

Oregon Hemp Update

Testimony on SB1564 - Oregon State Legislature

Beau R. Whitney, Chief Economist

Whitney Economics

February 8, 2022

The Intersection Between Cannabis and Hemp

- Federal Regulators are not deploying comprehensive policies regarding hemp, thereby relying on state legislatures to fill the void
- Patchwork of rules at the state level creating challenges to conduct interstate commerce and grow the legal industry
- Law enforcement having difficulty differentiating legal versus illicit operations
- Federal intervention required, but will do little to impact illicit activities unless interstate commerce or de-scheduling takes place.
- Fear is that new state laws could impact R&D for medical and other industrial applications as well as carbon reduction and economic development opportunities for hemp operators.

Oregon Hemp

- Oregon has fallen from being ranked 2nd nationally in terms of licensed acres to 9th since 2019.
- If licenses are frozen, will this really address the cartel issues?
- What happens when eastern Oregon farmers want to plant hemp fiber as a rotation crop?
- Moratorium on licenses does NOT seem appropriate.

Rank	State	Licensed Acres 2019	Rank	State	Licensed Acres 2020	Rank	State	Licensed Acres 2021
1	Colorado	80,000	1	Colorado	62,187	1	New York	33,034
2	Oregon	64,142	2	Tennessee	51,000	2	Illinois	22,961
3	Kentucky	60,000	3	Arizona	34,035	3	Missouri	21,928
4	Montana	53,000	4	California	32,505	4	Colorado	21,082
5	Wisconsin	38,300	5	Kentucky	32,106	5	Florida	17,462
6	Tennessee	38,000	6	New York	30,411	6	Arizona	14,820
7	Michigan	25,000	7	Oregon	27,662	7	Kentucky	12,085
8	Oklahoma	21,635	8	Illinois	26,264	8	Virginia	9,736
9	North Carolina	14,400	9	Missouri	21,836	9	Oregon	7,339
10	Illinois	12,949	10	Florida	18,327	10	North Carolina	6,279

Source: Whitney Economics, State Cannabis Regulatory Agencies

Oregon Hemp Value Decline

- Value of the Oregon hemp crop (Biomass only) has declined from \$5.5 billion to \$22 million since 2019.
- Bad actors are significantly reduced in Oregon's regulated market due to regulatory and enforcement activities in 2021.
- Most farmers remaining are either viable and profitable, are naïve to the complexities of farming in this industry, or are waiting for the market to settle before reengaging.

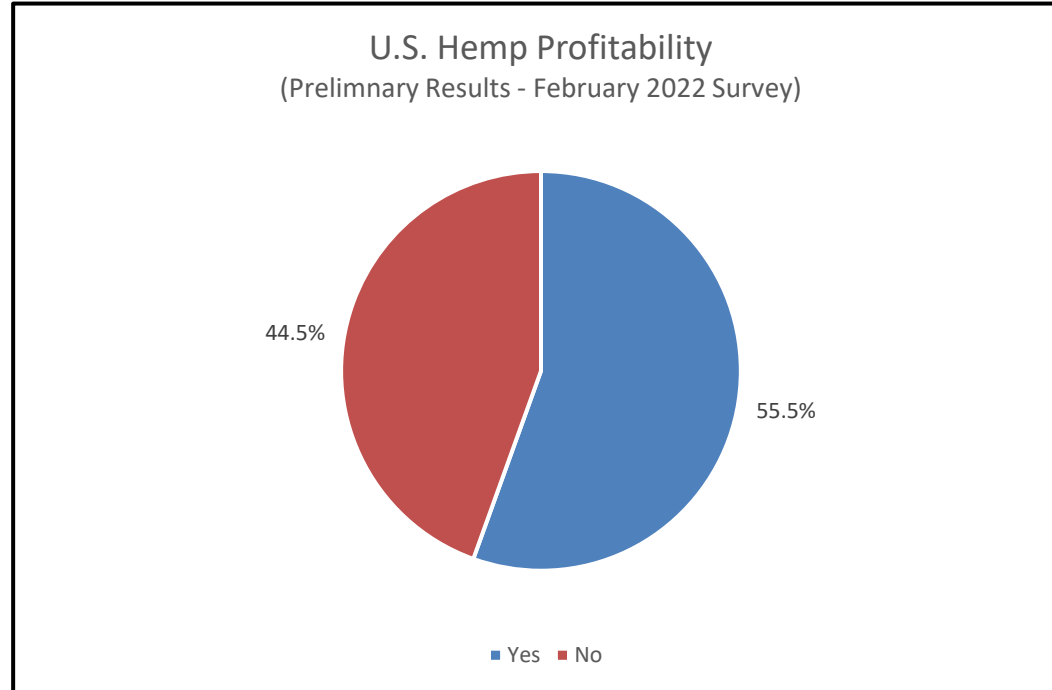
Oregon	2019	2021	Difference
Acres Licensed	64,142	7,339	-88.6%
Pounds per acre	2,000	2,000	
Capacity (Pounds)	128,284,000	14,678,000	
CBD % used in Valuation	10	10	
Price per pound @10%	\$ 42.90	\$ 1.50	
Value of biomass capacity	\$ 5,503,383,600	\$ 22,017,000	-99.6%

Source: Whitney Economics, Oregon Department of Agriculture, PanXchnage

©Whitney Economics, LLC. 2022 503.724.3084 www.whitneyeconomics.com

U.S. Market – Special Topic Industry Sentiment Survey

- Despite facing significant price declines in CBD space, many U.S. hemp operators are still managing.



Source: Whitney Economics

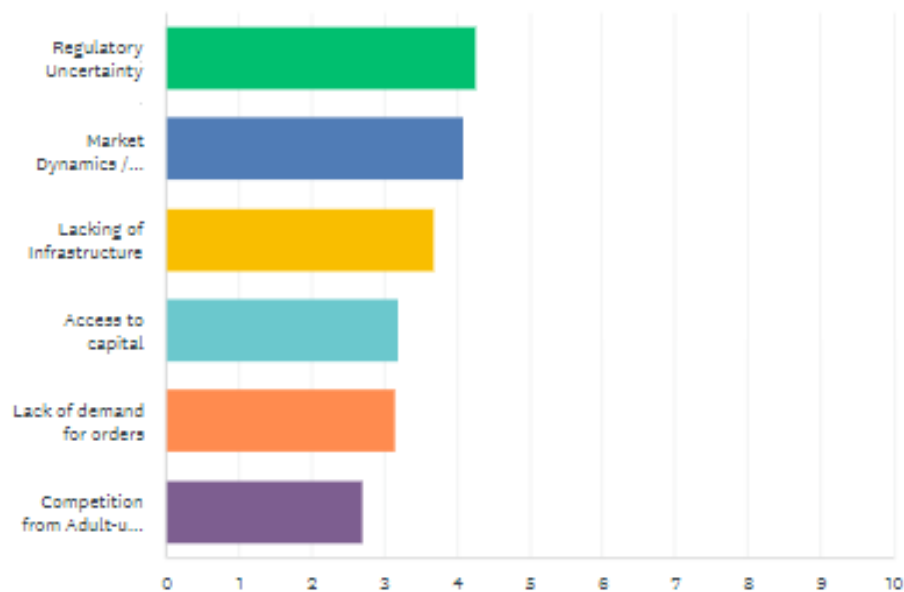
©Whitney Economics, LLC. 2022 503.724.3084 www.whitneyeconomics.com

U.S. Market – Special Topic

U.S. Hemp Concerns

- Regulatory uncertainty is top ranked concern nationwide.
- Regulatory murkiness is suppressing investment into fiber and grain sectors and limiting infrastructure development.

Rank in order your biggest concerns for your business in 2022?



Oregon Hemp Acreage Decline

- Acres licensed has declined over 80% since 2020
- There were only 780 cultivator licenses in 2021 a decline of 61% since last year.
- Indoor licensure accounts for 2.4% of all hemp capacity. Why punish the many for the mistakes of the few?
- How is this driving so much illicit supply and cartel activities? This just does not add up?

Description	2020		2021		YoY change	YoY Change (%)
# of acres licensed for cultivation:	35,254.80	% of Total Mkt	7,161.62	% of Total Mkt	(28,093.17)	-79.7%
Biomass:	12,415.34	35.2%	1,528.94	21.3%	(10,886.40)	-87.7%
Fiber:	813.65	2.3%	384.20	5.4%	(429.45)	-52.8%
Floral:	16,390.06	46.5%	3,861.07	53.9%	(12,528.99)	-76.4%
Other:	3,592.14	10.2%	1,330.44	18.6%	(2,261.70)	-63.0%
Propagation:	0.00	0.0%	9.60	0.1%	9.60	100.0%
Seed:	2,038.56	5.8%	47.38	0.7%	(1,991.18)	-97.7%
# of indoor square feet licensed for cultivation:	10,621,962.00		7,737,373.00		(2,884,589.00)	-27.2%
Biomass:	1,245,770.68	11.7%	661,572.60	8.6%	(584,198.08)	-46.9%
Fiber:	285,129.00	2.7%	98,872.00	1.3%	(186,257.00)	-65.3%
Floral:	5,705,980.51	53.7%	3,454,968.40	44.7%	(2,251,012.11)	-39.5%
Other:	1,434,483.00	13.5%	2,339,340.80	30.2%	904,857.80	63.1%
Propagation:	0.00	0.0%	373,807.60	4.8%	373,807.60	100.0%
Seed:	1,943,510.81	18.3%	793,131.60	10.3%	(1,150,379.21)	-59.2%
Source: Whitney Economics, Randall Lusson (2021), Oregon Department of Agriculture						

Source: Whitney Economics, Randall Lusson (2021), Oregon Department of Agriculture

Oregon Hemp Shifting to Fiber and Grain

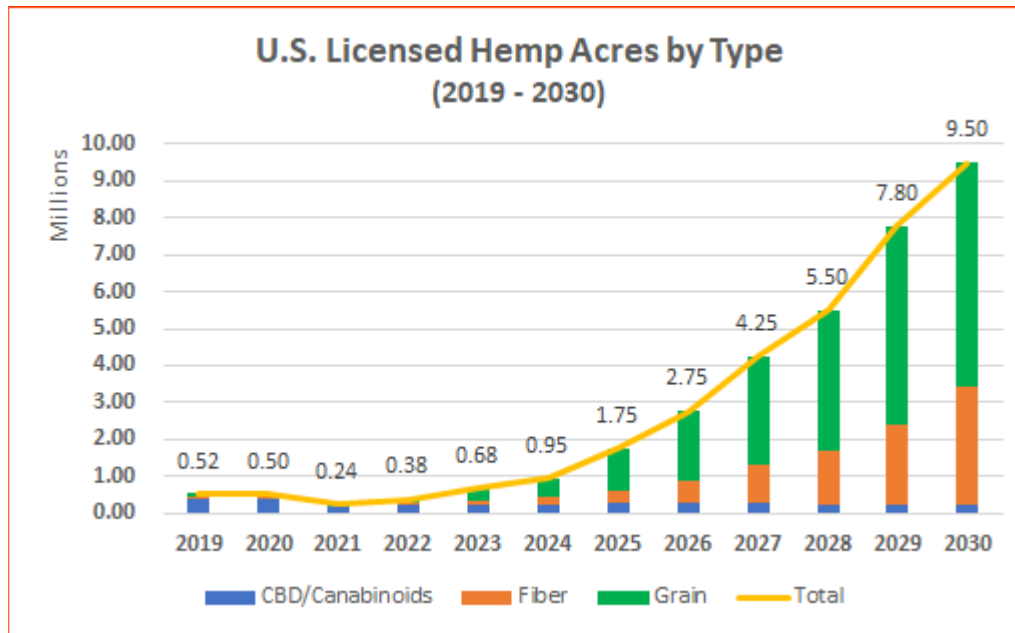
- While acreage has declined sharply, the percentage of licenses associated with fiber and grains have increased.
- Fiber and grain is forecasted to increase again in 2022.
- A moratorium will devastate this market without materially impacting illicit cartel activity.
- Farmers are also examining carbon-offset credits as a means to increase profitability per acre. (Currently 16% of U.S. hemp operators are already adopting this into their business plans)

Outdoor and Indoor Licensure	Type	2020	2021
Acres	CBD	81.7%	75.3%
	Fiber / Grain	12.5%	23.9%
	Propagation / Breeding	5.8%	0.8%
Square Feet	CBD	65.4%	53.2%
	Fiber / Grain	16.2%	31.5%
	Propagation / Breeding	18.3%	15.1%
Source: Whitney Economics, Randall Lusson (2021), Oregon Department of Agriculture			

Source: Whitney Economics, Randall Lusson (2021), Oregon Department of Agriculture

Oregon Hemp Shifting to Fiber and Grain

- With fiber for automotive, plastics, textiles, and construction using hemp fiber and hemp grains/seeds used in animal and human consumption, the hemp industry is forecasted to increase significantly throughout this decade.
- A moratorium, will put Oregon farmers at a significant economic disadvantage relative to the rest of the U.S.



Source: Whitney Economics, Randall Lusson (2021)

©Whitney Economics, LLC. 2022 503.724.3084 www.whitneyeconomics.com

Hemp Moratoriums Will Not Achieve Objectives

- A hemp moratorium will not stem the illicit, cartel driven activities in southern Oregon.
- Law enforcement and regulatory inspectors already have the tools to ascertain which parcel is legal (OLCC / ODA registered) versus illegal (Cartel).
- Farmers will not be able to participate in the significant growth associated with fiber and grain demand.
- Hemp offers carbon offset credit opportunities. A moratorium will impact revenue streams for farmers, while not supporting Governor Brown's carbon reduction agenda.
- A moratorium will hurt agricultural development and expansion of sustainable industries for Oregon farmers.

Summary

- By blocking the growth of a legal agricultural crop, this is in effect, the re-criminalization of hemp.
 - If this same policy was enacted in the early days of adult-use cannabis activity to address compliance, we would not have \$1.1 billion in legal sales and \$200 million in tax revenues.
- Law enforcement already has the tools and data to hold the hemp (and cannabis) industries accountable.
- A moratorium will limit farmers in eastern Oregon and elsewhere to use hemp as a rotational crop and hurt economic activities and carbon reduction opportunities.
- A moratorium will fail to stem the illicit activities and human trafficking occurring in southern Oregon

Contact

Beau R Whitney
Whitney Economics
Beau@WhitneyEconomics.com
503-724-3084

Backup Slides

About Whitney Economics

Beau Whitney, Cannabis Operations and Supply Chain Expert

Beau Whitney is the founder and Chief Economist at Whitney Economics, a global leader in cannabis and hemp business consulting, data and economic research.

Serving an international clientele, Beau is considered one of the leading cannabis economists in the U.S. and globally. His applications of economic principles to create actionable operational and policy recommendations have been recognized by governments, and throughout the economic, investment, business communities.

Beau has provided policy recommendations at the state, national and international levels and is considered an authority on cannabis economics and the supply chain.