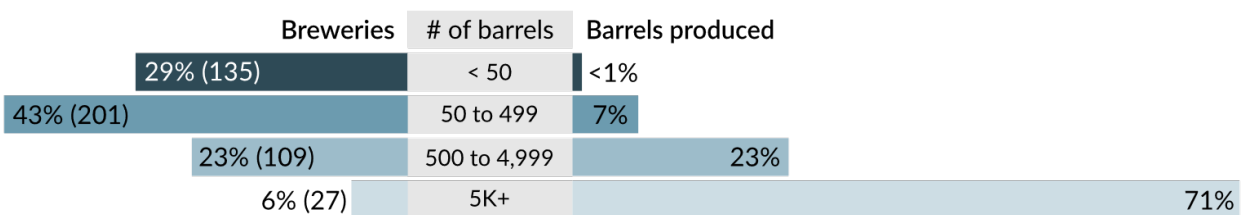


Source: JLARC staff analysis of Washington State Liquor and Cannabis Board data.

Most Washington breweries are small. 445 of 472 produce less than 30% of the state's beer.

As of June 30, 2019, Washington had 472 licensed breweries. The majority of these (336 breweries, or 71%) make fewer than 500 barrels of beer annually. This represents less than 8% of the state's overall beer production. Washington has 27 breweries that produce over 5,000 barrels each. These 27 breweries comprise less than 6% of the breweries, and contribute 71% of the state's beer production.

Exhibit 3.2: In 2019, 27 breweries produced 71% of the state's beer and 445 breweries produced the other 29%



Source: JLARC staff analysis of Washington State Liquor and Cannabis Board Fiscal Year 2019 production data.

Of the ten states with the most breweries, only Michigan provides beer tax credit based on production levels

JLARC staff reviewed the top ten states with the most breweries to determine if others provide preferential beer tax treatment.

Only Michigan provides preferential tax treatment based on brewery production levels. Michigan's beer excise tax is \$6.30 per barrel. Breweries that produce fewer than 50,000 barrels can take a \$2.00 per barrel credit against the tax on the first 30,000 barrels produced.

4. Preference provides negligible economic benefit

Breweries and distributors receive an economic benefit of 0.13% of their gross business income

To determine if the preference helps breweries reduce business costs, JLARC staff calculated the ratio of beer tax savings to gross business income⁴ for Washington microbreweries and distributors.

JLARC staff compared the net beer tax savings of \$3.30 per barrel to the total gross business income for four cohorts of breweries, based on brewery production. The same analysis was conducted for distributors.

The results indicate that the smallest breweries realize the largest benefit from the preference. However, the preference likely provides negligible economic benefit. All brewery cohorts and distributors realize a benefit of less than 1% of their total gross business income.

Exhibit 4.1: All beneficiaries realize an economic benefit of less than 1%

Benefit Directly Realized By	Ratio of Savings to Gross Business Income at \$3.30 Tax Savings
WA breweries < 50 barrel production	0.61%
WA breweries 50-499 barrel production	0.38%
WA breweries 500-4,999 barrel production	0.23%
WA breweries 5,000+ barrel production	0.09%
All distributors	0.17%
All beneficiaries	0.13%

Source: JLARC staff analysis of Washington State Liquor and Cannabis Board production detail and sales data and confidential Department of Revenue tax return detail.

⁴Gross income reported to Department of Revenue for business and occupation and public utility tax purposes.

5. Preference likely increased employment in beer industry by 2 to 6 jobs

Economic impact analysis estimates that the \$7.2 million biennial preference likely increased employment in the beverage manufacturing industry by two to six jobs, and reduced government employment by 25 to 27 jobs

While the preference likely increased the number of jobs in the beverage manufacturing industry, the overall impact to the state likely was a job loss due to decreased state and local government employment.

Economic impact model estimated the preference's impact

JLARC staff used an economic modeling tool that predicts future impacts of a change, such as the removal of a tax preference. The estimated fiscal and employment impacts described below are based on the assumption that the preference is removed.

The fiscal and employment changes include direct, indirect, and induced changes if the preference is removed. The model estimates the impact over a 13-year period, from 2018 through 2030.

The economic model JLARC uses accounts for an industry's labor and capital needs to estimate employment changes. Brewery industry representatives described brewing as a capital-intensive industry. Breweries require equipment such as brewhouses, tanks, filters, and canning or bottling equipment to operate. In contrast, state and local government is more labor intensive. The model's assumptions for the breakdown of labor and capital for the "beverage manufacturing" and "state and local government" industries are shown in the table below.

Factor of Production	Beverage Manufacturing	State and Local Government
Labor	31%	80%
Capital and other tangible inputs	69%	20%

JLARC staff used the model to estimate a range of statewide net fiscal and employment changes in two ways: 1) breweries would bear the full tax obligation resulting from repeal of the preference; and 2) customers would bear the full tax obligation resulting from repeal of the preference. This produced a range of potential impacts. The model results suggest the preference likely:

- Directly supported between two and six beverage manufacturing jobs, depending on whether the preference reduced consumer prices or production costs.
- Reduced state and local government spending, resulting in reductions of between 25 to 27 public sector jobs.

Appendices A and B provide additional detail about the economic modeling tool and analysis.

6. Applicable statutes

RCW 66.24.290(3)(b)

**Authorized, prohibited sales—Monthly reports—>—>Added tax—
Distribution—Late payment penalty—Additional taxes, purposes.**

RCW 66.24.290

(1) Any microbrewer or domestic brewery or beer distributor licensed under this title may sell and deliver beer and strong beer to holders of authorized licenses direct, but to no other person, other than the board. Any certificate of approval holder authorized to act as a distributor under RCW 66.24.270 shall pay the taxes imposed by this section.

(a) Every such brewery or beer distributor shall report all sales to the board monthly, pursuant to the regulations, and shall pay to the board as an added tax for the privilege of manufacturing and selling the beer and strong beer within the state a tax of one dollar and thirty cents per barrel of thirty-one gallons on sales to licensees within the state and on sales to licensees within the state of bottled and canned beer, including strong beer, shall pay a tax computed in gallons at the rate of one dollar and thirty cents per barrel of thirty-one gallons.

(b) Any brewery or beer distributor whose applicable tax payment is not postmarked by the twentieth day following the month of sale will be assessed a penalty at the rate of two percent per month or fraction thereof. Beer and strong beer shall be sold by breweries and distributors in sealed barrels or packages.

(c) The moneys collected under this subsection shall be distributed as follows: (i) Three-tenths of a percent shall be distributed to border areas under RCW 66.08.195; and (ii) of the remaining moneys: (A) Twenty percent shall be distributed to counties in the same manner as under RCW 66.08.200; and (B) eighty percent shall be distributed to incorporated cities and towns in the same manner as under RCW 66.08.210.

(d) Any licensed retailer authorized to purchase beer from a certificate of approval holder with a direct shipment endorsement or a brewery or microbrewery shall make monthly reports to the *liquor control board on beer purchased during the preceding calendar month in the manner and upon such forms as may be prescribed by the board.

(2) An additional tax is imposed on all beer and strong beer subject to tax under subsection (1) of this section. The additional tax is equal to two dollars per barrel of thirty-one gallons. All revenues collected during any month from this additional tax shall be deposited in the state general fund by the twenty-fifth day of the following month.

(3)(a) An additional tax is imposed on all beer and strong beer subject to tax under subsection (1) of this section. The additional tax is equal to ninety-six cents per barrel of thirty- one gallons through June 30, 1995, two dollars and thirty-nine cents per barrel of thirty-one gallons for the

period July 1, 1995, through June 30, 1997, and four dollars and seventy-eight cents per barrel of thirty-one gallons thereafter.

(b) The additional tax imposed under this subsection does not apply to the sale of the first sixty thousand barrels of beer each year by breweries that are entitled to a reduced rate of tax under 26 U.S.C. Sec. 5051, as existing on July 1, 1993, or such subsequent date as may be provided by the board by rule consistent with the purposes of this exemption.

(c) All revenues collected from the additional tax imposed under this subsection (3) shall be deposited in the state general fund.

(4) An additional tax is imposed on all beer and strong beer that is subject to tax under subsection (1) of this section that is in the first sixty thousand barrels of beer and strong beer by breweries that are entitled to a reduced rate of tax under 26 U.S.C. Sec. 5051, as existing on July 1, 1993, or such subsequent date as may be provided by the board by rule consistent with the purposes of the exemption under subsection (3)(b) of this section. The additional tax is equal to one dollar and forty-eight and two-tenths cents per barrel of thirty-one gallons. By the twenty-fifth day of the following month, three percent of the revenues collected from this additional tax shall be distributed to border areas under RCW 66.08.195 and the remaining moneys shall be transferred to the state general fund.

(5)(a) From June 1, 2010, through June 30, 2013, an additional tax is imposed on all beer and strong beer subject to tax under subsection (1) of this section. The additional tax is equal to fifteen dollars and fifty cents per barrel of thirty-one gallons. (b) The additional tax imposed under this subsection does not apply to the sale of the first sixty thousand barrels of beer each year by breweries that are entitled to a reduced rate of tax under 26 U.S.C. Sec. 5051 of the federal internal revenue code, as existing on July 1, 1993, or such subsequent date as may be provided by the board by rule consistent with the purposes of this exemption. (c) All revenues collected from the additional tax imposed under this subsection shall be deposited in the state general fund.

(6) The board may make refunds for all taxes paid on beer and strong beer exported from the state for use outside the state.

(7) The board may require filing with the board of a bond to be approved by it, in such amount as the board may fix, securing the payment of the tax. If any licensee fails to pay the tax when due, the board may forthwith suspend or cancel his or her license until all taxes are paid.

[2010 1st sp.s. c 23 § 1301; 2009 c 479 § 43; 2006 c 302 § 7; 2003 c 167 § 5; 1999 c 281 § 14. Prior: 1997 c 451 § 1; 1997 c 321 § 16; 1995 c 232 § 4; 1994 sp.s. c 7 § 902 (Referendum Bill No. 43, approved November 8, 1994); 1993 c 492 § 311; 1989 c 271 § 502; 1983 2nd ex.s. c 3 § 11; 1982 1st ex.s. c 35 § 24; 1981 1st ex.s. c 5 § 16; 1965 ex.s. c 173 § 30; 1933 ex.s. c 62 § 24; RRS § 7306-24.]

Appendix A: REMI overview

What is REMI?

JLARC staff used Regional Economic Models, Inc.'s (REMI) Tax-PI software (version 2.3.1) to model the economic impacts for the 2020 tax preference review of the beer tax exemption for microbreweries.

Multiple state governments, private sector consulting firms, and research universities also use REMI's dynamic economic modeling to evaluate policy impacts.

Model is tailored to Washington and includes a government sector

Tax-PI is an economic impact tool used to evaluate the fiscal and economic effects and the demographic impacts of a 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 Washington's economy from both increased expenditures by businesses due to a tax preference, along with decreased spending by government due to the associated 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).
- The model can forecast economic and revenue impacts multiple years into the future.

Model simulates the full impact of a tax policy change

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 a 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.
- 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.

Model includes economic, demographic, and fiscal variables

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 effect Washington's economy, population, and fiscal situation.

Appendix B: REMI analysis

REMI analysis shows range of potential employment and tax revenue impacts of the beer tax exemption for microbreweries

JLARC staff used REMI's Tax-PI tool to model two scenarios that illustrate potential employment effects if the microbrewers tax preference were removed.

This technical appendix provides context and supporting information for the analysis supporting the results summarized in section 5.

REMI methodology

User inputs in REMI

REMI's Tax-PI model allows users to estimate the impacts of policy changes to Washington's economic activity and government finances (see Appendix A for an overview of the REMI model).

Before modeling policy scenarios, JLARC staff set parameters by calibrating the model to the state budget. JLARC staff used the November 2019 revenue estimates produced by the Economic and Revenue Forecast Council (ERFC) and budgeted expenditures from the 2019 budget, as reported by the Legislative Evaluation and Accountability Program (LEAP) Committee. This data provides the budget and revenue data for the model and serves as the starting point for Tax-PI's economic and fiscal forecasts.

Users also 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.
- "By revenue" ties government expenditures to estimated changes in revenue collections.

JLARC staff modeled the scenarios with expenditures determined by demand. This avoids assumptions about how policymakers may alter spending priorities in the future. In addition, current budget allocations are carried forward for each expenditure category.

In order to best isolate the effects of a hypothetical removal of the tax preference, JLARC staff modeled the scenarios with the balanced budget restriction option turned off. The balanced budget restriction forces revenue and expenditures to be equivalent, and doing so may impose some limitations on economic activity and obscure the effects of a policy change. Because Tax-PI is a forecasting tool, JLARC staff were unable to model the employment impacts of the tax preference beginning in 1993, the year the preference was enacted. Rather, JLARC staff modeled the potential effects of removing the preference in 2018, the year in which the REMI model used by JLARC staff begins forecasting.

Data for the REMI model

The REMI model includes historical economic and demographic data from 2001 onward. 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. The inputs for the two modeled scenarios described below is based on JLARC staff estimates of future beer production levels and beneficiary savings.

JLARC staff estimated future production levels for two classes of breweries. The first class of breweries includes the ten breweries with the highest production in 2019. The second class consists of all other breweries. For both classes, the growth rate of production for the class was determined by the average annual growth rate over the previous five years.

Beneficiary industries in REMI

The scenarios described below estimate the economic activity and tax revenue impact using North American Industry Classification System (NAICS) code 3121, which is designated for the

beverage manufacturing industry. JLARC staff modeled the impact to the beer brewing industry through the **beverage manufacturing industry** because this was the most detailed level of industry classification related to brewing.

The scenarios capture the inter-industry purchases by the beverage manufacturing industry. The results below focus on the estimated impact to economic development of Washington's microbrewery industry, based on the inferred public policy objectives for this preference.

Modeled scenarios estimate the revenue and employment impact if the tax preference were removed

To illustrate the potential responses of consumers and beneficiaries and the associated employment effects, JLARC staff simulated a removal of the tax preference. The scenarios assume the economic burden of the removal is experienced entirely by either breweries or consumers:

- **Scenario 1:** Assumes that breweries experience the full economic impact of the tax preference removal. This model increases the production cost for beverage manufacturers by the amount of the estimated beneficiary savings.
- **Scenario 2:** Assumes that beer consumers experience the full economic impact of the tax preference removal. This model increases the cost to consumers by the amount of the estimated beneficiary savings.

Model forecasts future impacts

The REMI model is a forecasting tool. It estimates change in economic activity and government revenues based on underlying model data and the budget parameters described above.

JLARC staff modeled the effects of removing the tax preference effective July 1, 2017. This provides estimates of employment beginning in fiscal year 2018 through fiscal year 2030.

Scenario 1: The economic burden of the tax preference's removal is borne by the breweries

To model this scenario, JLARC staff assumed the entire economic burden of the preference removal is borne by breweries. The approach used the following parameters:

- Loss of beneficiary savings begins the first day of fiscal year 2018 (July 1, 2018), when the tax preference is removed.
- Model inputs are estimated by applying an average growth rate over the previous five years to determine future production, and then determining the share of future production eligible for the tax preference.
- Production costs increase by the sum of the estimate of beneficiary savings for each fiscal year.
- The increased revenue from the removal of the tax preference is spent by state and local governments.

The estimate increase in production costs (and corresponding increase in government spending) is shown below (\$ in millions):

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Estimated increase in production costs	1.9	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.6	3.9	4.2	4.6	5.0

Source: JLARC staff analysis of Washington State Liquor and Cannabis Board brewery production data.

The removal of the preference in this scenario results in:

- 6.1 jobs lost in the beverage manufacturing industry annually.
- 19 jobs gained statewide annually, primarily in the public sector. Job gains peak at 26.5 jobs in 2030, primarily in the state and local government sectors. This employment increase is driven by the assumption that increased tax revenues would be spent in the public sector.

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Jobs, beverage manufacturing	-4.1	-4.4	-4.6	-4.9	-5.2	-5.6	-5.9	-6.3	-6.7	-7.1	-7.5	-8.0	-8.5
Jobs, state and local government	18.2	19.2	20.3	21.2	22.3	23.6	25.0	26.4	27.8	29.4	31.1	32.9	34.7
Jobs, other private non-farm	2.3	-0.6	-1.4	-1.7	-1.6	-1.3	-0.8	-0.4	-0.2	0.0	0.2	0.2	0.3

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Jobs, total	16.4	14.2	14.2	14.6	15.4	16.7	18.3	19.7	20.9	22.3	23.8	25.1	26.5

Scenario 2: The economic burden of the tax preference's repeal is borne by consumers

To model this scenario, JLARC staff made the same production and expenditure assumptions described under scenario 1 and shifted the burden of the loss of the tax preference from brewers to consumers. This model assumes that consumer costs are increased by the amount of the beneficiary savings.

The estimated increase in consumer costs (and corresponding increase in government spending) is shown below (\$ in millions):

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Estimated increase in consumer costs	1.9	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.6	3.9	4.2	4.6	5.0

Source: JLARC staff analysis of Washington State Liquor and Cannabis Board brewery production data.

The removal of the preference in this scenario results in:

- 2 jobs lost in the beverage manufacturing industry annually.
- 34.8 jobs gained statewide annually, primarily in the public sector. Job gains peak at 47.5 jobs in 2030, driven primarily by employment in state and local government and private non-farm employment.

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Jobs, beverage manufacturing	-1.5	-1.5	-1.6	-1.7	-1.8	-1.9	-2.0	-2.0	-2.1	-2.2	-2.4	-2.5	-2.6
Jobs, state and local government	18.7	19.9	21.2	22.3	23.5	24.9	26.4	27.8	29.4	31.0	32.9	34.7	36.7
Jobs, other private non-farm	9.0	7.3	7.5	7.8	8.2	8.9	9.6	10.2	10.8	11.4	12.1	12.8	13.5
Jobs, total	26.2	25.6	27.0	28.4	29.9	31.9	34.0	36.0	38.0	40.2	42.6	45.0	47.5

RECOMMENDATIONS & RESPONSES

Legislative Auditor's Recommendation

The Legislative Auditor recommends to review and clarify the preference

The Legislature should clarify the beer tax preference by including a performance statement, clarify the intended beneficiaries, and ensure the preference directly targets those businesses.

The preference was enacted before the Legislature required a performance statement for new tax preferences. The Legislature should clarify its expectations for the preference by adding a performance statement that clearly states the public policy objectives and metrics to determine if the objectives have been met.

The Legislature should review the preference's requirements to ensure that it supports the intended beneficiaries.

Legislation Required: Yes

Fiscal Impact: Unknown

Letter from Commission Chair

Available on [Citizen Commission website](#) October 2020.

Commissioners' Recommendation

Available on [Citizen Commission website](#) October 2020.

Agency Response

If applicable, available on [Citizen Commission website](#) October 2020.

MORE ABOUT THIS REVIEW

Study Questions



PROPOSED STUDY QUESTIONS Microbrewers

State of Washington Joint Legislative Audit and Review Committee

December 2019

JLARC to review a beer tax exemption for microbreweries



The 2006 Legislature directed the staff of the Joint Legislative Audit and Review Committee (JLARC) to conduct performance audits of tax preferences. This preference is included in the 10-year review schedule set by the Citizen Commission for Performance Measurement of Tax Preferences.

In 1993, the Legislature added a tax on beer to help fund a comprehensive state health care system. At that time, the Legislature provided an exemption for the first 60,000

barrels of beer sold by microbrewers who produce less than 2 million barrels of beer per year.

The tax rate is currently \$4.78 per barrel for those who are not exempt, which is equivalent to 11.5 cents per six pack. The tax is paid at the point of first sale, either by a distributor or by the brewery, if they sell their own beer.

The Legislature did not state a public policy objective for the preference

JLARC staff infer the preference was intended to provide microbrewers with a tax break to help reduce their business costs at a time when the industry was developing in the state.

This study will address the following questions:

1. To what extent are Washington microbreweries using the preference?
 - Are these Washington-based businesses?
 - How long have the beneficiaries been operating?
 - What size are the beneficiaries and what is the range of beer production?
2. How much has the preference reduced costs for the beneficiaries?
3. What are the potential economic impacts if the preference was repealed?

Study Timeframe

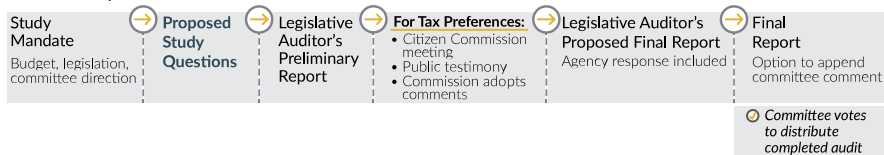
Preliminary Report: July 2020

Proposed Final Report: December 2020

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JLARC Study Process



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