Vermont Cannabis Control Board

Report to the House Committee on Ways and Means, the Senate Committee on Finance, and the House and Senate Committees on Government Operations

as per Section 4a of Act 62 (2021)

October 15, 2021

VERMONT
CANNABIS CONTROL BOARD

Overview

- **Background, Requirements, and Process**
- **Market Analysis**
- **State Licensing Recommendations**
- **State Fee Recommendations**
- **Costs, Revenue, and Taxes**
- **Local Fee Recommendations**

Background, Requirements, and Process

- Cannabis Control Board
- Advisory Committee
- Advisory Sub-Committees
- Consultants
- Relevant Requirements of the Fee Report
- Public Comment

Cannabis Control Board

The three-member Cannabis Control Board (CCB) was established through Act 164 of 2020 for the purpose of safely, equitably implementing and administering the laws and rules regulating adult-use cannabis (marijuana) in Vermont. It is responsible for establishing, administering, and regulating a cannabis regulatory system for commercial cannabis cultivators, wholesalers, product manufacturers, retailers and testing laboratories.

James Pepper (Chair)

Kyle Harris

Julie Hulburd

Advisory Committee

The 14-member Cannabis Control Board Advisory Committee was created to assist the Board's mission to safely, equitably, and effectively implement and administer the laws enabling adult and medical use of cannabis in Vermont.

Member	Statutory Position
Shayla Livingston	(A) expertise in public health appointed by the Governor
Stephanie Smith	(B) the Secretary of Agriculture, Food and Markets or designee
Kim Watson	(C) expertise in laboratory science or toxicology appointed by the Governor
Nader Hasim	(D) expertise in systemic social justice and equity issues appointed by the Speaker of the House
Ashley Reynolds	(E) expertise in women- and minority-owned business ownership appointed by the Speaker of the House
Mark Levine	(F) the Chair of the Substance Misuse Prevention Oversight and Advisory Council or designee
Chris Walsh	(G) expertise in the cannabis industry appointed by the Senate Committee on Committees
Sivan Cotel	(H) expertise in business management or regulatory compliance appointed by the Treasurer
Tim Wessel	(I) expertise in municipal issues appointed by the Senate Committee on Committees
Ingrid Jones	(J) expertise in public safety appointed by the Attorney General
TJ Donovan (Designee: Julio Thompson)	(K) expertise in criminal justice reform appointed by the Attorney General
Billy Coster	(L) the Secretary of Natural Resources or designee
Jim Romanoff	(M) the Chair of the Cannabis for Symptom Relief Oversight Committee or designee
Meg D'Elia	(N) appointed by the Vermont Cannabis Trade Association

Advisory Sub-Committees

The Advisory Committee is broken down into six sub-committees by issue area:

- Compliance and Enforcement
- Market Structure, Licensing, Taxes and Fees
- Medicinal Cannabis
- Public Health
- Social Equity
- Sustainability

Consultants

VS STRATEGIES

Relevant Requirements of the Fee Report

Act 62 (2021), Section 4a states:

"[T]he Cannabis Control Board shall provide recommendations to the House Committee on Ways and Means, the Senate Committee on Finance, and the House and Senate Committees on Government Operations on the following:

(1) State fees to be charged and collected …. The recommendations shall be accompanied by information justifying the recommended rate …. The State fees … shall be projected to be sufficient to fund the duties of the Cannabis Control Board …. To the extent possible, the recommend fees shall include an amount to repay over a period, not greater than 10 years, to the General Fund any application of excise taxes to the Cannabis Regulation Fund ….

(A) Application fees, initial annual license fees, and annual license renewal fees for each type of cannabis establishment license as provided in 7 V.S.A. § 846: cultivator, product manufacturer, wholesaler, retailer, testing laboratory, and integrated. If the Board establishes tiers within a licensing category, it shall provide a fee recommendation for each tier.

(B) Fee for a cannabis establishment identification card ….

(2) Whether monies expected to be generated by State fees … are sufficient to support the … the Board and whether any portion of the tax … should be allocated to the Cannabis Regulation Fund ….

(3) Local fees to be charged and collected …. The recommendations shall be accompanied by information justifying the recommended rate …. The Board shall recommend local fees that are designed to help defray the costs incurred by municipalities in which cannabis establishments are located."

Public Comment

The CCB has emphasized receiving input and feedback from Vermont residents throughout the process.

- Time is reserved for public comment at all Board meetings, Advisory Committee meetings, and Advisory Sub-Committee meetings.
  - Since the end of May, there have been 16 full Board meetings, two full Advisory Committee meetings, and 50 sub-committee meetings.
- The Board set up a process to receive public comments through its website, where it has received more than 100 substantive comments to date.

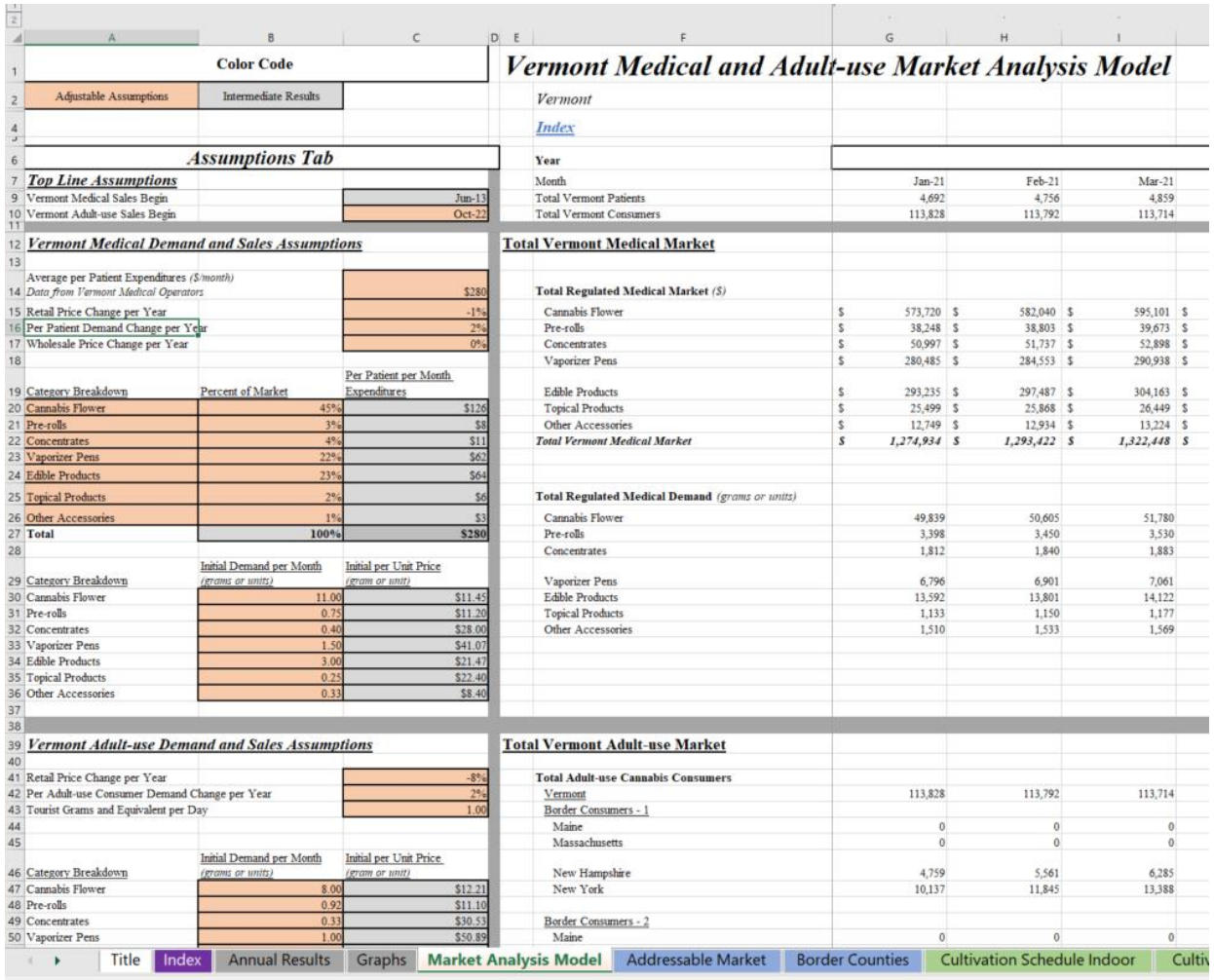
Market Analysis

- Supply and Demand Model
- Determining Cannabis Demand
- Evaluating Cannabis Supply
- Total Supply and Demand
- Total Cultivation Required to Meet Demand
- Total Projected Sales

Supply and Demand Model

VS Strategies developed a market analysis model to:

- Determine annual and seasonal cannabis demand
- Evaluate total square feet of cultivation and production volume required to meet market demand
- Project indoor and outdoor production timelines to understand seasonal trends in supply and demand



	A	B	C	D	E	F	G	H	I
1	Color Code					Vermont Medical and Adult-use Market Analysis Model			
2	Adjustable Assumptions	Intermediate Results				Vermont			
4						Index			
6	Assumptions Tab					Year			
7	Top Line Assumptions					Month	Jan-21	Feb-21	Mar-21
9	Vermont Medical Sales Begin		Jun-13			Total Vermont Patients	4,692	4,756	4,859
10	Vermont Adult-use Sales Begin		Oct-22			Total Vermont Consumers	113,828	113,792	113,714
11									
12	Vermont Medical Demand and Sales Assumptions					Total Vermont Medical Market			
13									
14	Average per Patient Expenditures ($/month) Data from Vermont Medical Operators		$280			Total Regulated Medical Market ($)			
15	Retail Price Change per Year		-1%			Cannabis Flower	$ 573,720	$ 582,040	$ 595,101 $
16	Per Patient Demand Change per Year		2%			Pre-rolls	$ 38,248	$ 38,803	$ 39,673 $
17	Wholesale Price Change per Year		0%			Concentrates	$ 50,997	$ 51,737	$ 52,898 $
18						Vaporizer Pens	$ 280,485	$ 284,553	$ 290,938 $
19	Category Breakdown	Percent of Market	Per Patient per Month Expenditures			Edible Products	$ 293,235	$ 297,487	$ 304,163 $
20	Cannabis Flower	45%	$126			Topical Products	$ 25,499	$ 25,868	$ 26,449 $
21	Pre-rolls	3%	$8			Other Accessories	$ 12,749	$ 12,934	$ 13,224 $
22	Concentrates	4%	$11			Total Vermont Medical Market	$ 1,274,934	$ 1,293,422	$ 1,322,448 $
23	Vaporizer Pens	22%	$62						
24	Edible Products	23%	$64						
25	Topical Products	2%	$6			Total Regulated Medical Demand (grams or units)			
26	Other Accessories	1%	$3			Cannabis Flower	49,839	50,605	51,780
27	Total	100%	$280			Pre-rolls	3,398	3,450	3,530
28						Concentrates	1,812	1,840	1,883
29	Category Breakdown	Initial Demand per Month (grams or units)	Initial per Unit Price (gram or unit)			Vaporizer Pens	6,796	6,901	7,061
30	Cannabis Flower	11.00	$11.45			Edible Products	13,592	13,801	14,122
31	Pre-rolls	0.75	$11.20			Topical Products	1,133	1,150	1,177
32	Concentrates	0.40	$28.00			Other Accessories	1,510	1,533	1,569
33	Vaporizer Pens	1.50	$41.07						
34	Edible Products	3.00	$21.47						
35	Topical Products	0.25	$22.40						
36	Other Accessories	0.33	$8.40						
37									
38									
39	Vermont Adult-use Demand and Sales Assumptions					Total Vermont Adult-use Market			
40									
41	Retail Price Change per Year		-8%			Total Adult-use Cannabis Consumers			
42	Per Adult-use Consumer Demand Change per Year		2%			Vermont	113,828	113,792	113,714
43	Tourist Grams and Equivalent per Day		1.00			Border Consumers - 1			
44						Maine	0	0	0
45						Massachusetts	0	0	0
46	Category Breakdown	Initial Demand per Month (grams or units)	Initial per Unit Price (gram or unit)			New Hampshire	4,759	5,561	6,285
47	Cannabis Flower	8.00	$12.21			New York	10,137	11,845	13,388
48	Pre-rolls	0.92	$11.10						
49	Concentrates	0.33	$30.53			Border Consumers - 2			
50	Vaporizer Pens	1.00	$50.89			Maine	0	0	0

Title | Index | Annual Results | Graphs | Market Analysis Model | Addressable Market | Border Counties | Cultivation Schedule Indoor | Cultiv

A Complex Array of Data Sources

Multiple data sources and intermediate models were combined to create the primary market models and municipal-level adjustable market analysis.

Vermont Medical and Adult-use Cannabis Supply and Demand Model

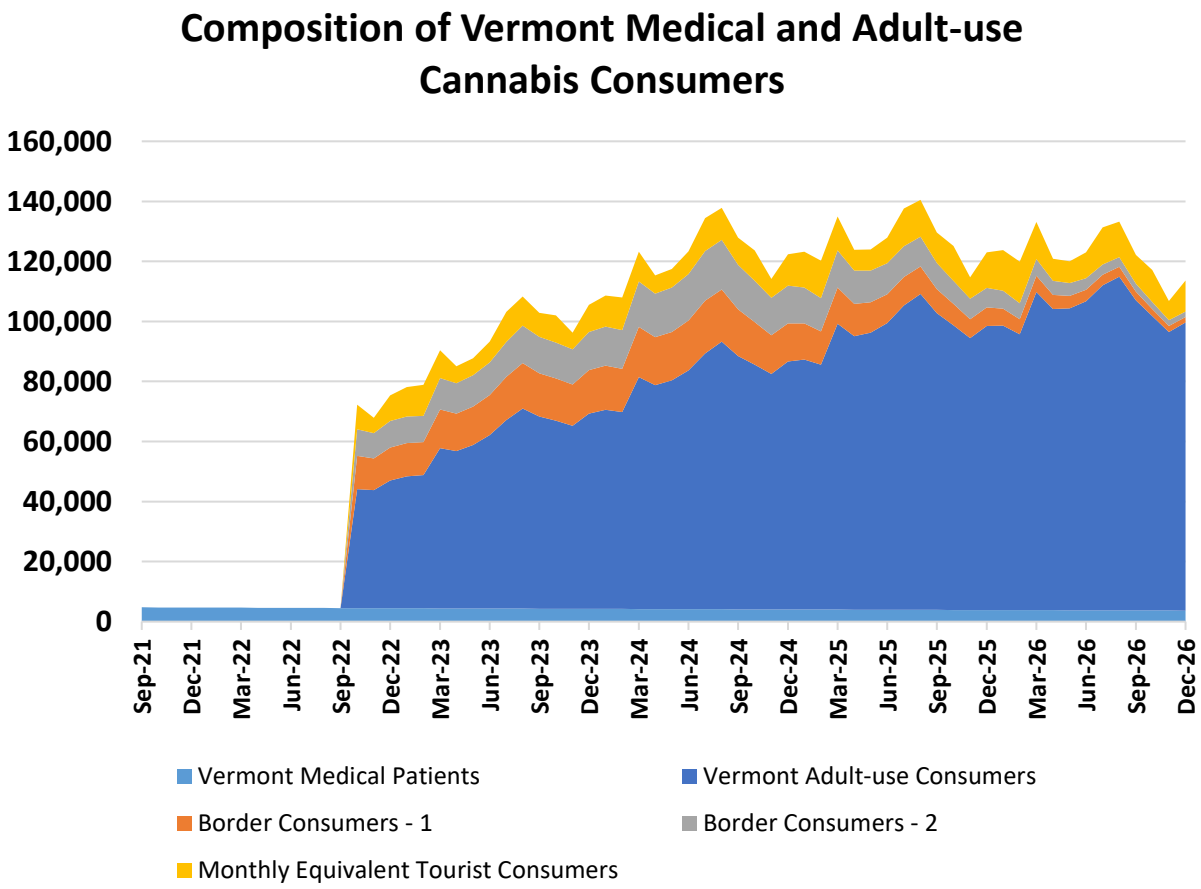
Index

Annual Key Results	*Primary Market Analysis Model*	*Addressable Market*	*Cultivation*	*Tourism*	*Consumer and Population Projections*	*Other Data Tabs*
Vermont Annual Results and Key Data	**Vermont Medical and Adult-use Market Analysis Model**	**Addressable Market of Past Month Cannabis Consumers**	**Vermont Medical and Adult-use Indoor Cultivation Schedule**	**Vermont County and Seasonal Cannabis Tourism Model**	**Vermont Municipal-Level Cannabis Consumer Projection**	**Vermont Medical Cannabis Patient Registration**
Vermont Medical and Adult-use Market Graphs		**Vermont Border County and Market Capture Analysis**	Random Cultivation Start Date Generator - Indoor Cultivation	**Vermont Tourism Spending Analysis by County By Month**	Vermont Municipal-Level Population Data and Projections	**Established Market Seasonal Trend Analysis**
	Links to Sections Within Primary Market Analysis Model		**Vermont Medical and Adult-use Greenhouse Cultivation Schedule**	**Vermont Tourist Expenditures by Metropolitan Area and Frequency**	**Vermont and Border County Consumer Projection**	**Vermont Hemp Data**
	Total Vermont Medical Market		Random Cultivation Start Date Generator - Greenhouse Cultivation		Vermont and Border County Population Data and Projections	**Vermont and Neighboring States Home Cultivation Analysis**
	Total Vermont Adult-use Market					**Vermont Medical Cannabis Dispensary Locations**
	Total Vermont Medical and Adult-use Market					**Vermont Population Data**
	Vermont Indoor Cultivation					**Vermont and Border County NSDUH Substate Regions (2016-2018)**
	Vermont Greenhouse Cultivation					**NSDUH Substate Data (2016-2018)**
	Combined Inventory Allocation from Both Cultivation Facilities					
	Vermont Extraction					
	Vermont Finished Product Production					
	Vermont Medical Patient Dispensary Retail Sales					
	Vermont Adult-use Store Retail Sales					
	Supply and Demand Analysis					
	Medical and Adult-use Finished Product Retail Sales and Taxes					
	Medical and Adult-use Retail Sales by Storefront					

Determining Cannabis Demand

Estimate the number of cannabis consumers seasonally within multiple consumer categories:

- Resident Medical Patients
- Resident Adult-use Consumers
- Business and Leisure Tourists
- Border Tourists



Process to Determine Cannabis Demand

- Utilized Vermont county and municipal level population projections from Vermont Center for Geographic Information.
- Overlayed state and sub-state past month and past year cannabis use frequency data from the federal National Survey on Drug Use and Health (NSDUH) administered by the Substance Abuse and Mental Health Services Administration.
- Analyzed seasonal tourism data from Vermont Agency of Commerce and Community Development to evaluate non-Vermont resident cannabis consuming tourists on a seasonal basis.
- Integrated seasonal demand trends from existing cannabis markets in Colorado, Oregon, and Washington to show month to month shifts in consumer spending.
- Calculated cannabis expenditures by consumer cohort using NSDUH data for intra-past month use frequency and an analogue for price per ounce.
- Projected product category specific market share using data from Vermont medical sales and other regulated northeast cannabis markets.

Evaluating Cannabis Supply

- The model utilizes two types of cultivation:
  - *Indoor and light-supplemented greenhouses* – Allow flowering plants to be harvested all year
  - *Outdoor and basic greenhouses* – Only use the light from the sun resulting in one harvest per year
- The Cannabis Control Board controls when cultivators receive licenses but not when they complete their construction or harvest plants.
  - The model incorporates a degree of randomness to highlight the complexities of harvest coming to the regulated market from cultivators at different times.

Modeling Cannabis Cultivation

Vermont Medical and Adult-use Indoor Cultivation Schedule

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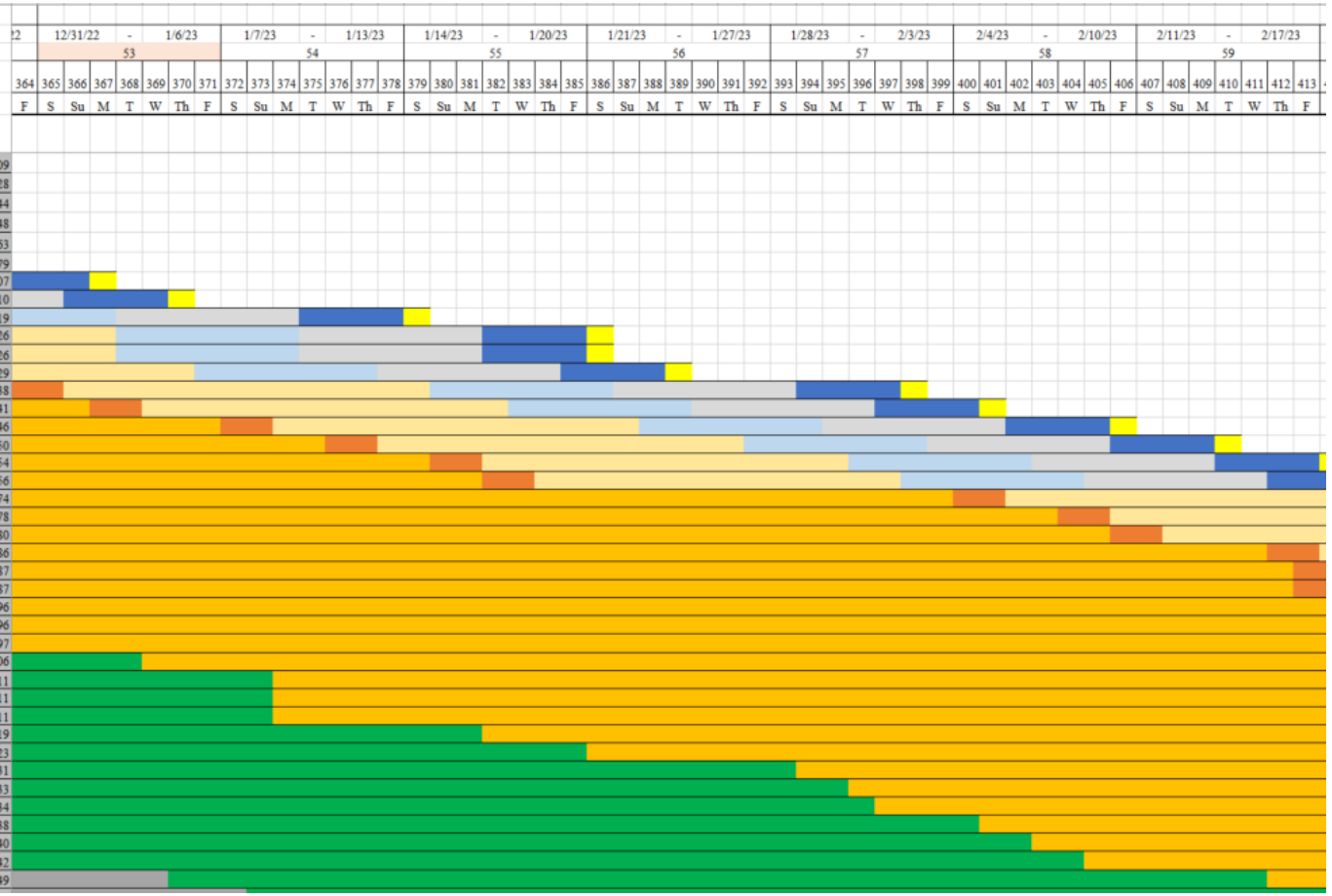
Licensing Assumptions	Start	End	Number of Months
Cultivation Licensing Date Range	Jan-22	Jul-23	18
Time for Licensing (months)	1		Licenses per Month
Number of Cultivators	200		11

From Final License to Start Planting	Low	High	Average
Time Range (months) - Normal	4	12	8
Time Range (months) - Outlier	2	18	
	Low - Outlier	**High - Outlier**	**Normal Range**
Percentage of Licenses	17%	17%	67%

Cultivation Facility Assumptions			
Date	**Jan-22**	**Jan-23**	**Jan-25**
SQFT of Flowering Space	360,000	360,000	360,000
Canopy per Cultivator	1,800	1,800	1,800
Frequency of Cultivation (days)	128	128	128

Stage	Color	Number of Days	Number of Weeks
Starting Clones		21	3.00
Continual Cut Clones		21	3.00
Vegetation		42	6.00
Flower		63	9.00
Harvest/Clean		2	0.29
Dry		14	2.00
Trim		7	1.00
Cure/Test		7	1.00
Package		4	0.57
Release		1	0.14
Initial Cycle		161	23.00
Full Cycle		**161**	**23.00**
Initial Cycle Cultivation Through Harvest		128	18.29
Cultivation Through Harvest		**128**	**18.29**
Initial Cycle Cultivation Through Cure		156	22.29
Cultivation Through Cure		**156**	**22.29**

Cycle Number	Grow Facility	#	Freq	Start Day
Cycle 1	Grow Facility	1	-	109
Cycle 2	Grow Facility	2	19	128
Cycle 3	Grow Facility	3	16	144
Cycle 4	Grow Facility	4	4	148
Cycle 5	Grow Facility	5	15	163
Cycle 6	Grow Facility	6	16	179
Cycle 7	Grow Facility	7	28	207
Cycle 8	Grow Facility	8	3	210
Cycle 9	Grow Facility	9	9	219
Cycle 10	Grow Facility	10	7	226
Cycle 11	Grow Facility	11	0	226
Cycle 12	Grow Facility	12	3	229
Cycle 13	Grow Facility	13	9	238
Cycle 14	Grow Facility	14	3	241
Cycle 15	Grow Facility	15	5	246
Cycle 16	Grow Facility	16	4	250
Cycle 17	Grow Facility	17	4	254
Cycle 18	Grow Facility	18	2	256
Cycle 19	Grow Facility	19	18	274
Cycle 20	Grow Facility	20	4	278
Cycle 21	Grow Facility	21	2	280
Cycle 22	Grow Facility	22	6	286
Cycle 23	Grow Facility	23	1	287
Cycle 24	Grow Facility	24	0	287
Cycle 25	Grow Facility	25	9	296
Cycle 26	Grow Facility	26	0	296
Cycle 27	Grow Facility	27	1	297
Cycle 28	Grow Facility	28	9	306
Cycle 29	Grow Facility	29	5	311
Cycle 30	Grow Facility	30	0	311
Cycle 31	Grow Facility	31	0	311
Cycle 32	Grow Facility	32	8	319
Cycle 33	Grow Facility	33	4	323
Cycle 34	Grow Facility	34	8	331
Cycle 35	Grow Facility	35	2	333
Cycle 36	Grow Facility	36	1	334
Cycle 37	Grow Facility	37	4	338
Cycle 38	Grow Facility	38	2	340
Cycle 39	Grow Facility	39	2	342
Cycle 40	Grow Facility	40	7	349

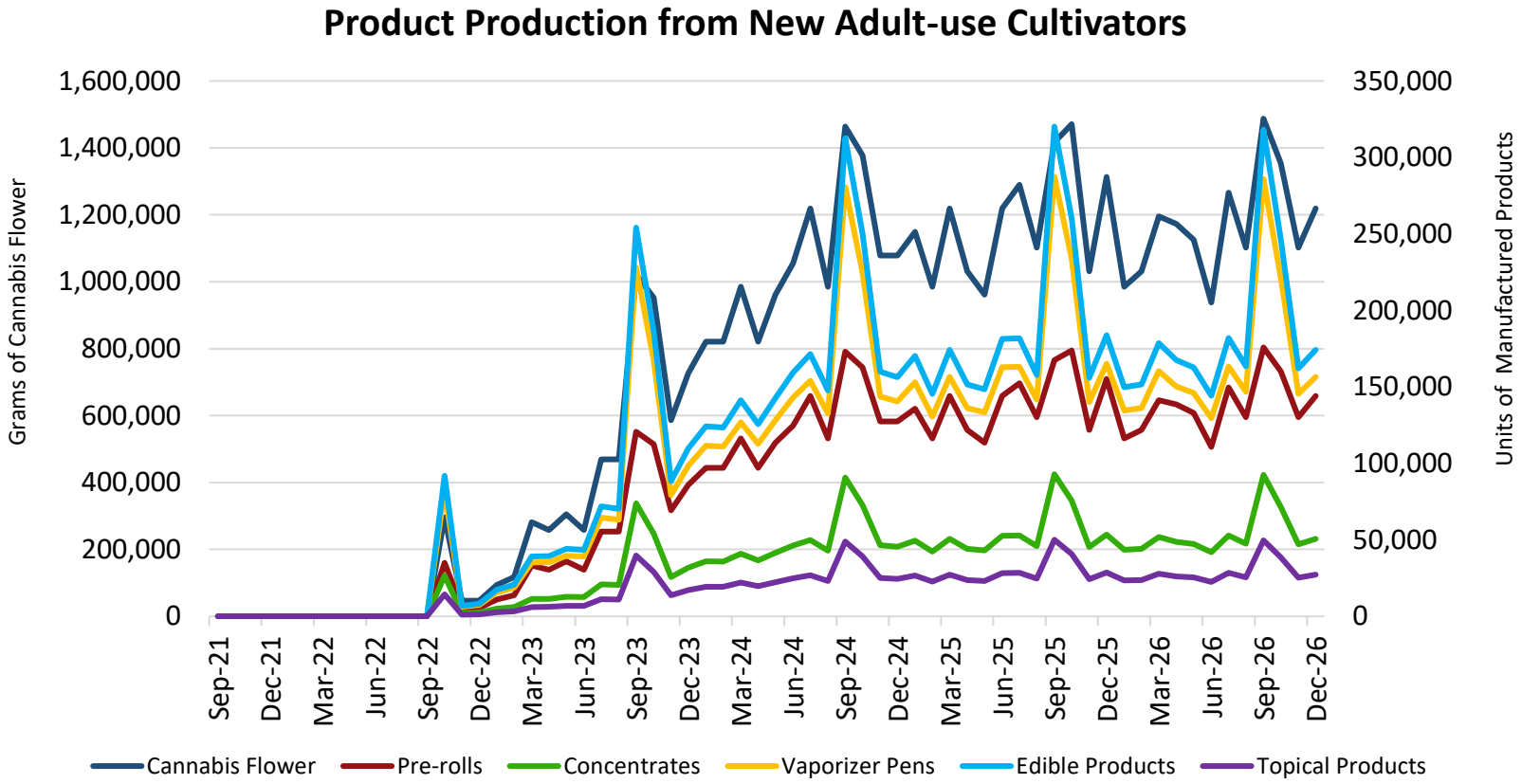


Harvest and Extraction Yield

- Cannabis cultivation and supply is evaluated based on yield per square feet of flowering canopy.
  - Total grams of cannabis harvested from flowering plants divided by the area of flowering plants harvested
- Cannabis is then extracted raw for high-end vaporizer cartridges or dried and separated into flower and trim for use in inhalable, ingestible, or topical forms.
- Cannabis allocated for extraction is first turned to concentrate and then divided among different types of manufactured products.

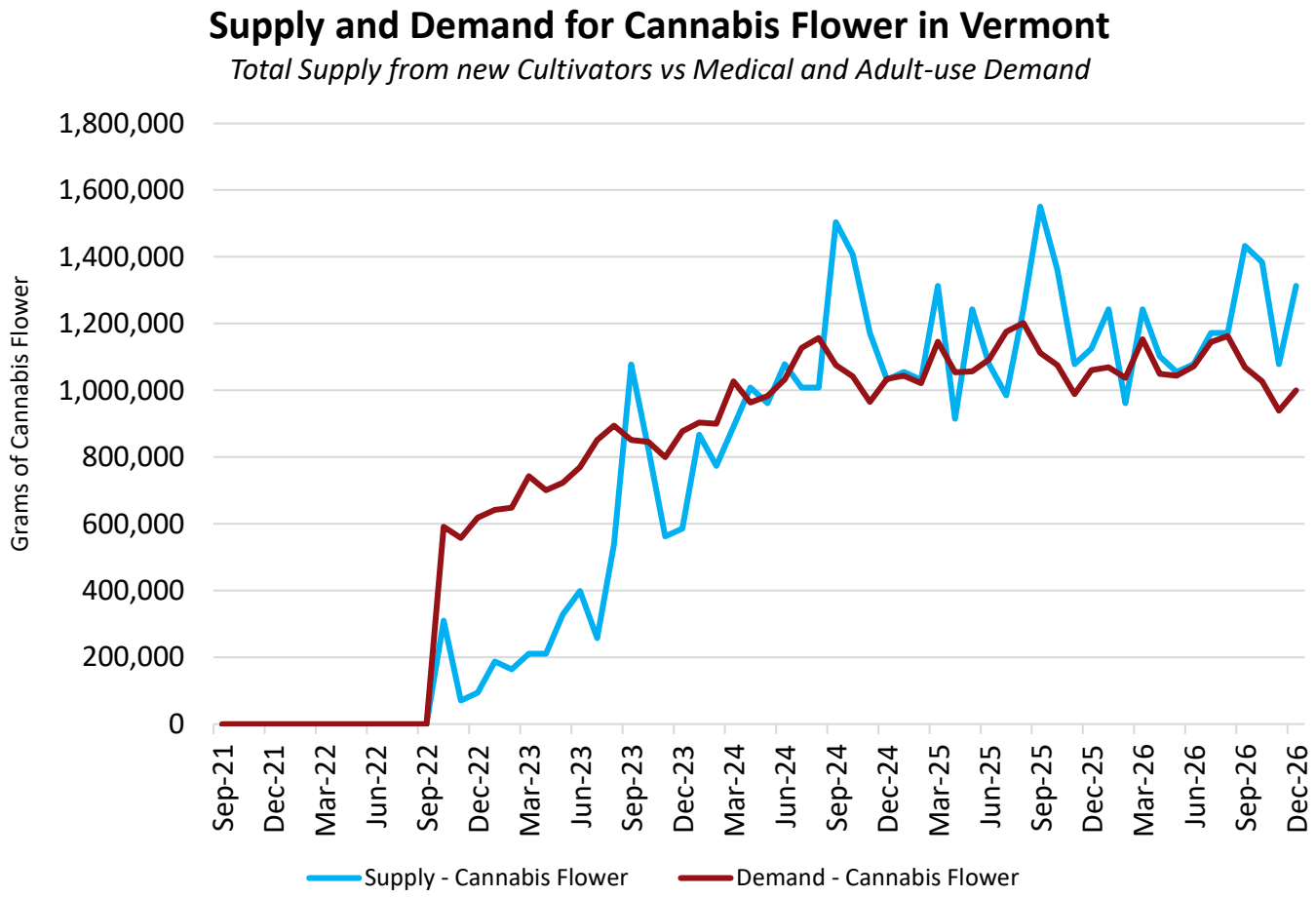
Product Production for Retail Supply

- Harvested cannabis is turned into six primary product categories:
  - Cannabis Flower
  - Pre-rolls
  - Concentrates
  - Vaporizer Pens
  - Edible Products
  - Topical Products
- Each of these categories will have dozens to hundreds of different retail product varieties.



Total Supply and Demand

- Supply and demand are evaluated on a product category basis.
- Supply in Vermont will vary based on the total square feet of cultivation, month, harvest yield, extraction efficiency, and allocation of oil to manufactured products.



Total Cultivation Required to Meet Demand

- Assuming approximately 20% of cultivation comes from outdoor cultivation with one harvest per year, Vermont will likely require 400,000–500,000 square feet of flowering canopy.
- Flowering canopy typically makes up 40%–60% of a cultivation facility's premises.
- The following tables show the total balance of seasonal supply and demand with 450,000 square feet of flowering canopy and 20% outdoor.
- While seasonal outdoor supply will surpass demand in the fall, inventory can be stored over time to meet consumer needs in the winter and spring.

Assumptions Tab

Top Line Assumptions	
Vermont Medical Sales Begin	Jun-13
Vermont Adult-use Sales Begin	Oct-22

Product Category	**Shelf Life** *(Months)*
Cannabis Flower	3
Pre-rolls	3
Concentrates	6
Vaporizer Pens	6
Edible Products	8
Topical Products	12

Year	**2024**											
Month	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Total Vermont Patients	4,241	4,223	4,206	4,189	4,172	4,155	4,138	4,120	4,103	4,087	4,070	4,053
Total Vermont Consumers	115,256	115,301	115,343	115,389	115,432	115,477	115,521	115,566	115,611	115,654	115,699	115,742
Percentage of Regulated Vermont Market Capable of Being Served with Produced Inventory												
Cannabis Flower	83.0%	96.4%	91.3%	92.4%	85.9%	115.8%	87.4%	101.3%	123.0%	143.4%	114.2%	115.5%
Pre-rolls	87.5%	101.6%	96.0%	97.3%	90.4%	121.7%	91.7%	106.3%	129.1%	150.7%	120.2%	121.4%
Concentrates	91.2%	100.0%	92.2%	94.3%	97.7%	114.5%	93.2%	99.2%	202.4%	173.1%	119.3%	113.8%
Vaporizer Pens	92.9%	101.9%	94.1%	96.1%	99.6%	116.9%	95.1%	101.3%	206.7%	176.6%	121.7%	116.1%
Edible Products	97.8%	107.3%	99.7%	101.6%	105.5%	124.0%	101.3%	108.1%	219.8%	187.6%	128.7%	123.3%
Topical Products	97.0%	106.4%	98.2%	100.4%	104.0%	122.0%	99.3%	105.8%	215.8%	184.4%	127.0%	121.3%
Percentage of Vermont Medical and Adult-use Market Capable of Being Served with Produced Inventory *Shelf Life Adjusted Rolling Average*												
Cannabis Flower	83.4%	84.9%	87.3%	90.8%	91.4%	96.6%	95.4%	97.6%	106.5%	113.0%	120.1%	124.2%
Pre-rolls	88.0%	89.5%	91.9%	95.6%	96.2%	101.6%	100.2%	102.5%	111.8%	118.6%	126.1%	130.5%
Concentrates	100.4%	106.5%	112.0%	97.1%	91.7%	96.4%	97.6%	98.7%	113.7%	125.1%	128.3%	130.4%
Vaporizer Pens	102.2%	108.5%	114.1%	99.0%	93.5%	98.2%	99.6%	100.7%	116.0%	127.6%	131.0%	133.1%
Edible Products	97.2%	102.5%	106.3%	110.7%	116.1%	106.8%	101.9%	104.0%	119.1%	128.9%	130.9%	133.5%
Topical Products	79.9%	85.0%	89.2%	94.2%	98.7%	103.5%	105.9%	109.0%	122.0%	120.9%	119.6%	121.7%

Indoor vs. Outdoor Cultivation

- Outdoor cultivation produces less total biomass per square feet per year since Vermont's climate only allows for one early fall harvest.
- Outdoor harvests come on the market in the fall before the ski season starts when demand is lowest.
- The same 450,000 square feet of cultivation would result in summer shortages if 50% of square feet were allocated for outdoor cultivators.
- While it is possible to supply the market with a greater percentage of outdoor cultivation, doing so may result in larger seasonal supply swings and a less stable market for growers

Assumptions Tab

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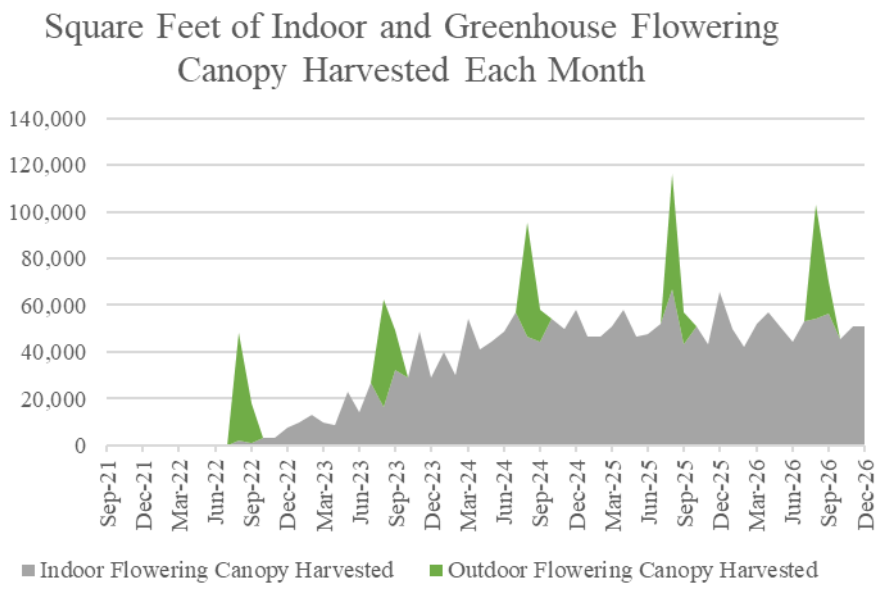
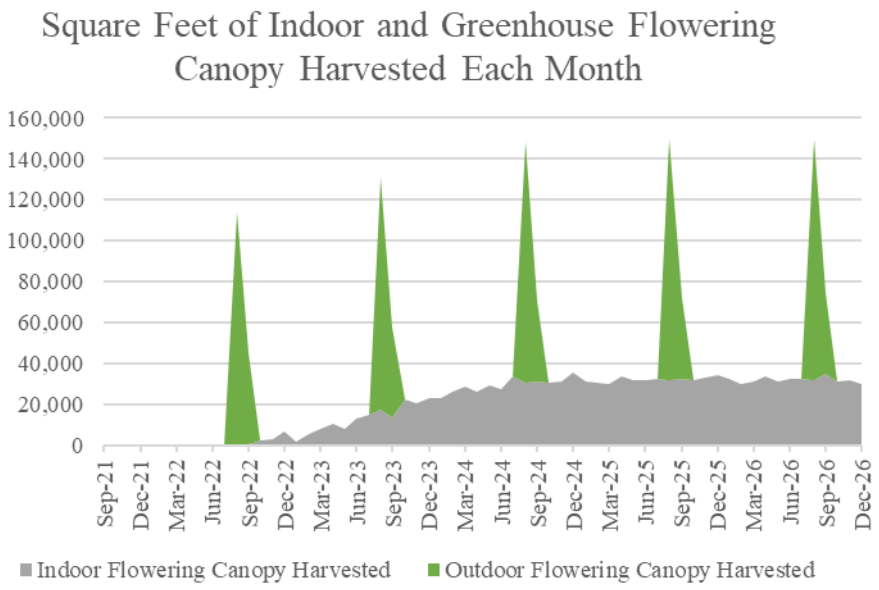
Percentage of Regulated Vermont Market Capable of Being Served with Produced Inventory												
Cannabis Flower	56.7%	58.6%	45.7%	62.3%	65.6%	56.8%	62.4%	57.0%	185.9%	100.1%	66.8%	69.4%
Pre-rolls	59.8%	61.8%	48.0%	65.6%	69.0%	59.7%	65.5%	59.8%	195.2%	105.1%	70.3%	72.9%
Concentrates	59.9%	58.1%	50.1%	64.3%	68.6%	58.8%	64.0%	59.8%	241.9%	196.9%	69.9%	71.8%
Vaporizer Pens	61.0%	59.1%	51.1%	65.6%	70.0%	60.0%	65.4%	61.1%	246.9%	201.0%	71.3%	73.3%
Edible Products	64.3%	62.3%	54.2%	69.3%	74.0%	63.7%	69.7%	65.1%	262.5%	213.4%	75.4%	77.8%
Topical Products	63.7%	61.8%	53.4%	68.4%	73.0%	62.7%	68.3%	63.8%	257.8%	209.8%	74.4%	76.5%
Percentage of Vermont Medical and Adult-use Market Capable of Being Served with Produced Inventory *Shelf Life Adjusted Rolling Average*												
Cannabis Flower	63.5%	51.4%	51.4%	55.6%	57.9%	57.4%	61.7%	60.3%	89.9%	100.1%	102.5%	107.0%
Pre-rolls	67.0%	54.2%	54.1%	58.6%	60.9%	60.4%	64.9%	63.4%	94.4%	105.1%	107.7%	112.4%
Concentrates	103.1%	106.6%	107.2%	77.7%	57.1%	58.6%	60.6%	60.5%	87.3%	108.0%	108.7%	108.9%
Vaporizer Pens	104.9%	108.6%	109.2%	79.2%	58.2%	59.7%	61.8%	61.8%	89.1%	110.2%	110.9%	111.1%
Edible Products	94.0%	96.9%	97.6%	101.2%	104.6%	79.8%	62.7%	64.2%	88.4%	104.8%	105.8%	108.4%
Topical Products	74.3%	76.5%	78.3%	81.4%	83.6%	85.4%	87.1%	88.7%	106.7%	102.5%	91.4%	92.8%

Indoor vs. Outdoor Cultivation (cont.)

- 450,000 square feet with **20% grown outdoor**



- 450,000 square feet with **50% grown outdoor**



Total Projected Sales

Vermont Annual Results and Key Data		2021	2022	2023	2024	2025	2026
Index							
Medical and Adult-use Retail Sales	**Medical Dispensary Finished Products and Accessories Sold Retail**						
	Cannabis Flower	$6,838,666	$6,609,148	$6,354,401	$6,108,927	$5,873,354	$5,646,968
	Pre-rolls	$455,911	$440,610	$423,627	$407,262	$391,557	$376,465
	Concentrates	$607,881	$587,480	$564,836	$543,016	$522,076	$501,953
	Vaporizer Pens	$3,343,348	$3,231,139	$3,106,596	$2,986,587	$2,871,417	$2,760,740
	Edible Products	$3,495,318	$3,378,009	$3,247,805	$3,122,341	$3,001,936	$2,886,228
	Topical Products	$303,941	$293,740	$282,418	$271,508	$261,038	$250,976
	Other Accessories	$151,970	$146,870	$141,209	$135,754	$130,519	$125,488
	Total Retail Sales of Medical Finished Products	**$15,197,036**	**$14,686,996**	**$14,120,892**	**$13,575,394**	**$13,051,898**	**$12,548,818**
	Adult-use Finished Products and Accessories Sold Retail**						
	Cannabis Flower	$0	$2,844,867	$47,283,629	$103,716,829	$111,005,765	$100,512,745
	Pre-rolls	$0	$379,810	$5,550,094	$10,985,150	$11,563,101	$10,470,078
	Concentrates	$0	$717,817	$5,246,967	$11,250,602	$11,563,101	$10,470,078
	Vaporizer Pens	$0	$3,495,638	$26,267,469	$56,452,824	$57,815,503	$52,350,388
	Edible Products	$0	$1,506,387	$12,343,104	$27,967,892	$27,751,441	$25,128,186
	Topical Products	$0	$424,730	$3,261,408	$6,885,035	$6,937,860	$6,282,047
	Other Accessories	$0	$740,457	$3,804,381	$4,672,029	$4,625,240	$4,188,031
	Total Retail Sales of Adult-use Finished Products	**$0**	**$10,109,707**	**$103,757,052**	**$221,930,360**	**$231,262,011**	**$209,401,553**
	***Adjusted so total sales are reduced in months where supply does not meet total demand*						
	Combined Medical and Adult-use Finished Products and Accessories Sold Retail						
	Cannabis Flower	$6,838,666	$9,454,015	$53,638,030	$109,825,756	$116,879,119	$106,159,713
	Pre-rolls	$455,911	$820,420	$5,973,721	$11,392,411	$11,954,657	$10,846,542
	Concentrates	$607,881	$1,305,297	$5,811,802	$11,793,618	$12,085,176	$10,972,030
	Vaporizer Pens	$3,343,348	$6,726,778	$29,374,065	$59,439,410	$60,686,920	$55,111,128
	Edible Products	$3,495,318	$4,884,396	$15,590,909	$31,090,232	$30,753,378	$28,014,414
	Topical Products	$303,941	$718,470	$3,543,826	$7,156,543	$7,198,898	$6,533,023
	Other Accessories	$151,970	$887,327	$3,945,590	$4,807,783	$4,755,759	$4,313,519
	Total Retail Sales of Medical and Adult-use Finished Products	**$15,197,036**	**$24,796,703**	**$117,877,944**	**$235,505,754**	**$244,313,908**	**$221,950,371**

State Licensing Recommendations

- Goals and Objectives
- License Type and Fee Requirements
- Other Relevant Statutory Requirements
- Initial License Type Recommendations
- Potential Future License Types

Goals and Objectives

The CCB's license and fee recommendations are designed to foster a legal cannabis market that reflects Vermont's culture and embraces its strengths.

- To promote sustainability, they encourage outdoor cultivation where possible.

- To promote an equitable and accessible industry, they include license types focused on providing access to:

    - small cultivators;
    - individuals operating in the legacy market; and
    - individuals from communities disproportionately impacted by harmful government policies, including cannabis prohibition.

- The Board believes its initial license type recommendations will begin the process of creating an equitable market, and that additional license types and tiers, which will be discussed in a later report, could further this goal immensely.

License Type and Fee Requirements

- Required license types:
  - Cultivators
  - Product manufacturers
  - Wholesalers
  - Retailers
  - Testing laboratories
  - Integrated
- The Board needed to tier the following license types and may tier other license types:
  - Cultivators
  - Retailers
- The Board must recommend state fees to be charged, including application fees, initial annual license fees, and annual license renewal fees for each type of cannabis establishment license.

Other Relevant Statutory Requirements

- The Board needs to propose a plan for reducing or eliminating licensing fees for individuals from communities that have historically been disproportionately impacted by cannabis prohibition or individuals directly and personally impacted by cannabis prohibition.

- Integrated licenses are defined and limited in statute to the existing medical businesses.

- Integrated licensees face a statutory $50,000 fee to the Cannabis Business Development Fund.

- “Small cultivator” is defined as a tier in statute as “a cultivator with a plant canopy or space for cultivating plants for breeding stock of not more than 1,000 square feet.”

- “Plant canopy” is defined in statute as “the square footage dedicated to live plant production and does not include areas such as office space or areas used for storage of fertilizer, pesticides, or other products.”

Initial License Type Recommendations

Cultivation*

- 6 Outdoor Tiers
- 6 Indoor Tiers
- 1 Mixed Tier

Retail

- 2 Tiers

Manufacturing

- 2 Tiers

Other License Types

- Wholesaler
- Testing Laboratory
- Integrated

* Outdoor cultivation vs. indoor cultivation is differentiated by whether flowering plants receive a light cycle that is different from the normal rise and fall of the sun.

Cultivation License Tiers

Outdoor

Tier	Max Sq Ft of Total Canopy
1	1,000
2	2,500
3	5,000
4	10,000
5	20,000
6*	37,500

Indoor

Tier	Max Sq Ft of Total Canopy
1	1,000
2	2,500
3	5,000
4	10,000
5	15,000
6**	25,000

* Outdoor Tier 6 is designed to fall within existing land use regulations for cultivation of under an acre.

** Indoor Tier 6 licenses shall not be available initially. If additional supply is need, the Board may choose to allow existing cultivators to expand to Indoor Tier 6 or allow applications for Indoor Tier 6 licenses at some point in the future.

Mixed Tier Licenses

- While most tiers are designated either outdoor or indoor, the Board is proposing one license targeted at small businesses and farmers that will allow both indoor and outdoor cultivation under one license.

- This tier would allow license holders to have an indoor cultivation space of up to 1,000 square feet AND grow up to 50 plants outdoors at the same licensed premise.

- Licensees would have the flexibility to grow how they choose and the ability to continue cultivation during the winter when outdoor growing in Vermont is impossible.

Retail License Tiers

Tier	Nature of business
Retail – Storefront	A traditional retail location that sells cannabis and cannabis products to consumers. A Retail – Storefront licensee may also sell all products a Retail – Nursery may sell.
Retail – Nursery	Enables the licensee to sell seeds and clones to home cultivators or other licensees. Could be a stand-alone business or could be held by an existing nursery or other business, provided all other regulatory requirements are met.

Manufacturing License Tiers

Tier	Nature of business
Manufacture – Tier 1	Enables the licensee to process and manufacture cannabis in order to produce cannabis products using all allowable methods of extraction, including solvent-based extraction. Products could be sold to Retailers and other licensees but not directly to consumers.
Manufacture – Tier 2	Enables the licensee to process and manufacture cannabis products like the Tier 1 license, but licensees would be prohibited from using more dangerous solvents in their extractions. Aims to be a lower-cost license for businesses that want to make infused or processed products. Licensees may purchase extract for infusing from other licensees.

Other License Types

Tier	Nature of business
Integrated	For existing medical businesses, as defined in statute.
Wholesale	Allows the licensee to purchase cannabis and cannabis products from a licensee to sell to other licensees, but not directly to consumers.
Testing Laboratory	Allows the licensee to test cannabis and cannabis products from other licensees or from any home cultivators in the state.

Potential Future License Types

- In addition to the tiers proposed above, there are other license types that can help build the Vermont cannabis industry in a way that stays true to the culture of the state and furthers the goal of creating an equitable and accessible market.

- These license types either need additional regulatory requirements or, in some cases, legislative authorization. The CCB will provide the legislature more information in our report due January 15, 2022, but we wanted to highlight them now because we think they can become a very important part of the market.

- The Board is discussing the following potential license types but likely will not recommend all of them in the future because some may prove to be too difficult to regulate or may be too similar to existing license types to be practicable.

Potential Future License Types

License Type	Nature of business
Co-op Cultivation	Allows co-ops to be formed for the purpose of cannabis cultivation.
Retail – Limited	Allows sections of existing businesses, like general stores, to be secured to sell a limited amount of cannabis, provided all other regulations are met.
Manufacturing – Cottage	Allows small amounts of infused products to be produced in a non-professional kitchen for retail sale.
Delivery	Allows for delivery directly to consumers. Models based on sales from Retail – Storefront and based on sales from Wholesalers have been debated.
On-site Consumption	Allows for sales to consumers for on-site consumption.
Retail – Temporary Event	Allows for temporary retails sales for consumption at an event like an outdoor concert.
Entry Level or Reduced Rate Retail	A lower fee retail with sales or space restrictions, which may encompass producer direct to consumer sales.

State Fee Recommendations

- Recommendation Format
- Application Fee Recommendations
- License Fee Recommendations
- Social Equity Fee Reduction Recommendations
- CCB Fee Proposal Recommendation

Recommendation Format

- The statute requires the Board to propose fees that would cover the agency's operating costs as well as repay any appropriations that have been received thus far.

- Even with the modest budget the Board is anticipating, due to the small size of the state and the potential market, covering all costs through application and license fees will result in fees that are significant outliers when compared with cannabis license fees around the country and other regulatory fees in the state. While the Board still structured the license fees to prioritize small businesses, social equity applicants, and market access, we have serious concerns that the high fees necessary to cover our costs could keep many from entering our licensed market.

- **Therefore, the Board has decided to submit two separate fee proposals.**

Fee Proposals

Proposal A — We estimate that the fees in this proposal would cover our costs and provide enough additional revenue to reimburse the state for initial appropriations within 10 years. The size of these fees could keep prospective entrepreneurs out of the market and would make Vermont an outlier when compared to most competitor states.*

Proposal B — This proposal was designed to balance the goals of generating significant fee revenue with providing low-cost entry into the market for many license types and keeping most fees competitive with nearby states and other markets without limited licenses. Some tax revenue would be needed to cover operating expenses, but we believe this investment will help ensure Vermont has a functioning and inclusive market.

*See state-by-state list of licensing fees:
https://www.cannabisbusinesstimes.com/article/state-state-guide-marijuana-application-licensing-fees/

Application Fee Recommendations

We envision a two-part licensing process, where potential applicants can file an intent to apply early in the process. This filing will allow the applicant to meet background check and other application requirements before procuring real estate and finalizing business plans. If an applicant submits an intent to apply application, the application fee will be reduced by the amount of the intent to apply fee.

Fee Type	Proposal A	Proposal B
Intent to Apply Fee	$500	$500
Application Fee	$1,000	$1,000

Benefits of a Two-part Licensing Process

- Provides the Board an early sense of entrepreneurial demand in order to gauge supply.
- Allows applicants to get official state approval for their leadership team and initial plans before having to procure real estate, saving money for applicants and helping them attract financing.
- Allows applicants to begin the process before finalizing all the details of their plan.
- Allows the state to collect a portion of the application fee earlier in the process.
- Provides potential entrepreneurs a relatively low-cost first step they can use to evaluate the viability of their plan.

License Fee Recommendations

Outdoor Cultivation and Mixed Tier License Fees

License Tier	Proposal A	Proposal B
Tier 1 Outdoor < 1,000 sq ft	$1,000	$750
Tier 2 Outdoor < 2,500 sq ft	$2,500	$1,875
Tier 3 Outdoor < 5,000 sq ft	$5,000	$3,750
Tier 4 Outdoor < 10,000 sq ft	$10,000	$7,500
Tier 5 Outdoor < 20,000 sq ft	$20,000	$15,000
Tier 6 Outdoor < 37,500 sq ft	$37,500	$25,000
Mixed Tier	$4,500	$1,750

Indoor Cultivation License Fees

License Tier	Proposal A	Proposal B
Tier 1 Indoor < 1,000 sq ft	$4,000	$1,500
Tier 2 Indoor < 2,500 sq ft	$10,000	$3,750
Tier 3 Indoor < 5,000 sq ft	$20,000	$7,500
Tier 4 Indoor < 10,000 sq ft	$40,000	$15,000
Tier 5 Indoor < 15,000 sq ft	$60,000	$22,500
Tier 6 Indoor < 25,000 sq ft	$100,000	$37,500

Retail License Fees

License Tier	Proposal A	Proposal B
Retail – Storefront	$10,000	$5,000
Retail – Seeds and Clones	$4,000	$1,000

Manufacturing License Fees

License Tier	Proposal A	Proposal B
Manufacturer – Tier 1	$15,000	$7,500
Manufacturer – Tier 2	$5,000	$1,500

Other Fees

Fee Type	Proposal A	Proposal B
Integrated	$125,000	$50,000
Wholesaler	$4,000	$1,000
Testing Laboratory*	$1,500	$1,500
Employee Registration**	$100 max	$100 max
Local Processing***	$100 max or follow uniform fee schedule	$100 max or follow uniform fee schedule

* Testing laboratory fees will be integrated with hemp program fees so that a facility testing both does not pay a double fee.

** Biannual

*** The Board recommended municipalities either be (1) permitted to set their own fee, which should be capped by the Board at $100, or (2) required to follow the uniform charges schedule set forth in 1 V.S.A. 316(d).

Social Equity Fee Reduction Recommendations

- Application fees should be waived.

- License fees should be waived in the first year, then reduced by 75%, 50%, and 25% in each of the following three years, respectively.

Year	License Fee
1	Waived
2	25% of fee
3	50% of fee
4	75% of fee
5	Full fee

CCB Fee Proposal Recommendation

The Board strongly recommends that the Legislature chooses to adopt Proposal B, which features a lower fee schedule.

- An adult-use cannabis market that develops correctly and inclusively will generate significant tax revenue. Most states use this revenue to cover costs for their cannabis regulatory agency. Using some of this revenue to lessen the burden on licensees in Vermont will benefit cannabis consumers and potential small operators immensely.
- Lower fees will invite more applications and licensees, while encouraging participants in the illicit market to join the regulated market. Proposal B will likely close the projected revenue gap by encouraging the number of licenses to end up closer to the more robust dynamic than the more limited dynamic. (See pp. 52-54)
- Potential future license types should bring in additional revenue, reducing the projected revenue gap even further.
- For lower cost licenses, the Board may institute a sliding fee scale for low-income applicants to create opportunities for all Vermonters to benefit from participating in the market.

Costs, Revenue, and Taxes

- CCB Budget Projections
- Scenarios for Number of Applications
- Fee Revenue Projections for FY25
- Fee Justification Requirements
- Justification for Proposal A
- Justification for Proposal B
- Fee Comparison with Comparable Jurisdictions
- Tax Projections

CCB Budget Projections

- The first step to determine what fees are needed is to estimate what the CCB budget will be and what amount it needs to repay.
  - The projected CCB FY23 budget is $2,742,553.
  - The Fiscal Note for S. 54, which contemplated 2 full-time staff members for the CCB, estimated CCB's deficit could be about $1.8 million by the end of FY24.
- After factoring in budgetary inflation and other cost variables, we believe that if the Board can bring in annual fee revenue plus prorated one-time fee revenue of at least $2.8 million by FY25, the fees would cover costs and be on track to pay off the agency's deficit within 10 years.

CCB Budget Projections (cont.)

- The projected CCB FY23 budget contemplates 11 new positions.
  - Enforcement director and 5 inspection/enforcement personnel
  - Licensing director and 2 licensing administrators
  - Financial Manager
  - Data and Information Project Manager

- The Board needs this basic level of staffing to carry out the regulatory duties required by Act 164 and Act 62.

Scenarios for Number of Applications

- Significant uncertainty exists when estimating the number of applications in a new market without state-level license limitations.

- Application statistics were pulled from similar states and three dynamic scenarios provide an understanding of potential license ranges for each license fee proposal.

- Each of these three dynamics then provide projections for application and license fee revenue under fee Proposal A and Proposal B.

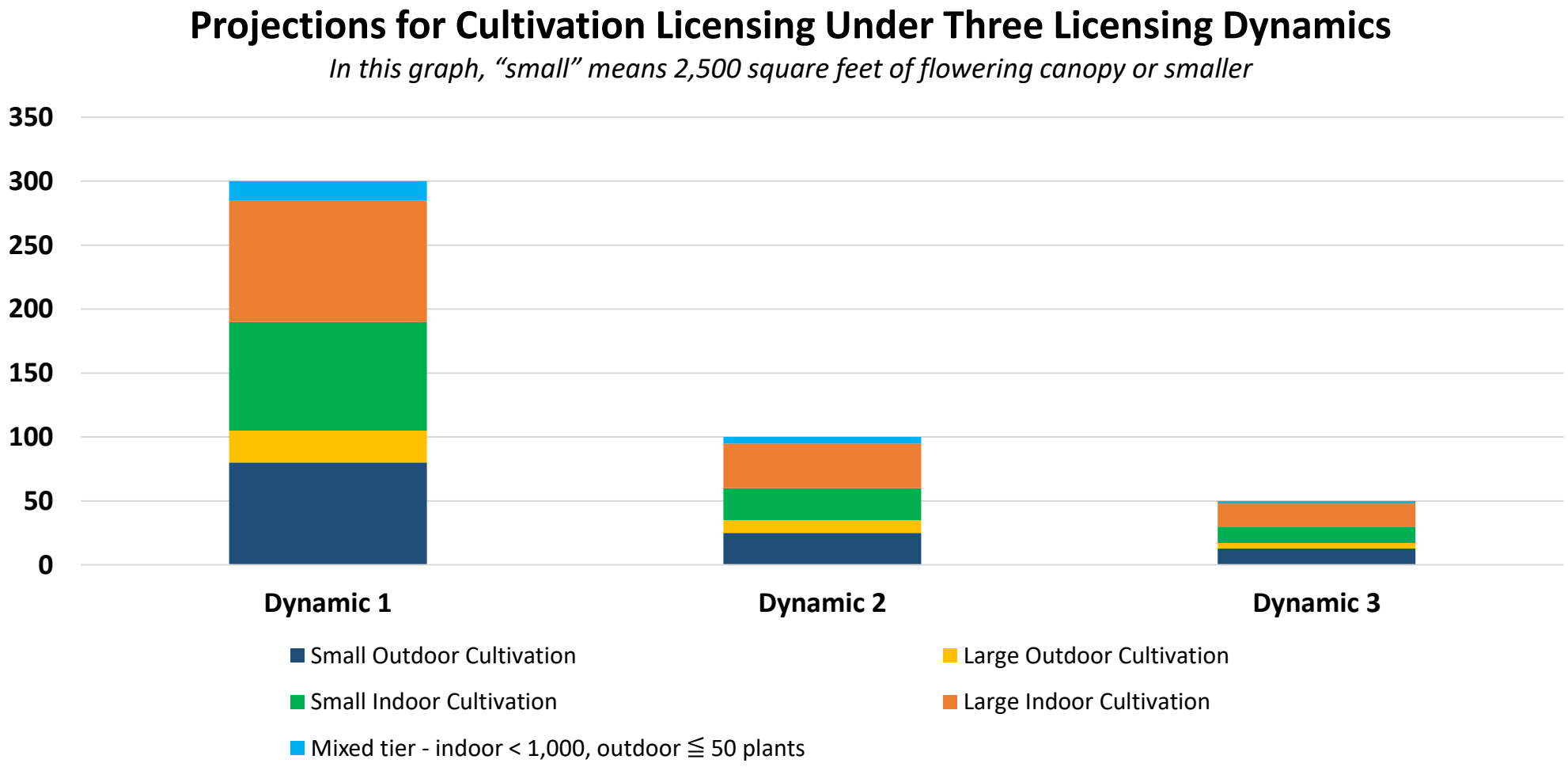
Application Uncertainty

- Fee costs may affect entrepreneurial interest and under Proposal A it is possible that high fees will discourage applications and lower projected total collections.

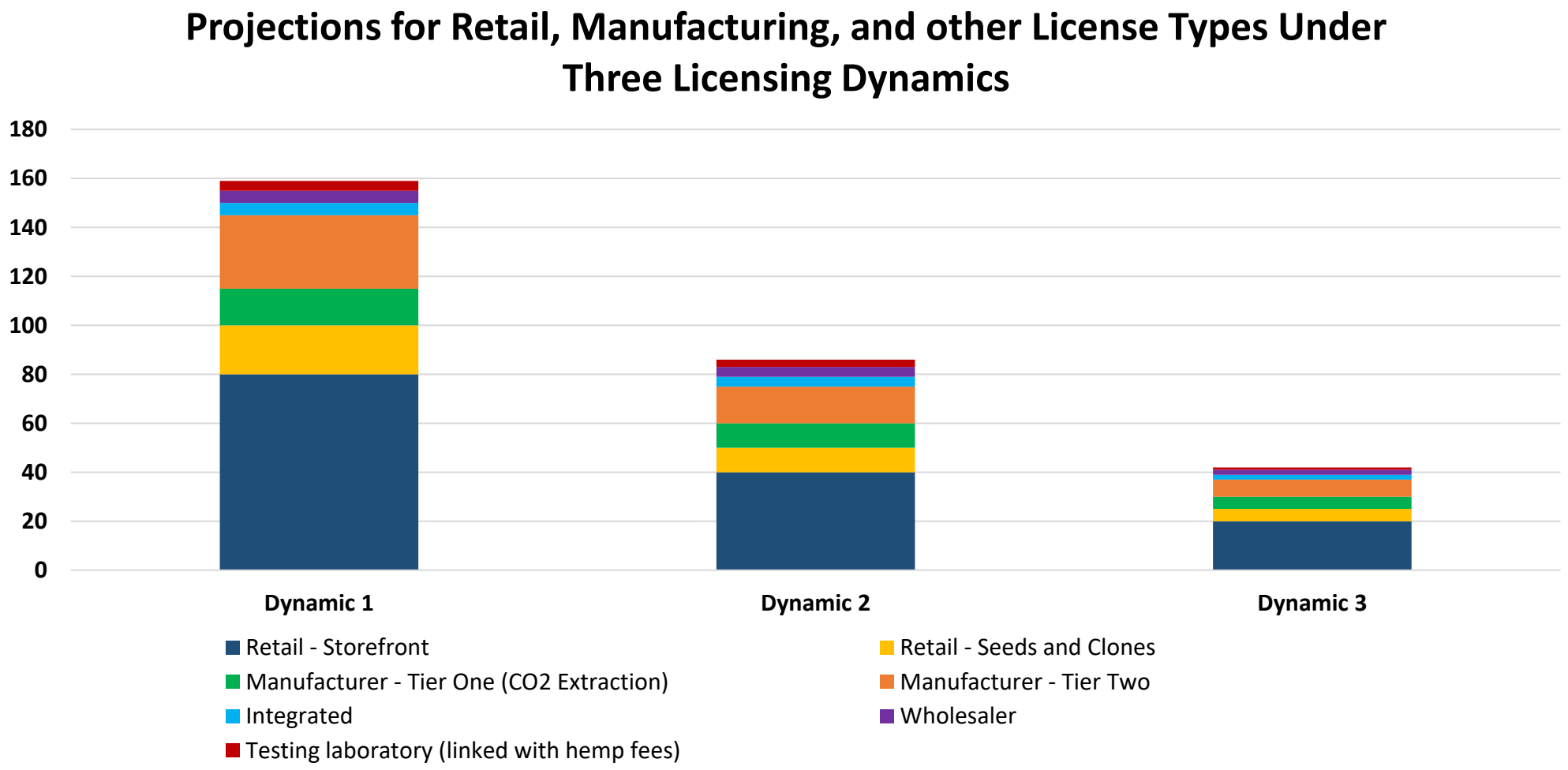
- To reduce application uncertainty, the Cannabis Control Board may utilize an initial “intent to apply” stage to identify entrepreneurial demand in Vermont for each license type.

  - This will enable the Cannabis Control Board to effectively allocate assets and resources in order to best serve cannabis applicants.

Estimating Entrepreneurial Interest



Estimating Entrepreneurial Interest (cont.)



Fee Revenue Projections for FY25

Type	Proposal A	Proposal B
Dynamic 1	$6,502,207	$2,874,082
Dynamic 2*	$2,858,007	$1,273,507
Dynamic 3	$1,417,664	$625,289

* In our estimation, this is the most likely Dynamic, although if the high fees of Proposal A are adopted the estimated license totals may move towards Dynamic 3

Fee Justification Requirements

32 V.S.A. §605(d) states:

"(d) A fee request shall contain any proposal to:

(1) Create a new fee, or change, reauthorize, or terminate an existing fee, which shall include a description of the services or product provided, or the regulatory function performed.

(2) Set a new or adjust an existing fee rate or amount. Each new or adjusted fee rate shall be accompanied by information justifying the rate, which may include:

(A) the relationship between the revenue to be raised by the fee or change in the fee and the cost or change in the cost of the service, product, or regulatory function supported by the fee, with costs construed pursuant to subdivision 603(2) of this title;

(B) the inflationary pressures that have arisen since the fee was last set;

(C) the effect on budgetary adequacy if the fee is not increased;

(D) the existence of comparable fees in other jurisdictions;

(E) policies that might affect the acceptance or the viability of the fee amount; and

(F) other considerations."

Justification for Proposal A

- The fees proposed here would be for the purpose of applying for a cannabis establishment license, being awarded a cannabis licenses, and renewing a cannabis license.

- The primary justification for the fee schedule is the operating costs associated with the Cannabis Control Board. We estimated our needed revenue and estimated number of licenses across three demand dynamics and developed a fee schedule based on what was estimated to cover costs.

- Within the fee schedule, we still tried to encourage smaller businesses and outdoor cultivation by having comparably low fees for more accessible licenses and keeping outdoor cultivation one-quarter the cost of indoor cultivation.

- The fees in Proposal A are significantly higher for many licenses than comparable markets.

Justification for Proposal B

- The fee schedule in Proposal B is based on promoting market access, not on covering operating costs, but it would still generate significant annual revenue.
- The fees in Proposal B are comparable to fees in similar jurisdictions (see pp. 58-59).
- The fee structure in Proposal B is unlikely to cover the operating costs of the Board, but much more likely than Proposal A to foster a diverse and equitable market with adequate supply to service Vermont's consumers. The high fees of Proposal A create a significant risk that a full market never develops and most supply and sales remain in the legacy market.
- The CCB needs approximately $2.8 million to cover operating costs and be on track to pay off the agency's deficit. Under Proposal B, approximately $1.27 million in application and license fees will be collected under Licensing Dynamic 2 (see pp. 51–52). If the Legislature chooses Proposal B, we recommend it fill the gap by allocating to the CCB approximately 15%–20% of adult-use excise tax revenue over the first 12 months of sales, which equates to approximately $1.5 million–$2 million under this model.
- All participants in the regulated cannabis market, especially consumers, will benefit from its safe and effective operation. For this reason, it's reasonable for consumers to share in the cost of managing the market by assigning a portion of the excise tax revenue to support the Board's regulatory function.

Fee Comparison with Comparable Jurisdictions

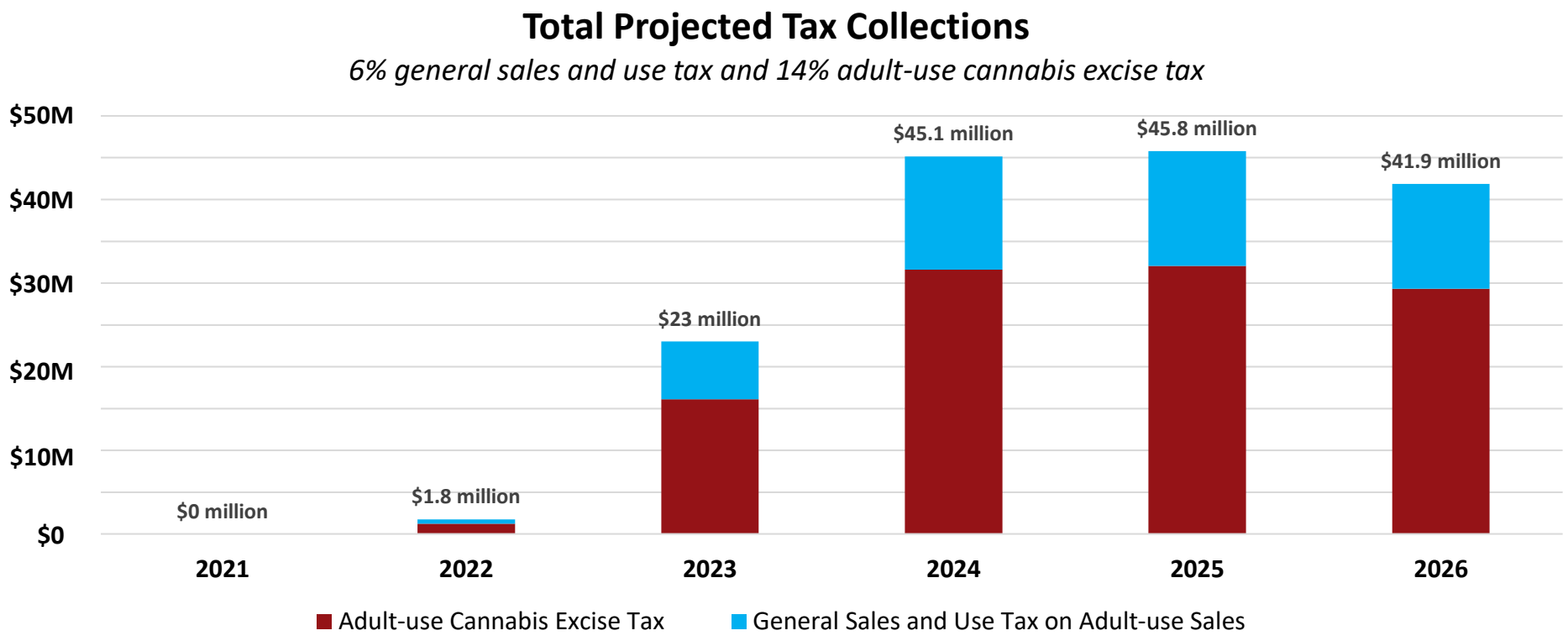
State	Retail License	Cultivator License
Alaska	New: $5,000 Renewal: $7,000	Limited (≤ 500 sq ft): $1,000 new, $1,400 renewal Standard (unlimited sq ft): $5,000 new, $7,000 renewal
Maine	$2,500	Outdoor: $250–$15,000 (500–20,000 sq ft) Indoor: $500–$30,000 (500–20,000 sq ft)
Massachusetts	$10,000	Outdoor: $625–$25,000 (5,000–100,000 sq ft) Indoor: $1,250–$50,000 (5,000–100,000 sq ft)
Vermont Proposal A	Storefront: $10,000 Nursery: $4,000	Outdoor: $1,000–$37,500 (< 1,000–37,500 sq ft) Indoor: $4,000–$100,000 (< 1,000–25,000 sq ft) Mixed: $4,500 (1,000 sq ft indoor + 50 plants outdoor)
Vermont Proposal B	Storefront: $5,000 Nursery: $1,000	Outdoor: $750–$25,000 (< 1,000–37,500 sq ft) Indoor: $1,500–$37,500 (< 1,000–25,000 sq ft) Mixed: $1,750 (1,000 sq ft indoor + 50 plants outdoor)

Fee Comparison with Comparable Jurisdictions (cont.)

State	Manufacturing License	Testing License	Employee Registration
Alaska	Concentrates: $1,000 (new), $2,000 (renewal) Products: $5,000 (new), $7,000 (renewal)	New: $1,000 Renewal: $5,000	$50
Maine	$2,500	Testing: $1,000 Sample Collector: $250	$50
Massachusetts	$10,000	$10,000	$115
Vermont Proposal A	Tier 1: $5,000 Tier 2: $15,000	$1,500	$100
Vermont Proposal B	Tier 1: $1,500 Tier 2: $7,500	$1,500	$100

Tax Projections

Tax projections are estimated to grow to more than $40 million annually and then fall as neighboring states implement their own adult-use cannabis programs.



Pursuant to Act 62, 30% of the excise tax revenues, not to exceed $10,000,000.00 per FY, shall be used to fund substance misuse prevention programming.
Pursuant to Act 164, sales and use tax revenue shall be used to fund a grant program to start or expand afterschool and summer learning programs.

Local Fee Recommendations

- Local Administration Fees
- Local Administration Fee Recommendation and Justification
- Excise Tax Revenue Shareback Recommendation and Justification

Local Administration Fees

- **Vermont statute states:**

  "Local fees to be charged and collected in accordance with the Board's authority pursuant to 7 V.S.A. § 846. The recommendations shall be accompanied by information justifying the recommended rate as required by 32 V.S.A. § 605(d). The Board shall recommend local fees that are designed to help defray the costs incurred by municipalities in which cannabis establishments are located."

- **The phrase "costs incurred by municipalities" is ambiguous, which could lead to different interpretations by each town based upon what costs they consider incurred due to regulating cannabis businesses.**

  - VS Strategies recommended the Board define the term to promote consistency among local governments and set clear expectations for stakeholders.

  - The Market Structure Sub-Committee recommended that costs only include the processing of the required forms, as current staff levels should be sufficient to process them.

Local Administration Fee Recommendation and Justification

Recommendation

- The Market Structure Sub-Committee recommended that municipalities either be:
  - permitted to set their own local administration fees, but the Board should cap those fees at $100; or
  - required to follow the uniform charges schedule set forth in 1 V.S.A. 316(d).
- The application fee would be in addition to any normal local building, zoning, permitting, signage, or other fees required.

Justification

- The state will handle most of the application review process, so the burden on local governments should be relatively minimal and processing costs are expected to be low.
  - The sub-committee expects local governments' review of each application will only take a few minutes; therefore, it can likely be absorbed by existing staff and the low fee will cover any costs incurred.
- Based upon a review of local fees in Vermont, a $100 fee appears to be within range of other municipal fees.
  - Local fees were reviewed in Rutland, South Burlington, and Essex Junction.

Excise Tax Revenue Shareback Recommendation and Justification

Recommendation

- The Board recommends the Legislature direct 1%–2% of the state excise tax on retail sales to the municipalities where the retail sales occurred.

Justification

- Other states have adopted this type of fee, which allows local governments to cover ancillary costs associated with cannabis retail stores and support other local initiatives that are struggling to find funding.
- Allowing local governments to generate revenue from local businesses will encourage municipalities to opt in to allowing cannabis retailers, improving access for consumers and, in turn, reducing illicit market activity.