



BOTANICAL EDUCATION ALLIANCE™
Preserving Plant Legality Through Education

Economic Impact Of Kratom Scheduling

Revenue: According to a survey of 163 business owners conducted by the Botanical Education Alliance in September, 2016, total combined revenue of businesses that sell kratom exceeded \$1.13 billion. This revenue, only as measured by the 157 participants who shared sales data, places the industry roughly equivalent to:

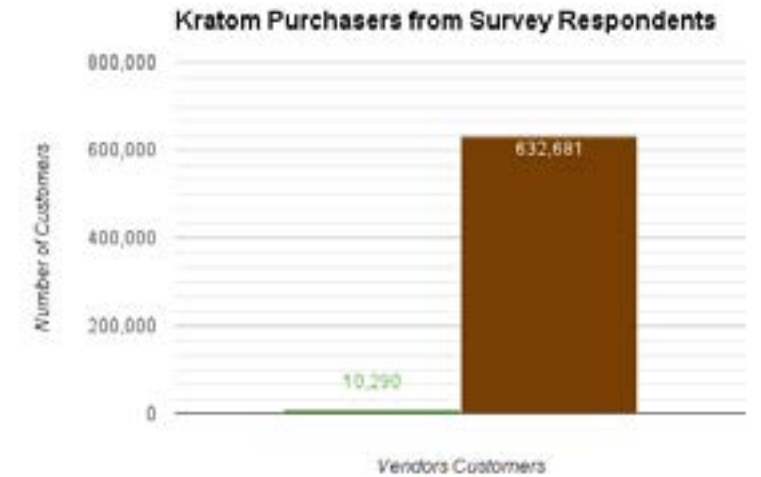
- » Retail market for headphones (\$1.6 billion)
- » Online medical supplies (\$1.2 billion)
- » Pet insurance (\$778 million)
- » Ice manufacturing (\$761 million)
- » Mouthwash manufacturing (\$1.5 billion)
- » Soy and almond milk production (\$905 million).¹

These 157 respondents projected that revenue would decline by nearly \$207 million after scheduling, an 18% decline. This indicates that kratom sales account for nearly 20% of revenue for these companies. Kratom sales make up at least 90% of revenue for approximately half of respondents.

There are an estimated 10,000 kratom vendors operating across the U.S. If we consider the above data with regard to the actual size of the kratom industry, we

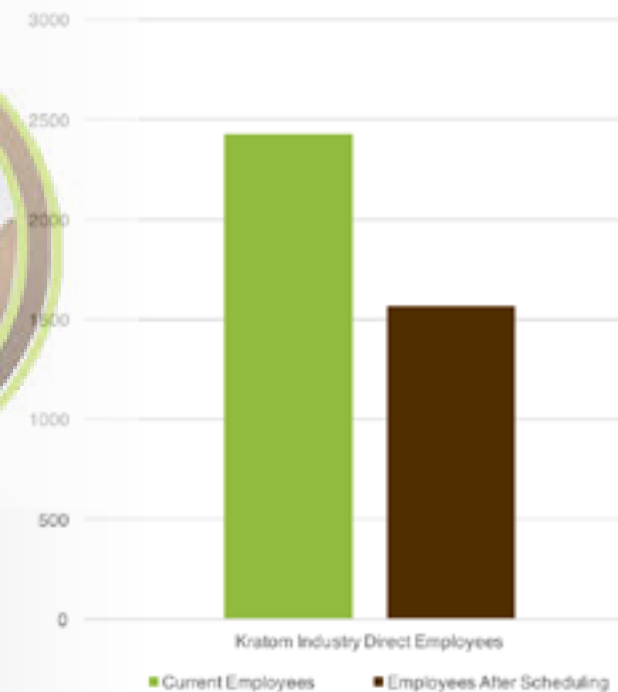


can project lost revenue of up to \$5 billion. Given this data, it is clear that the tax revenue generated by kratom sales is significant. A \$5 billion loss in revenue would translate to millions in lost tax dollars.



Employment: Presently, there are at least 2426 people directly employed by companies operating in the kratom industry, based on data compiled from the BEA's September, 2016 survey. Respondents said that if kratom were to become a Schedule 1 substance, nearly 900 of those jobs would be eliminated.

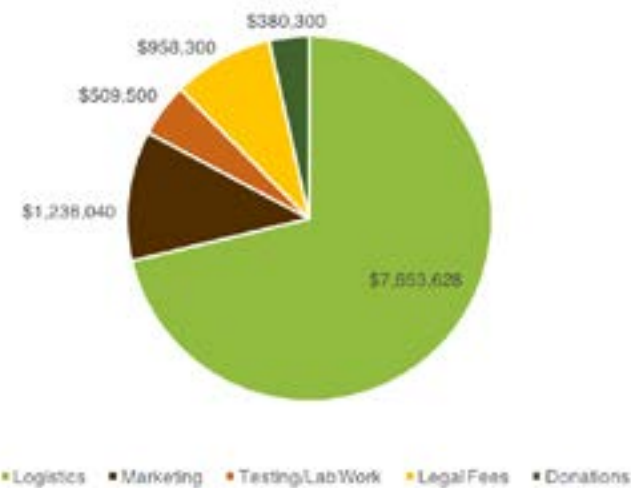
Assuming each of these positions are some of the lowest-paid positions according to the Bureau of Labor Statistics and these jobs are composed of retail sales workers (annual mean wage \$24,490), shipping and receiving clerks (annual mean wage \$32,350), and customer service representatives (annual mean wage \$34,560), this represents a loss of \$26,292,733 per year in wages alone.² If every one of those jobs were minimum wage positions, and all were compensated with the Federal Minimum Wage (note that 29 states have minimum wages that are higher than federal), this would still represent a loss of \$13,057,837.³



¹IBISWorld.com

²This figure represents the 863 reported lost positions multiplied by the average of the annual mean wages for the three position types mentioned, according to the Bureau of Labor Statistics' May 2015 National Occupational Employment and Wage Estimates for the United States.
³This figure represents the 863 reported lost positions multiplied by the Federal Minimum Wage of \$7.25 per hour and the working hours per year, 2087. It should also be noted that this sum is statistically impossible, as the majority of states have a rate higher than the federal minimum.

Third Party Vendor Spending



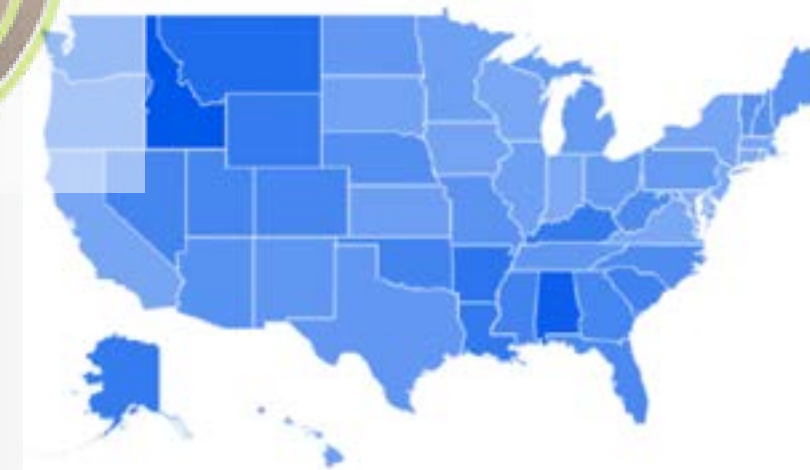
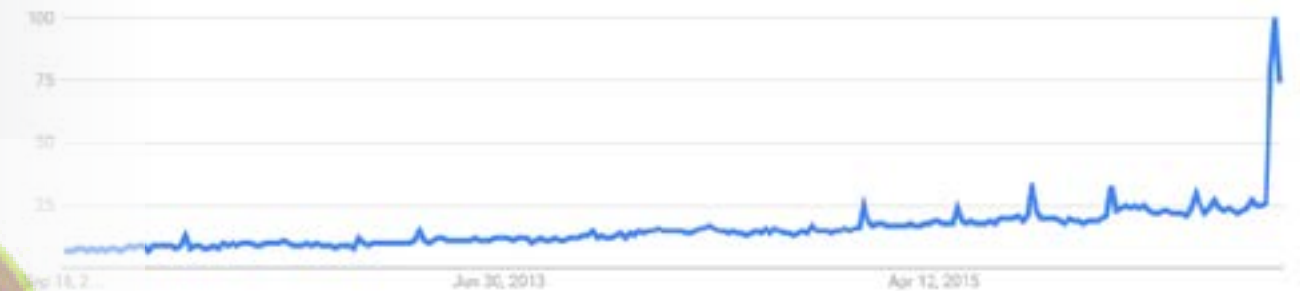
Of course, the cost to employ workers is more than the wage alone. Even if each of these employers chose not to offer benefits, Social Security Tax and Medicare Tax are calculated at 7.56% of wages; Federal and State Unemployment Taxes can add more, and each state requires workers' compensation insurance – the median rate for which is 1.85%. Therefore, at the lowest possible rate, losing \$26.3

million in annual wages means losing an additional \$2,474,146 in workers' compensation insurance and Social Security and Medicare taxes combined.⁴

External Vendor Spending: No business exists in a vacuum. Kratom vendors are no different. They rely on logistics, marketing, laboratory testing, and professionals such as attorneys and accountants to help their business run smoothly and thrive just like any other. 65 business owners in the kratom industry gave spending details in these categories, as well as spending in donations. The above chart, compiled with data collected from the Botanical Education Alliance, shows the greater economic impact this small sample of business have. Fewer than 70 businesses are spending more than \$10.4 million per year on external services, plus an additional \$380,000 annually in charitable donations. The chart above shows the breakdown of how those funds are deployed across vendor types.



Public Interest: If Google search queries are any indication of public interest in a topic, and they are, interest in kratom has surged since the beginning of September, when the DEA's intention to schedule was announced. However, kratom has not been languishing in obscurity until this recent announcement; searches for kratom has consistently risen over the course of five years. The following chart, supplied by Google Trends, shows the interest in kratom over time as well as a comparison of interest by state.⁵



Bigger Picture: The above data have been gathered by the Botanical Education Alliance from a small sample of businesses operating in the kratom industry. While it is difficult to extrapolate the larger economic impact this industry has on the overall economy, it is certain that the

figures presented are undeniably conservative. Many other types of vendors sell kratom, including

⁴This figure is calculated using the most recent data available for payroll expenses, but does not include additional state and local taxes, as well as the Federal Unemployment Tax, which is variable and incalculable with current data. Source: <http://quickbooks.intuit.com/r/hr-laws-and-regulation/the-true-cost-of-paying-an-employee/>

⁵Source: <https://www.google.com/trends/explore?geo=US&q=kratom>

medical and recreational marijuana stores, as well as smoke shops that do not dispense cannabis products but do sell paraphernalia. A conservative estimate from market research firm IBISWorld places the number of businesses in the *Medical & Recreational Marijuana Stores* industry at 5,796, collectively generating \$6.7 billion in annual revenue, and spending \$1.5 billion in wages. The following charts, generated by IBISWorld, give an overview of this industry:⁶

Revenue
\$6.7bn

Annual Growth 11-16
32.1%

Annual Growth 16-21
32.3%

Profit
\$266.3m

Wages
\$1.5bn

Businesses
5,796

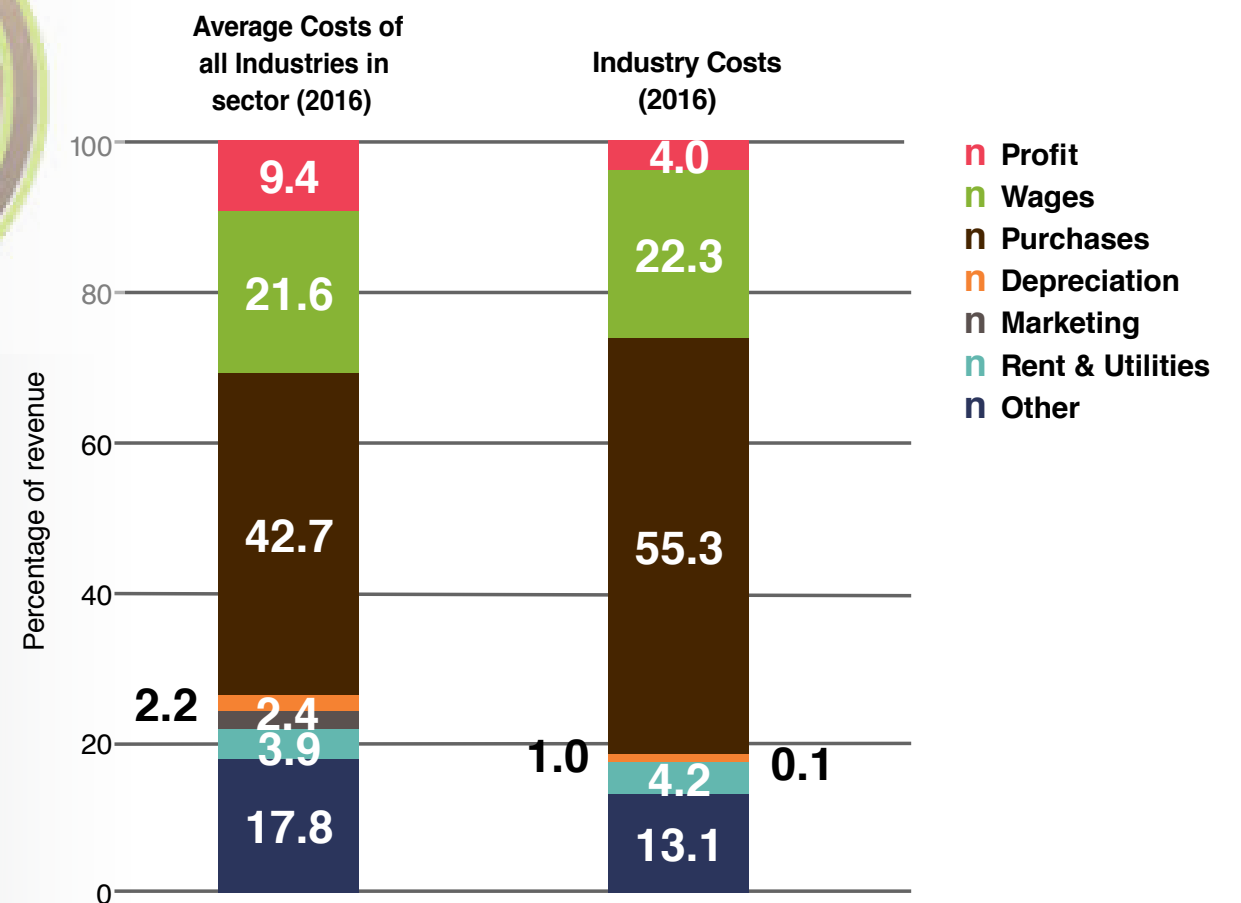


It stands to reason that if only a fraction of these businesses offer kratom among their retail products, the economic loss would be significant. \$100 million is only 1.5% of \$6.7 billion. Because respondents in the survey conducted by the Botanical Education Alliance in September, 2016, said that sales would decrease by 18% due to scheduling of kratom, the loss to the overall industry could be more like \$1.2 billion in revenue. If wages stayed proportional to revenue, this loss would mean an additional \$1.2 billion in lost wages. There are of course other costs that businesses operating in this industry need to account for, and spending in those areas would suffer as well. The following chart, compiled by IBISWorld, gives a breakdown of spending by businesses in this industry:

Key Ratios

	IVA/Revenue (%)	Revenue per Employee (\$'000)	Wages/Revenue (%)	Employees per Est.	Average Wage (\$)
2007	30.98	40.40	28.09	13.69	11,347.58
2008	29.04	42.88	25.94	13.18	11,125.17
2009	28.67	43.08	25.76	13.41	11,095.51
2010	28.60	41.90	25.70	13.49	10,767.64
2011	27.51	44.90	25.51	13.40	11,455.59
2012	30.16	49.82	25.76	13.35	12,834.05
2013	30.20	52.60	26.30	13.53	13,832.76
2014	26.42	71.25	22.57	13.45	16,082.37
2015	26.83	73.31	22.45	13.40	16,457.38
2016	27.33	75.80	22.34	13.71	16,935.99
2017	28.11	77.44	22.40	14.01	17,345.78
2018	27.93	89.58	21.00	14.41	18,813.78
2019	28.75	101.21	19.96	14.85	20,205.62
2020	31.76	102.60	20.18	15.33	20,702.58
2021	34.83	102.78	20.55	15.83	21,122.28

Sector vs. Industry Costs



⁶IBISWorld.com

SOURCE: WWW.IBISWORLD.COM