

# Economic Impact of the Brewing Industry on Alaska's Economy

Prepared for the Brewers Guild of Alaska by Southeast Strategies  
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The brewing industry in Alaska brews, packages, and sells beer across the state, the nation, and the world. As a basic economic sector, the brewing industry creates jobs and income in the state that would not exist if these businesses did not decide to locate here. This report estimates the economic impact of the brewing industry on the economy of Alaska in 2015. These estimates were developed using economic multipliers calculated by an economic model of Alaska, as well as results of a 2016 survey of Brewers Guild of Alaska (BGA) members.

In 2015, the brewing industry contributed a minimum of 2,281 jobs to Alaska's economy, and generated over \$169 million through direct spending and the multiplier effect of that spending in the state. Not only does the industry bring money into the state from export of its product outside Alaska, brewers also provide a product to meet statewide demand that would otherwise have to be imported, thus reducing the amount of money leaving Alaska.

## Direct, Indirect and Induced Economic Impacts to Alaska from the Brewing Industry, 2015

	Direct Impacts	Indirect Impacts (from business spending)	Induced Impacts (from worker spending)	Total Impacts
<b>Jobs (Full Time Equivalent)</b>	1,435.9	514.6	330.9	2,281.4
<b>Total Business Income</b>	\$339,853,340	\$104,134,838	\$48,130,492	\$492,118,669
<b>In-state Expenditures:</b>				
<b>Payroll &amp; Owners Income</b>	\$47,030,465	\$33,348,537	\$15,934,688	\$96,313,690
<b>Fees &amp; Taxes Paid</b>	\$27,585,752	\$5,733,831	\$2,249,047	\$35,568,630
<b>Rents &amp; Dividends Paid</b>	\$9,359,307	\$17,140,452	\$10,704,817	\$37,204,577
<b>TOTAL IN-STATE EXPENDITURES</b>	<b>\$83,975,524</b>	<b>\$56,222,821</b>	<b>\$28,888,553</b>	<b>\$169,086,897</b>
<b>Percent Retained in Alaska</b>	24.71%	53.99%	60.02%	34.36%

Source: Southeast Strategies, 2016. Developed using the IMPLAN econometric model of Alaska's economy in 2014, and adjusted for inflation to 2015 dollars.

**Direct impacts** to the Alaska economy from brewing industry activity include payroll, fees and taxes, rent, and owners' income paid in Alaska through direct spending by brewing businesses. In addition to the direct impacts of initial spending in Alaska by the brewing industry, there are indirect and induced impacts created when those brewing businesses and their employees buy goods and services from other Alaska businesses. The total of initial spending and subsequent respending of brewery business income creates a multiplier effect, where part of each dollar spent is respent within the state economy.

**Indirect impacts** arise from respending by businesses, and **induced impacts** arise from respending by employees. All of these impacts, summarized in the previous table, represent

money and jobs that stay within the Alaska economy. Details about the model and methodology used for this analysis are included at the end of this report.

As seen in the table above, brewers in Alaska directly pay over 27.5 million in non-payroll taxes such as sales, excise, and property taxes, as well as licenses and fees to State and local governments. While it is difficult to find detail on all taxes paid by the industry, the following table presents historic excises taxes levied on alcoholic beverages sold in state by the State of Alaska. The tax is collected primarily from wholesalers and distributors of these beverages. Small breweries in Alaska are taxed at a rate of \$0.35 per gallon of beer produced. Of the revenue collected, 50% goes into the Alcohol and Other Drug Abuse Treatment and Prevention Fund, and 50% goes into the State General Fund.

### **Alcoholic Beverage Taxes Collected in Alaska Small Breweries, FY12 – FY 15**

	<b>FY15</b>	<b>FY14</b>	<b>FY13</b>	<b>FY12</b>
<b>Gallons Taxed</b>	3,947,554	3,856,606	3,615,276	3,405,102
<b>Tax Collected</b>	\$1,399,148	\$1,277,176	\$1,287,948	\$1,193,074
<b>Number of Returns</b>	906	922	870	815
<b>Number of Taxpayers</b>	61	61	61	55

Source: Alaska Department of Revenue, Tax Division, 2016.

The beer brewing industry in Alaska contributes to the wellbeing of the state in other ways not necessarily reflected in the numbers presented here. Brewers are good community members who donate cash, beer, and merchandise to local and statewide causes and organizations. Some brewing entities in Alaska win national and international awards, and bring acclaim to Alaska and its brewing industry. In addition, some brewers advertise outside the state, showcasing Alaska and its residents to the nation and the world.

### **Methodology**

In order to determine the 2015 impact of the brewing industry on the economy of Alaska, Southeast Strategies followed the methodology outlined here. The most current full year of information available for all variables was used to capture as close to a current (2015) estimate as possible. Where actual 2015 data were not available through the economic model used for this analysis, dollar amounts were adjusted for inflation to reflect 2015 dollars.

Brewing industry employment information was fed through a well known economic model (IMPLAN) calibrated to fit Alaska’s economy to determine secondary impacts of initial spending in the state. The IMPLAN (IMpact analysis for PLANning) model is a community and regional level input/output model initially developed by the U.S. Forest Service in cooperation with the Federal Emergency Management Agency, and the U.S. Department of the Interior, Bureau of Land Management to assist the Forest Service in land and resource management planning. The model uses data about employment, income, and various other indicators to determine how direct economic impacts will produce multiplier effects (indirect and induced economic impacts) within Alaska.

The IMPLAN model uses Alaska Department of Labor and Workforce Development (DOL) data to determine employment. The brewing industry in Alaska reports its earnings to DOL under several different industry categories. Some businesses report as brewers of alcoholic beverages, and brewpubs report as eating and drinking establishments. The Brewers Guild of Alaska (BGA) surveyed its membership in 2016 to determine their 2015 employment, however, not every brewing business in Alaska belongs to the BGA. The BGA survey of its members showed about 263.6 employees in businesses reporting as brewers of alcoholic beverages, whereas the IMPLAN model (based on actual Alaska employment data) reported 379 employees in that industry in 2014. This analysis uses the full IMPLAN employment figure for 2014. Because it is difficult to estimate employment of those non-BGA businesses that brew beer but report employment and earnings under the restaurant industry categories, this analysis uses only employment by BGA members in the category of brewpubs. It is important to note that economic impact of brewers reporting in these two categories is an undercounting of the actual impact, because non-BGA brewers reporting in these categories are not considered. Consequently, the economic impact reported here should be considered a minimum impact.

The level of impacts in Alaska from brewing activities are calculated in terms of jobs, earnings by workers and business owners, state and local taxes and fees paid, and rents and dividends paid. These impact categories are defined below:

- **Jobs (Full Time Equivalent)** – Total number of jobs created by impacted businesses resulting from the brewing activity in Alaska. Jobs are counted as the equivalent of full-time, year round jobs.
- **Total Business Income** – The total income received as a result of brewing activity in Alaska.
- **Payroll & Owners Income** – Total wages and salaries paid to employees, and payments received by business owners as income resulting from brewing activity in Alaska.
- **State and Local Fees & Taxes** – A combination of State and local excise, sales, and property taxes, as well as fees, fines, licenses, and permits paid as a result of brewing activity in Alaska. Excludes payroll taxes such as social security and federal income taxes.
- **Rents & Dividends** – Total rental payments, royalties, and dividends paid as a result of brewing activity in Alaska.
- **Total In-state Expenditures** – The sum of payroll and owner’s income, state and local fees and taxes, and rents and dividends paid. This represents all expenditures in Alaska resulting from brewing activity in the state.
- **Percent Retained in Alaska** – The percent of total brewing business income that is spent in Alaska (in-state expenditures) as a result of brewing activity in the state. This figure includes direct, indirect and induced impacts.

Impacts to an economy result either from direct spending or through multiplier effects, and are defined below:

- **Direct** impacts are primary impacts in the state created by direct spending of brewers on payroll, fees and taxes, rent, and business owners’ income. Spending in the state for other goods and services by brewers is considered under indirect impacts.

- **Indirect** impacts are secondary impacts created by additional spending in the state by **businesses** earning revenue directly from in-state brewing activity. These impacts take the form of payroll, fees and taxes, rent, and business owners' income.
- **Induced** impacts are secondary impacts created by additional spending in the state by **households** earning income (usually as wages and salaries) directly from in-state brewing activity. These impacts take the form of payroll, fees and taxes, rent, and business owners' income.