



Washington State Liquor and Cannabis Board

Key Takeaways

Whitney Economics Report on the Economic Viability of Cannabis Licenses in Washington

August 2024

LCB Research Program

The Research Program at the Washington State Liquor and Cannabis Board (LCB) is a non-partisan, transparent resource focused on public health and safety outcomes related to the products, policy, and regulation of alcohol, cannabis, tobacco, and vapor products.

Overview

The Liquor and Cannabis Board (LCB) contracted with Whitney Economics to forecast the number of cannabis producer, processor, and retail licenses that *may* be economically viable in Washington through the year 2032. This contract was in part to inform decision making pursuant to E2SSB 5080, now codified as RCW 69.50.335(1)(e)(B)(ii), which requires LCB to “*adopt rules establishing a threshold of the number of licenses created by this section that can be located in each county.*” Whitney Economics was the selected contractor given their background and expertise in cannabis economic research as well as their ability to provide a report within LCB’s specified rulemaking timeline.

This document does not represent an official position of LCB but rather provides key takeaways from the independent report conducted by Whitney Economics. The full report can be accessed on the Research Program webpage.

Contact

For further information about the Research Program and its work, please visit: lcb.wa.gov/research_program.

For specific questions, please email the Research Program at lcbresearch@lcb.wa.gov.

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Key Takeaways

This was an independent report from Whitney Economics. Their findings do not represent an official position of LCB.

Estimating economic viability of cannabis licenses is complex¹. In this analysis, retail license viability was estimated by forecasting year-over-year sales growth, legal participation, and the lowest amount of revenue necessary to cover annual expenses². Producer license viability was estimated by calculating biomass demand, projected number of consumers, and per capita consumption. Finally, processor license viability was estimated by determining raw material needed to be profitable and total output capacity.

Retail opportunities are considered available but limited in scope. It was estimated that 634 retail licenses *may be* economically viable in 2032, suggesting that ~160 more retail licenses *could be* viable in eight years.

Producers have the capacity to supply more cannabis than demand. It is estimated that Washington has the ability to produce ~2.6 million pounds of biomass each year. By 2032, there will be an estimated demand of 891 thousand pounds. This calculation suggests producers cannot all operate at full scale given the total output capacity.

Processor licenses are considered to be the largest opportunity in the cannabis market. Whitney Economics estimates there will be demand for between 1,782 and 3,340 processor licenses in 2032, suggesting that at least 740 more processor licenses *could be* viable in eight years.

Given RCW 69.50.335(1)(e)(B)(ii), Whitney Economics also estimated economic viability of retail, producer, and processor licenses by county. LCB does not consider county-level estimates for producers and processors as useful as the county-level estimate for retail licenses. This is because producers and processors are not public-facing and products are easily transported to other counties. Therefore, restricting these licenses by county does not reflect how the current market operates. Nevertheless, see Tables [1](#) (retail), [2](#) (producer), and [3](#) (processor) for county-level estimates.

¹ This description is only a brief summary of calculations performed. Please see full report for more details.

² Whitney Economics estimated legal participation by dividing the amount of legal sales by the calculated total addressable market. To estimate the lowest amount of revenue necessary, Whitney Economics considered several factors such as labor, product acquisition costs, rental rates, insurance, taxes, etc.

Limitations

LCB has also identified several limitations that are important to consider prior to making any interpretations of the Whitney Economics findings:

1. **These are estimates only.** No calculation will be able to precisely determine the number of licenses that will be able to operate successfully across time. The success of any retail, producer, or processor license is complex and nuanced.
2. **There is extensive variability across licenses and counties.** For example, retail licenses in different locations with different number of employees will have different annual expenses, and these differences may alter the extent to which a business can operate successfully. Additionally, local jurisdictions with bans and moratoriums may impact legal cannabis market participation and the ability for licensees to find locations that would allow them to be successful.
3. **This analysis examined producers and processors separately.** However, most of these licenses have both production and processing privileges. These combined license types may have unique factors that determine their overall success not accounted for in these findings.
4. **Data sources vary.** Data on certain topics, such as percent legal cannabis market participation in Washington, are subject to differ based on which metrics were used. The data in this analysis were from commonly used sources for those in economics. However, those in other areas (e.g., public health) may use different metrics to estimate similar concepts, which would lead to different results.
5. **The cannabis industry is constantly evolving.** The possible rescheduling of cannabis at the federal level, its impacts on the application of IRS Code 280E, changes in interstate commerce, and other unprecedented changes could create shifts in the estimates provided.

Summary

Despite limitations, the report provided by Whitney Economics captures a snapshot of Washington's cannabis market and a projection based on that snapshot. This analysis found there is some economic opportunity for additional retail licenses. However, this does not guarantee any retail license *will* be profitable. There are numerous factors that determine the extent to which a business can be successful. Given Washington has a total output capacity that greatly exceeds future demand, it will likely be difficult for new producers to be successful. In contrast, there is great opportunity for processor licenses because there is an abundance of output capacity and processed products are increasing in popularity³. Overall, LCB hopes these estimates provide further understanding into the future state of the cannabis market in Washington and helps inform decisions for policy makers and prospective cannabis licensees.

³Although the economic opportunity for processor licenses is high, there are public health and safety concerns associated with processed products, particularly those with higher concentration THC.

Table 1. Retail License Analysis

	Current (May 2024)	Recommended Estimate 2032	High Estimate* 2032
Washington	473	634	1095
Adams	2	2	3
Asotin	3	2	3
Benton	4	19	28
Chelan	8	7	12
Clallam	10	8	11
Clark	17	44	72
Columbia	1	0	1
Cowlitz	13	11	17
Douglas	3	4	7
Ferry	1	1	1
Franklin	3	9	13
Garfield	0	0	0
Grant	10	10	15
Grays Harbor	10	8	11
Island	7	8	13
Jefferson	6	3	4
King	104	134	313
Kitsap	20	24	43
Kittitas	6	5	7
Klickitat	2	2	4
Lewis	4	8	13
Lincoln	3	1	2
Mason	9	7	11
Okanogan	9	4	7
Pacific	3	3	4
Pend Oreille	1	1	2
Pierce	32	82	103
San Juan	3	1	3
Skagit	18	11	18
Skamania	2	1	2
Snohomish	50	69	128
Spokane	33	52	90
Stevens	7	5	7
Thurston	21	28	48
Wahkiakum	2	0	1
Walla Walla	3	6	9
Whatcom	25	22	39
Whitman	7	5	7
Yakima	11	24	24

Note: *Whitney Economics recommended using an average number of 10 retail employees to calculate the overall minimum amount of revenue a retailer needs. However, there was an additional calculation (titled “High Estimate”) based on 5 retail employees because of the recognition that some stores may be smaller than others.

Table 2.1 Output Capacity by Tier

This analysis did *not* specify the number of producers by county given that various license types and Tier levels would create various estimates. Below is a chart to assist in determining the specific number of producers based on each cultivation type and Tier level:

Grow Type	Tier 1 Output Capacity in Pounds		Tier 2 Output Capacity in Pounds		Tier 3 Output Capacity in Pounds	
	Min	Max	Min	Max	Min	Max
Indoor	0	1,728	1,728	4,320	4,320	12,960
Greenhouse	0	868	868	2,170	2,170	6,510
Outdoor	0	404	404	1,010	1,010	3,030

Table 2.2 Producer License Analysis

	Current Licenses (May 2024)	Current Supply Capacity in Pounds (May 2024)	Estimated Demand in Pounds 2032
Washington	986	2,610,639	890,787
Adams	36	82,268	1,981
Asotin	1	864	2,597
Benton	41	123,212	22,700
Chelan	3	4,947	9,090
Clallam	14	36,936	9,444
Clark	14	74,466	58,213
Columbia	1	518	473
Cowlitz	20	52,392	12,509
Douglas	21	59,237	4,761
Ferry	2	3,504	871
Franklin	0	0	9,900
Garfield	0	0	260
Grant	88	218,645	10,527
Grays Harbor	30	117,949	8,882
Island	10	19,824	10,460
Jefferson	8	11,850	4,292
King	44	104,242	269,828
Kitsap	13	33,722	32,453
Kittitas	7	20,336	5,318
Klickitat	11	22,952	2,701
Lewis	4	15,552	9,365
Lincoln	16	49,823	1,258
Mason	32	92,163	7,795
Okanogan	112	259,513	4,846
Pacific	12	41,477	2,871
Pend Oreille	4	6,388	1,622
Pierce	61	192,449	104,143
San Juan	3	3,877	2,293
Skagit	24	62,203	14,851
Skamania	3	6,367	1,422
Snohomish	82	220,527	95,342
Spokane	100	260,796	61,777
Stevens	30	64,774	5,357
Thurston	57	159,144	34,195
Wahkiakum	1	2,121	550
Walla Walla	4	8,080	7,025
Whatcom	51	105,528	26,868
Whitman	9	16,271	5,195
Yakima	17	55,723	26,752

*Note: LCB does not consider this county-level analysis to be reliable because producer licenses are not public-facing and product can be easily transported across county lines.

Table 3. Processor License Analysis

	Current (May 2024)	Lower Estimate 2032	Higher Estimate 2032
Washington	1,039	1,782	3,563
Adams	22	4	8
Asotin	1	5	10
Benton	35	45	91
Chelan	6	18	36
Clallam	12	19	38
Clark	14	116	233
Columbia	1	1	2
Cowlitz	24	25	50
Douglas	23	10	19
Ferry	2	2	3
Franklin	0	20	40
Garfield	0	1	1
Grant	75	21	42
Grays Harbor	29	18	36
Island	12	21	42
Jefferson	12	9	17
King	82	540	1,079
Kitsap	20	65	130
Kittitas	7	11	21
Klickitat	9	5	11
Lewis	5	19	37
Lincoln	16	3	5
Mason	35	16	31
Okanogan	93	10	19
Pacific	17	6	11
Pend Oreille	3	3	6
Pierce	77	208	417
San Juan	3	5	9
Skagit	25	30	59
Skamania	3	3	6
Snohomish	96	191	381
Spokane	102	124	247
Stevens	27	11	21
Thurston	61	68	137
Wahkiakum	1	1	2
Walla Walla	4	14	28
Whatcom	62	54	107
Whitman	7	10	21
Yakima	16	54	107

*Note: LCB does not consider this county-level analysis to be reliable because processor licenses are not public-facing and product can be easily transported across county lines.