Oregon Cannabis Demand Forecast Analysis
Joint Committee on Implementing Measure 91

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Honorable Members of the Committee:

My name is Beau Whitney. I am the Chief Operating Officer at Greenpoint Oregon, Inc. I am also an economist, an economics instructor at the university level and I have previously submitted testimony to the Secretary of State's office regarding the tax revenue forecast associated with Measure 91.

Greenpoint Oregon, Inc is an Oregon based, vertically integrated medical cannabis company that serves the medical community and provides patients with high quality, high value user experiences. As an industry leader committed to transparency and controls, Greenpoint dedicated to partnering with industry leaders, communities and regulators to ensure the continued success and growth of the Oregon cannabis market.

Introduction:
There has been a lot of discussion recently regarding what the total market demand is for cannabis in Oregon. Given the nature of this emerging market and the lack of data specific to Oregon, there are challenges associated with determining the demand with a high degree of certainty. However there is a lot that can be gleaned and leveraged from the forecasts and experiences of other states. By utilizing the methodologies used by other forecasters, one can develop a forecast that can be judged on an apples to apples basis with other states.

The objective of this analysis is to provide a demand forecast analysis for the Oregon cannabis market so decision makers and legislators can make an informed decision that is based on data that is derived in a consistent manner as other markets. Based upon this analysis, the total market demand for cannabis in Oregon is estimated to be 113,104 pounds in 2015.

Background
For the past 18 months, I have been working with other economists around the country in order to develop a demand forecast for the Oregon medicinal and recreational use markets. After developing a demand forecast for Oregon using a forecast methodology similar to what was used in Colorado for their recreational referendum, I submitted the demand forecast as well as a tax revenue projection to then Secretary of State Brown as public testimony on Measure 91.

The forecast has very few assumptions; population, usage and consumption, and the sources for this data come from sources commonly used by the Oregon Office of Economic Analysis, the Oregon Health Authority and other regulatory bodies. By using similar data sources to those used by other states, there is a uniformity in the data set. I also mirrored the consumption assumptions with Colorado for the purposes

of consistency. The consumption assumes a much lower rate than in other forecast analysis that have been presented to you.

Demand Forecast Findings:
The total demand for the Oregon cannabis market is estimated to be 113,104 pounds per year in 2015. The medicinal market demand is 15,573 pounds and the recreational market is 97,531 pounds. This is significantly higher than other demand forecasts presented to the committee, but is based on extremely conservative assumptions that are consistent with other states. If one adds in demand from cannabis related tourism and the impact of a lower tax policy, the demand will be much higher than is proposed in this analysis. I am hoping this demand will serve as a baseline for discussion when it comes to policy and rule making.

Items of Note:
- The demand forecast is based on population, population growth and a constant percentage of usage model as defined by the Center of Behavioral Health Statistics (SAMSA). However, demand will fluctuate based on market conditions
- Given the demand forecast, there is much less potential excess on the market than is generally perceived
- The demand forecast does not include any tourist based consumption

Conclusion:
There are many ways to derive a demand forecast so differences are to be expected. However by mirroring the methodologies used in other states, it gives policy makers a basis for an apples to apples comparison. The total Oregon cannabis demand per year in 2015 is 113,104 pounds. Given the experiences in Colorado using this methodology, there is reason to have confidence in these numbers.

| | Source: State of Oregon | Source: State of Oregon | Source: National Survey (NSDOHS) | SAMHSA - Center for Behavior Health Statistics and quality | Source: OMMP | Calculated (Total Pop - Medical) | Matches DAS population Growth | Calculated at cnstant rate | Consumption | | | |
| | | | | Calculated (Population*% usage) | | | | | | | | |
Year	Population	Growth YoY	% usage	Projected TAM	OMMP	Recreational	OMMP growth	% of state population	ounce/year	Medical Pounds	Recreational Pounds	Total Demand Pounds
2015	4,008,100		0.129	517,045	71,191	445,854		1.78%	3.5	15,573	97,531	113,104
2016	4,054,400	1.16%	0.129	523,018	72,013	451,004	1.16%	1.78%	3.5	15,753	98,657	114,410
2017	4,102,300	1.18%	0.129	529,197	72,864	456,333	1.18%	1.78%	3.5	15,939	99,823	115,762
2018	4,151,000	1.19%	0.129	535,479	73,729	461,750	1.19%	1.78%	3.5	16,128	101,008	117,136
2019	4,200,200	1.19%	0.129	541,826	74,603	467,223	1.19%	1.78%	3.5	16,319	102,205	118,524
2020	4,249,800	1.18%	0.129	548,224	75,484	472,740	1.18%	1.78%	3.5	16,512	103,412	119,924
2021	4,299,000	1.16%	0.129	554,571	76,358	478,213	1.16%	1.78%	3.5	16,703	104,609	121,312
2022	4,348,000	1.14%	0.129	560,892	77,228	483,664	1.14%	1.78%	3.5	16,894	105,801	122,695

Assumptions and Sources:
- Population: Taken from DAS OEA (PSU/Census)
  - http://www.oregon.gov/DAS/OEA/Pages/demographic.aspx
- % Usage: SAMSA
  - Center for Behavioral Health Statistics (Ages 18 years and above)
- TAM (Total Available Market) = Population * % Usage
- Medical Patients: OMMP data as of 04/01/15
- Recreational = (Population * % usage) - Medical
- Usage = Same assumption as Colorado economist at 3.5oz/yr
- Demand does not differentiate between flower or oil
  - Oil demand requires 10x the supply than does flower demand