

8/16/2023

Maryland Rec Start vs. Peers

Cannabis Sector Equity Research



Key Highlights:

- Not all the research we publish is about what stocks to buy (or when to buy them).
- Take a long-term view and tolerate ST volatility.
- But we think it is important to track underlying trends, especially as more US states legalize rec.
- Here we benchmark Maryland's rec start.

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Dear reader: On Tue 7/18, we launched our cannabis equity research service (see [Sector Launch report](#)). We will publish thematic/macro reports during the first few weeks, and then follow with equity stock coverage. A full list of our recent reports is shown at the end of this report.

The Start of Maryland Rec vs. Other States

Maryland (recreational sales began on July 1, 2023): 2x, post 1mo. In July, total sales (rec+med) reached \$87.3Mn in MD, in the first month of rec sales, which was 2x the level of med sales in Jun (\$42.7Mn). Given border states like PA and VA (and DC) do not have official rec sales, given the small area of the state (12.4k sq miles, which makes it easier for out of state traffic), and based on the large number of dispensaries ready to sell rec at the outset (102 at last count), we would have expected a bigger jump. But this is still a good a start in the context of other states. Also, MD had a well-developed medical market (164K certified patients, or 2.7% of the population) as it began rec sales. Let's see what the next six months bring. Below we review the start of other rec states, in chronological order,

- **Missouri (rec since 3 Feb 2023): 3x, post 6mo.** Rec sales began on Feb 3, 2023. At their peak, med sales reached \$40.3Mn in Dec last year. Total sales (rec+med) in July reached \$123.2Mn (rec \$98.7Mn; med \$24.5Mn). So, roughly, six months after launch, total sales are 3x what they were pre rec. Rec per capita spend (pop is 6.2mn), annualized, is now a pretty robust \$192 (vs. \$133 for AZ rec); yes, this probably reflects inbound traffic from non-rec neighboring states (even from IL, where prices and taxes are higher), but this is not a small state, area wise, like MD (MO 70k sq miles).
- **Connecticut (10 Jan 2023): 2x, post 6mo.** Rec sales began on January 10, 2023. However, growth has been slow due to the small number of stores selling rec. At their peak, med sales reached \$13Mn in late 2022, but this was a not well-developed medical market (it only had ~50K registered patients in 4Q22, or 1.4% of the population). In July, total sales reached \$23.6Mn (\$13Mn rec; \$10.6Mn med). True, that is almost 2x pre-rec med sales (1.8x to be exact), but we would have expected a much larger jump given the low penetration of med. The main reason is rec access. Only seven stores were allowed to sell rec on the start date (of 18 total stores selling med in the state), and of the 18 med stores, so far only 12 can sell rec. The state has issued another 35 retail licenses, but these have yet to open. Rec per capita of \$43 is paltry vs. other states.
- **Rhode Island (1 Dec 2022): >2x, post 6mo.** Data is not provided on a regular basis, but the regulator disclosed sales of \$8.7Mn for the 30 days ending March 23 (\$5.4Mn rec, \$3.3Mn med). Still, rec of \$60 per capita is already higher than CT, and there are only four stores selling rec in RI (state area is 1.2k sq miles).
- **New Jersey (21 Apr 2022): 2x, post 6mo.** Rec sales began on April 21, 2022. The state only reports sales on a quarterly basis, and data is out only through 1Q23. Like, CT, this was not a well-developed medical market, and NJ has also lacked in rec stores (although it has



more than CT). That said, NJ has had the best growth ramp among the states reviewed in this report (at least initially). In 1Q23, total sales reached \$179.3Mn, which was more than 3x the \$59Mn in medical sales reported for 4Q21. At its peak, the medical program had 129K patients, or 1.5% penetration. At present, there are 23 stores offering rec services (and another 10 med stores yet to offer rec), but more should be on the way. The state has approved 46 retail store conversions (not all med stores have opened, and to convert to rec there is a 1-year phase in period for the latest licensees) plus 723 new rec store licenses. The latter seems a large number, but funding and township approval (>65% of towns remain closed to rec), will delay openings. That said, as we have seen in states like MI and MA, a ramp in store openings down the road should accelerate market growth.

- **New Mexico (1 Apr 2022): 2x, post 6mo.** Rec sales began on April 1, 2022. At their peak, med sales reached \$20Mn in late 2021. Six months after the start of rec, total sales (rec+med) were at \$40Mn by Oct'22. Like AZ, the lift was two-fold (below MO and other states). But unlike AZ, sales in NM have continued to grow. In July 2023 total sales were \$47.8Mn (rec \$34.1Mn; med \$13.7Mn) vs. \$40.3Mn in July 2022 (+19% yoy). With a population of 2.12mn, this means annualized rec spend of \$193 (in line with MO). We believe the large number of stores has spurred growth in NM; there are 102 stores open now, and the regulator has issued a total of 1,040 retail licenses.
- **Arizona (20 Jan 2021): 2x, post 6mo.** Rec sales began on Jan 20, 2021. At their peak, med sales reached \$65Mn per month in late 2020. Six months after the start of rec, total sales (rec+med) were in the \$126Mn range (almost 2x). Even adjusting for seasonality (winter birds, summer getaways), the 2x burst, in hindsight was disappointing. In part, this is understandable as AZ was quite a developed medical market with close to 4% of the population in the program (and monthly spend of \$220, as per our estimates). Also, taxes are lower on med, so patients save over 15% vs. rec. All this said, the market has stalled since then (partly on hefty deflation, of 35% at retail over the last two years, based on Headset data). The state government total taxable sales data for May'23 pointed to \$107Mn vs. \$117Mn in May'22 and \$123Mn in May'21. A slow ramp in stores may explain growth stalling (with 156 stores, the state is less dense than most rec states: 1 store for every 47,000 people).

“Older” Rec Markets: MA, MI, IL

These three markets began sales 4-5 years ago, and while the 2-3x jump rule (6mo post rec) applies to most of the recent states that went rec, the experience with MA, MI, and IL, five years later, is somewhat different. Both MI and IL continue to break monthly sales records, mostly driven by the increased number of stores, and generally greater assortment (brand, formats, variety). Also, as in other markets, lower deflation has helped bring in consumers from the illicit market (see our [2Q23 US MJ Trends](#) report). Growth in IL, on the other hand, has been slower due to a slow ramp in new stores, and more recently by the start of rec sales in MO.



- Massachusetts** (rec stores began to open in Nov 2018, but at a very slow pace initially): July sales reached \$154.7Mn (rec \$136Mn), or \$268 per capita (almost at current CO levels). The “growth spurt” post rec in the case of MA is distorted (10x). MA was different from other states as its med market was not well-developed, so pre rec med sales were only \$14Mn, and these peaked at \$28Mn in 1Q21 during COVID. Is there room for growth? Yes, per capita spend of \$233 is below MI at \$332. Store density is among the highest in the country (one store for every 17,500 people), but not as dense as MI (1 for 12,500), CO (5,500), or OR (5,100).
- Michigan** (rec started 1 Dec 2019): The state reported sales of \$276.7Mn for the month of July (98% rec and only 2% med), equivalent to \$332 per capita, highest in the US. But even though MI continues to break records, we note the market in July was “only” 3x med sales of \$92Mn reported in Sep 2019. With high per capita and high store density, we wonder how much more this market can grow. MI has now over 800 stores (1 store for every 12,500 people compared with IL where this one store for every 95,000 people). *Note: MI population is now 10mn; area is 97k sq miles.*
- Illinois** (rec started Jan 1, 2020): It reported July sales of \$167Mn (\$140Mn rec, \$27Mn med). Med sales peaked in Dec’19 at \$27.4Mn, so the market is now 6x pre-rec levels. As in other cases, this is aided by the low penetration of the med program before rec (57K patients, or 0.5% of the population, were served by dispensaries in Dec’19). But while IL has seen faster growth from pre-rec times vs. MI (6x vs. 3x), it has lower per capita spend vs. MI (\$134 vs. \$332). *Note: IL population is now 12.5mn; area is 58k sq miles.*

All the above said, IL should have the best growth potential of these three states if it can accelerate the opening of new dispensaries.

How The Start of Rec Impacts Med

In most of the states reviewed here, med sales have fallen double digits since the start of rec sales, with IL being the exception (sales have held steady since the start of rec in Jan’20). For the most part, our read is that, typically, ahead of rec legalization, one third to half of med is what we would call “pseudo rec”. The actual impact will be a function of the strength of the rec market (access, assortment, prices), and of how developed the med market was before the start of rec sales. For example,

- MI med -down 80% from peak:** The med market peaked at \$29Mn in Oct 2019, when the program had 276K patients registered (the patient count had peaked in Mar 2019 at 284k), or 2.8% of the population. There was no data on active patient, but we assume half were active (\$105 spend per month would be low if took the 276K figure). Anyhow, now in MI med monthly sales only amount to \$6.1Mn (Jul’23); almost an 80% drop since the Oct peak. As mentioned before, med sales are now only 2% of total cannabis sales in the state.



- **AZ med -57%:** There were 295K qualified patients as of Dec'20 (one month before rec began), and in July this was down to 127K (down 57% over the course of 2.5 years). Med sales in July 2023 amounted to \$28Mn (based on taxable sales date reported by the state), down 57% from the \$65Mn peak of Dec 2020.
- **NJ med -40%:** Med sales in 1Q23 were \$34.5Mn vs. \$59Mn in 4Q21 (\$55.8Mn in 1Q22), more than a 40% drop in over a year. The number of registered patients now is 101K compared with 129K in May 2022.
- **MO med -39%:** Monthly med sales peaked in Dec'22 at \$40.3Mn (rec began on Feb 3, 2023) and were down to \$24.5Mn by Jul'23. The active patient count peaked at 205k in Nov'22, and it was down to ~152k as of Jul'23. So average monthly spend per patient has dropped from ~\$200 to \$160 now.
- **MA med -33%:** The med market peaked at \$28Mn in Mar 2021 (rec sales effectively began in Nov 2018, but the ramp was slow due to few stores offering rec). We do not have patient data for MA but note med sales in Jul'23 were \$18.7Mn. Although down 33% since the med peak, the drop in med sales is a lot less than in MI, and we think this is due to tax savings for med patients in MA.
- **NM med -10%:** there are 39K patients (1.9% penetration) with approved licenses. On sales of \$14Mn, this means \$360 monthly spend, well above average. The med market is down from a peak of \$18Mn, or down more than 10% over the last year.
- **IL med flat:** This the only state where med sales (\$27Mn in July 2023) have held up since the start of rec, although med penetration was low to begin with. IL is one of the few states that provides three metrics of patient counts (approved applications; active patients; patients served within the last month). Back in Dec'19 (the peak of the med program), there had been 98K applications accepted, and 57K of those were served by dispensaries in that month (so, average med spend in Dec'19 was a massive \$474). As per the official data, in July 2023, there 64K patients served ("active patients" were 139K, and 283K applications had been received since the start of the program).
- **CT med flat:** Med sales have held mostly held steady so far due to the low number of stores offering rec.

The Read from "Matured" Markets

In this survey we do not review CO, OR, WA, or CA, as rec sales began there more than five years ago (in 2014 in the case of CO). We consider these to be more matured markets. That said, matured markets clearly experienced a temporary "COVID bump".



In CO, total sales reached \$588Mn in 2Q21 (rec \$476Mn; med \$111Mn med), or up 9% yoy despite this being a matured market. But since then, macro factors, deflation, and “post COVID life”, have resulted in a 34% drop in sales: in 2Q23 sales amounted to \$389Mn (rec \$343Mn, med \$46Mn). Interestingly, rec per capita spend of \$232 in CO is now well below MI and MA levels.

CA is a similar case. Total taxable sales peaked in 2Q21 at \$1,565Mn, and were \$1,250Mn in 1Q23 (last quarter reported), down 20% from peak.

Yes, we realize price deflation both in CO and CA masks the fact that volumes are actually up in that period.

Caveat Emptor

Our attempts here to predict market size post rec legalization (the 2-3x rule seems like a fair assumption), notwithstanding, we remind investors we must also keep an eye on the politics. For example,

- In PA and NH, there is growing preference among the authorities, apparently, for a model of state-owned stores. In other words, rec sales would only be done through stores owned by the state, and licensed producers would have to sell to those stores (this is the case for liquor in PA).
- In NY, the regulator has opted for favoring independent producers and issued retail licenses so far only to those impacted by the war of drugs (or entities that helped those impacted). We realize there is still potential for the larger multi-state operators (MSOs) to supply rec stores (wholesale), but this has yet to be determined.
- In VA and FL, the Governors of each respective state have done their best to delay or not allow the start of rec sales (we realize this is all TBD). In VA, rec sales were supposed to begin by 1/1/24, but this was delayed. In FL, the Governor, through the state’s AG, is doing his best to persuade the state Supreme Court to not allow a rec ballot by Nov’24 (sure, all this despite surveys that show the majority of the voters in both states support rec).



Links to our recent publications

[Roadmap to Dec 2024](#) (July 18)

[2Q23 US MJ Trends](#) (July 21)

[Canadian LP Dynamics](#) (Jul 25)

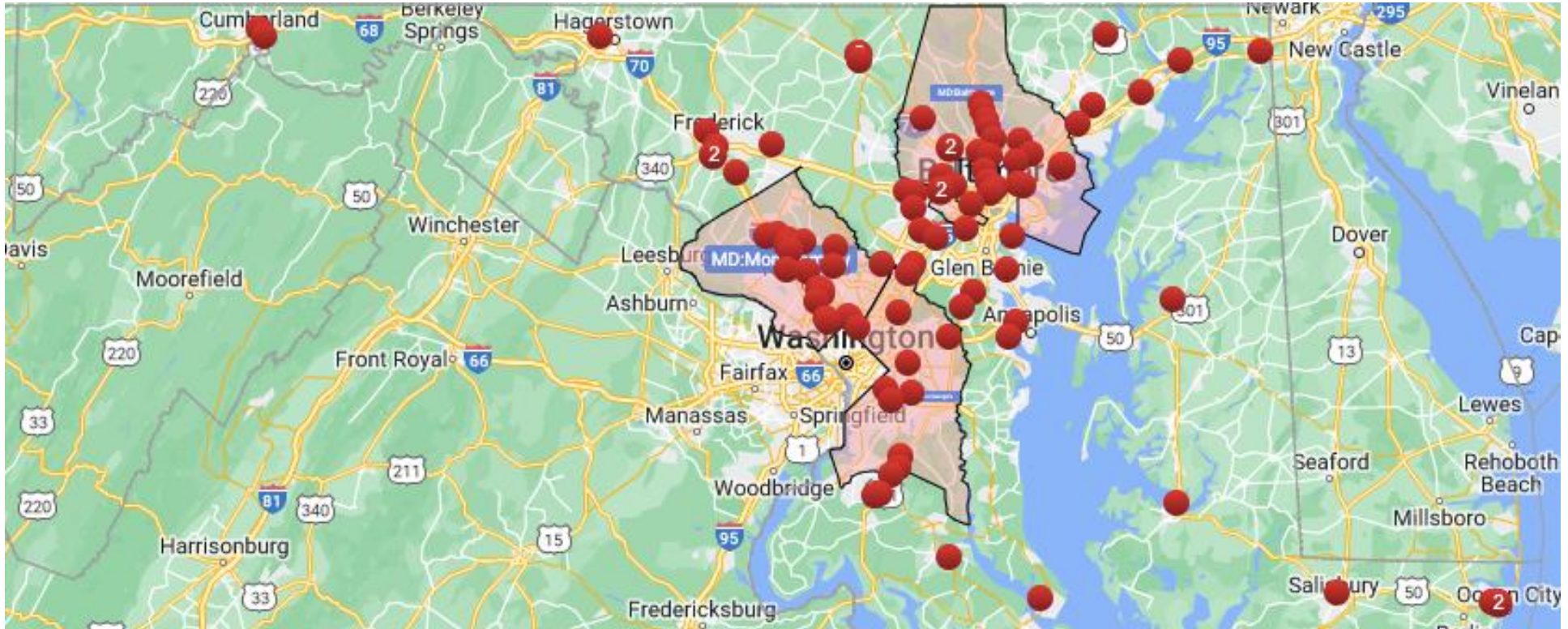
[On the Rescheduling Question](#) (July 28)

[Canada Pre-Rolls - Deep Dive](#) (Aug 7)



Appendix I: MD Stores

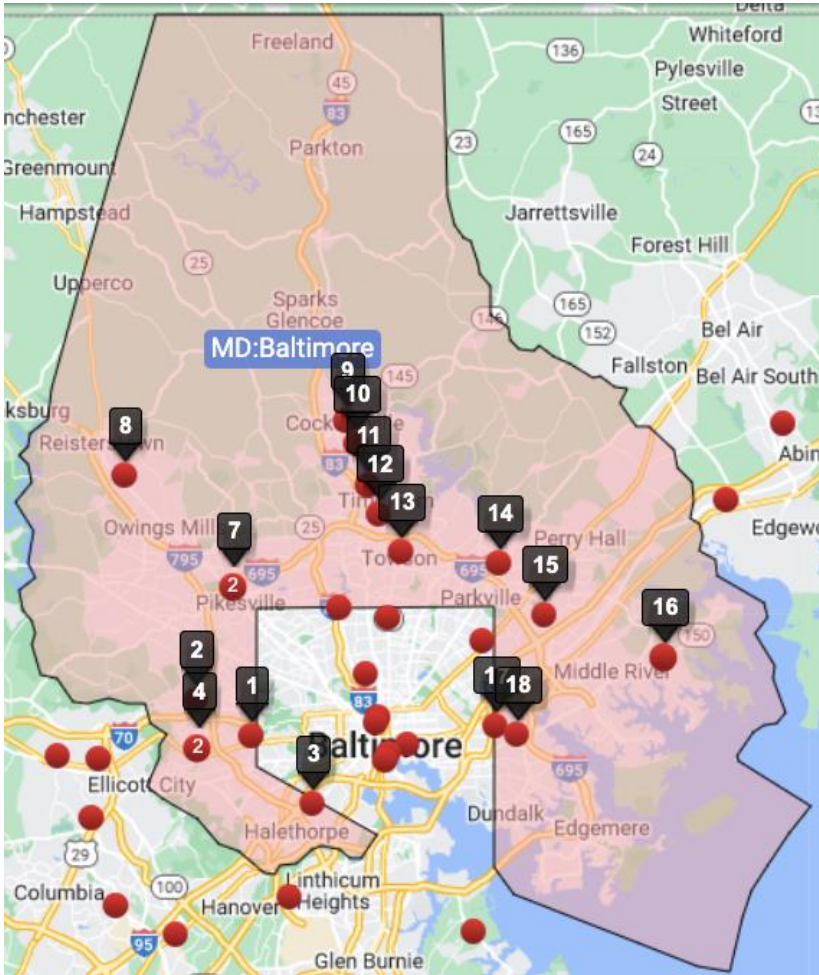
Exhibit 1: All MD Stores



Source: Official state data, potguide, weedmaps



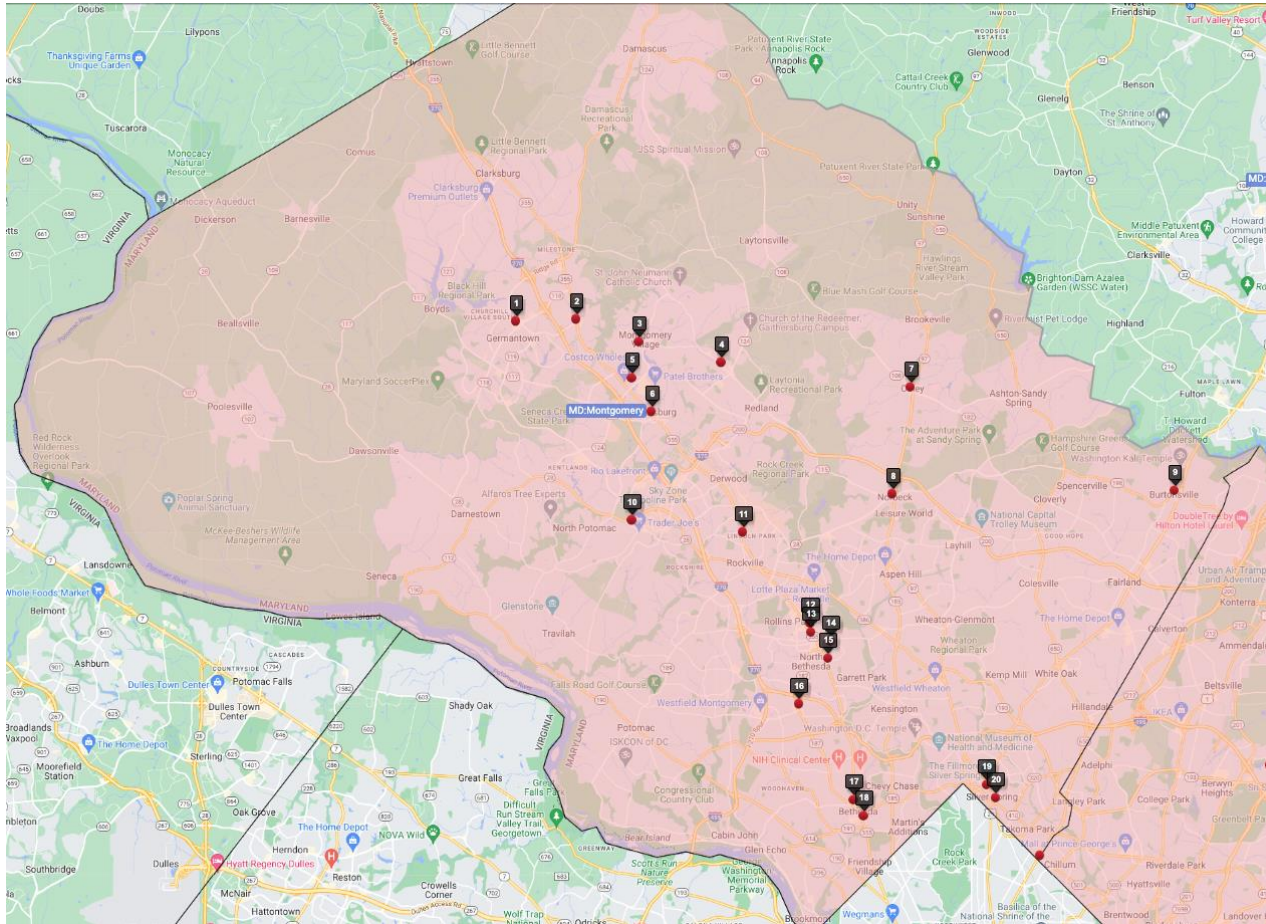
Exhibit 2: County: Baltimore



1. Nirvana Center
2. Remedy Baltimore
3. Americana Dispensary
4. Ethos Cannabis
5. Mission Catonsville
6. Temescal Wellness of MD LLC
7. The Living Room Comapny LLC
8. Curaleaf
9. Chesacanna
10. Kip
11. Curio Wellness
12. Your Farmacy
13. ZenLEAF
14. Blue Ridge
15. Health for Life White Marsh
16. Chesapeake Health Sciences, LLC
17. Health for Life Baltimore
18. Charm City Medicus, LLC

Source: Official state data, potguide, weedmaps

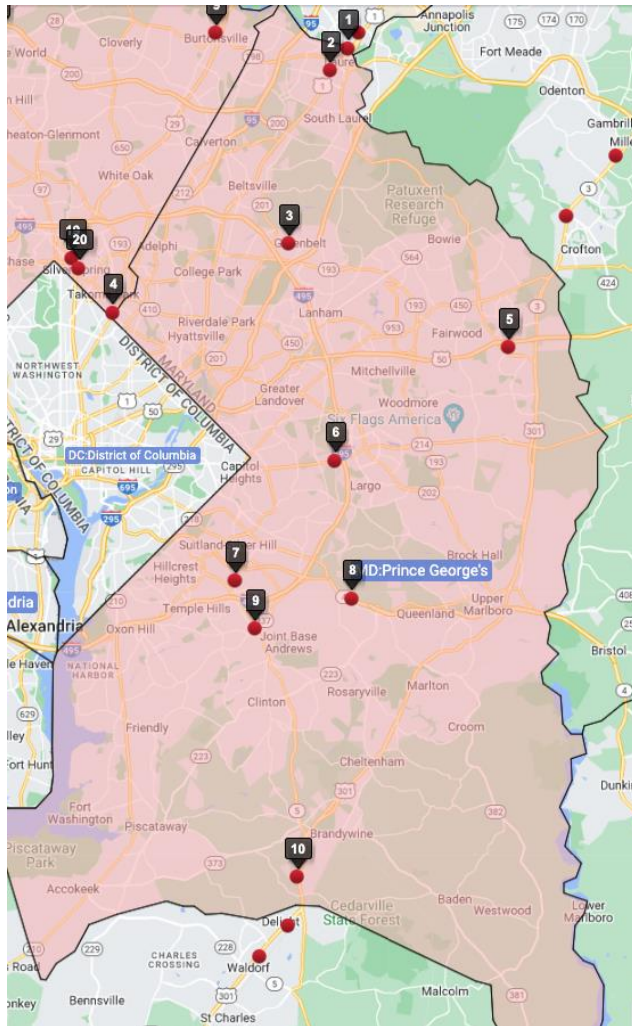
Exhibit 3: County: Montgomery



1. Zen Leaf Germantown
2. Bloom Medicinals
3. Curaleaf Gaithersburg
4. MI Health
5. Zenity
6. grassroots
7. sweetspot
8. Ethos cannabis
9. Herbiculture
10. Potomac Holistics
11. gLeaf
12. Peake Releaf
13. Harvest
14. Liberty
15. Verilife
16. Rise Bethesda
17. Health For Life Bethesda
18. Columbia Care
19. Hebafi
20. Rise Silver Spring

Source: Official state data, potguide, weedmaps

Exhibit 4: County: Prince George



1. Green Point Wellness
2. True Wellness Laurel
3. Waave Cannabis
4. Elevate
5. Salvera
6. Mary and Main
7. Altpharm
8. Medleaf
9. JOVA Wellness Center
10. Haven

Source: Official state data, potguide, weedmaps



Appendix II: Valuation Comps



Exhibit 5: Valuation Comps – Part I

Company name	Ticker	Listing	8/16/2023		(mn) Shares	Net (Debt)	Ent Value	EV/Sales 1yF	EV/EBITDA 1yF	US\$ Mn			
			Price	Mkt						1yF Estimates		EBITDA mgn %	Net debt EBITDA
			US\$	Cap						Sales	EBITDA		
US MSOs													
4Front Ventures Corp.	FFNTF	US OTC	0.09	55	643	-226	280	1.8x	7.5x	154	37	24%	-6.0x
Acreage Holdings, Inc. Class D	ACRDF	US OTC	0.23	8	34	-215	223	0.9x	5.7x	235	39	17%	-5.5x
Ascend Wellness Holdings LLC Class A	AAWH	US OTC	0.60	112	188	-489	601	1.1x	5.3x	539	113	21%	-4.3x
Ayr Wellness, Inc.	AYRWF	US OTC	0.88	53	60	-577	630	1.2x	4.7x	539	134	25%	-4.3x
C21 Investments Inc	CXXIF	US OTC	0.26	31	120	0	31	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Columbia Care, Inc.	CCHWF	US OTC	0.42	164	391	-519	683	1.2x	6.7x	553	102	18%	-5.1x
Cresco Labs, Inc.	CRLBF	US OTC	1.04	292	281	-549	841	1.0x	5.0x	827	168	20%	-3.3x
Curaleaf Holdings, Inc.	CURLF	US OTC	2.74	1,708	624	-988	2,696	1.9x	8.1x	1,405	333	24%	-3.0x
Glass House Brands Inc	GLASF	US OTC	3.91	218	56	-59	277	1.7x	9.6x	168	29	17%	-2.1x
Gold Flora Corporation	GRAMF	US OTC	0.12	13	108	30	-17	-0.2x	0.4x	76	-43	-57%	-0.7x
Goodness Growth Holdings, Inc.	GDNSF	US OTC	0.13	11	87	-124	136	1.4x	7.8x	94	17	18%	-7.2x
Green Thumb Industries Inc.	GTBIF	US OTC	6.68	1,384	207	-358	1,742	1.6x	5.4x	1,071	325	30%	-1.1x
Grown Rogue International Inc.	GRUSF	US OTC	0.18	31	171	-3	34	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Jushi Holdings Inc Class B	JUSHF	US OTC	0.39	77	197	-295	372	1.3x	6.4x	296	58	20%	-5.1x
Lowell Farms Inc	LOWLF	US OTC	0.03	4	122	-55	58	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
MariMed Inc	MRMD	US OTC	0.27	93	341	-26	119	0.7x	2.8x	166	42	25%	-0.6x
Planet 13 Holdings, Inc.	PLNHF	US OTC	0.54	119	220	25	94	0.7x	6.6x	128	14	11%	1.8x
Red White & Bloom Brands, Inc.	RWBYF	US OTC	0.01	5	470	-142	146	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Schwazze	SHWZ	US OTC	0.74	41	55	-114	155	0.7x	2.2x	208	70	34%	-1.6x
StateHouse Holdings Inc	STHZF	US OTC	0.03	8	252	-140	148	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
TerrAscend Corp.	TSNDF	US OTC	1.68	436	260	-216	653	1.9x	8.7x	343	75	22%	-2.9x
The Greenrose Holding Company Inc	GNRS	US OTC	0.00	0	16	-98	98	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
TILT Holdings, Inc.	TLLTF	US OTC	0.03	10	390	-102	112	0.6x	13.9x	180	8	4%	-12.7x
Trulieve Cannabis Corp.	TCNNF	US OTC	3.82	610	160	-269	879	0.8x	2.8x	1,128	314	28%	-0.9x
Verano Holdings Corp. Class A	VRNOF	US OTC	2.78	908	327	-414	1,322	1.3x	4.1x	1,005	320	32%	-1.3x
Vext Science, Inc.	VEXTF	US OTC	0.17	14	82	-30	44	0.8x	2.1x	57	21	36%	-1.4x

Source: FactSet, company reports



Exhibit 6: Valuation Comps – Part II

Company name	Ticker	Listing	8/16/2023		(mn) Shares	Net (Debt)	Ent Value	EV/Sales 1yF	EV/EBITDA 1yF	US\$ Mn			
			Price	Mkt						1yF Estimates		EBITDA mgn %	Net debt EBITDA
			US\$	Cap						Sales	EBITDA		
Canada													
Aleafia Health, Inc.	ALEAF	US OTC	0.02	6	403	-34	40	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Aurora Cannabis Inc.	ACB	NASDAQ	0.52	181	345	54	126	0.6x	8.6x	205	15	7%	3.7x
Auxly Cannabis Group Inc.	CBWTF	US OTC	0.01	11	906	-132	143	1.4x	-54.5x	105	-3	-3%	50.2x
Avant Brands Inc	AVTBF	US OTC	0.15	31	206	3	28	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
BZAM Ltd	BZAMF	US OTC	0.11	18	157	0	18	0.2x	11.3x	113	2	1%	0.0x
Canopy Growth Corporation	CGC	NASDAQ	0.39	199	517	-459	659	2.1x	-5.8x	321	-113	-35%	4.1x
Cronos Group Inc	CRON	NASDAQ	1.68	639	381	874	-234	-2.4x	6.0x	97	-39	-40%	-22.4x
Decibel Cannabis Company Inc	DBCCF	US OTC	0.10	41	405	-34	74	0.6x	2.2x	126	34	27%	-1.0x
Entourage Health Corp	ETRGF	US OTC	0.01	4	307	-91	95	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Tide, Inc.	HITI	NASDAQ	1.23	87	71	-33	120	0.2x	3.6x	525	33	6%	-1.0x
Nova Cannabis Inc	NVACF	US OTC	0.42	24	57	-40	64	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
OrganiGram Holdings Inc	OGI	NASDAQ	1.32	104	78	73	31	0.2x	3.4x	124	9	7%	8.0x
Rubicon Organics, Inc.	ROMJF	US OTC	0.39	22	56	-1	23	0.5x	2.4x	50	10	19%	-0.1x
SNDL Inc.	SNDL	NASDAQ	1.58	372	235	116	255	0.4x	12.1x	718	21	3%	5.5x
Tilray Brands, Inc.	TLRY	NASDAQ	2.52	1,655	657	-142	1,796	2.4x	23.3x	756	77	10%	-1.8x
Village Farms International, Inc.	VFF	NASDAQ	0.93	102	110	-49	151	0.5x	19.3x	288	8	3%	-6.3x

Source: FactSet, company reports

Exhibit 7: Valuation Comps – Part III

Company name	Ticker	Listing	8/16/2023							US\$ Mn			
			Price	Mkt	(mn)	Net	Ent	EV/Sales	EV/EBITDA	1yF Estimates		EBITDA	Net debt
			US\$	Cap	Shares	(Debt)	Value	1yF	1yF	Sales	EBITDA	mgn %	EBITDA
Service Providers													
AFC Gamma, Inc.	AFCG	NASDAQ	12.83	261	20	-17	278	4.0x	#N/A	70	#N/A	#N/A	#N/A
Agrify Corp.	AGFY	NASDAQ	2.64	0	0	54	-53	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Chicago Atlantic Real Estate Finance, Inc	REFI	NASDAQ	14.89	265	18	-52	317	5.1x	#N/A	62	#N/A	#N/A	#N/A
GrowGeneration Corp.	GRWG	NASDAQ	2.86	174	61	23	151	0.7x	-40.8x	227	-4	-2%	-6.2x
Hydrofarm Holdings Group, Inc.	HYFM	NASDAQ	1.02	46	45	-165	211	0.9x	26.8x	239	8	3%	-21.0x
Innovative Industrial Properties Inc	IIPR	NYSE	80.36	2,248	28	-14	2,262	7.5x	9.2x	304	245	81%	-0.1x
Leafly Holdings, Inc.	LFLY	NASDAQ	0.32	14	43	-4	18	0.4x	-3.5x	46	-5	-11%	0.7x
NewLake Capital Partners, Inc.	NLCP	US OTC	12.60	270	21	42	228	4.8x	#N/A	48	#N/A	#N/A	#N/A
Power REIT	PW	NYSE American	1.30	4	3	-34	39	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
RiverNorth Opportunities Fund, Inc.	RIV	NYSE	11.21	207	18	18	189	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
SHF Holdings Inc Class A	SHFS	NASDAQ	0.50	12	24	7	4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Scotts Miracle-Gro Company Class A	SMG	NYSE	50.77	2,818	56	-3,183	6,001	1.7x	11.9x	3,570	506	14%	-6.3x
Silver Spike Investment Corp.	SSIC	NASDAQ	9.50	59	6	85	-26	-1.8x	#N/A	15	#N/A	#N/A	#N/A
SpringBig Holdings, Inc.	SBIG	NASDAQ	0.24	6	27	-6	12	0.3x	10.7x	34	1	3%	-5.0x
urban-gro Inc	UGRO	NASDAQ	1.12	12	11	6	7	0.1x	-3.9x	108	-2	-2%	-3.3x
WM Technology, Inc. Class A	MAPS	NASDAQ	1.13	104	92	-11	115	0.6x	4.3x	201	27	13%	-0.4x
CBD, CPG, Pharma, International													
Cardiol Therapeutics Inc. Class A	CRDL	NASDAQ	0.94	60	64	44	17	#DIV/0!	-0.9x	0	-18	#DIV/0!	-2.4x
cbdMD, Inc.	YCBD	NYSE American	1.35	2	1	3	-1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Charlotte's Web Holdings, Inc.	CWBHF	US OTC	0.26	39	152	9	31	0.4x	-3.5x	79	-9	-11%	-1.0x
Clever Leaves Holdings, Inc.	CLVR	NASDAQ	0.23	10	44	9	1	0.0x	-0.2x	26	-7	-26%	-1.3x
CV Sciences, Inc.	CVSI	US OTC	0.04	6	152	-1	7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Greenlane Holdings, Inc. Class A	GNLN	NASDAQ	0.86	1	2	-8	9	0.1x	-3.2x	102	-3	-3%	2.7x
Hempfusion Wellness, Inc.	CBDHF	US OTC	0.00	0	100	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
IM Cannabis Corp	IMCC	NASDAQ	0.88	7	8	-7	13	0.3x	8.8x	45	2	3%	-4.4x
InterCure Ltd.	INCR	NASDAQ	1.53	70	46	-2	72	0.5x	2.8x	149	25	17%	-0.1x
Jazz Pharmaceuticals Public Limited Cor	JAZZ	NASDAQ	139.99	8,849	63	-4,936	13,785	3.5x	7.4x	3,968	1,872	47%	-2.6x
Little Green Pharma Ltd.	LGPPF	US OTC	#N/A	#N/A	298	0	#N/A	#N/A	#N/A	39	4	9%	0.0x
PharmaCielo Ltd.	PCLOF	US OTC	0.09	14	155	-9	23	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Turning Point Brands Inc	TPB	NYSE	25.09	439	17	-314	753	1.8x	8.1x	419	93	22%	-3.4x

Source: FactSet, company reports

Exhibit 8: Stock Performance

Stock Performance			
Ticker	Last 30d	Last 90d	Last 12mo
US MSOs			
FFNTF	-49%	-47%	-85%
ACRDF	25%	-57%	-79%
AAWH	-17%	-30%	-73%
AYRWF	-25%	-25%	-81%
CXXIF	-20%	1%	-15%
CCHWF	-5%	-8%	-76%
CRLBF	-44%	-31%	-70%
CURLF	-26%	1%	-54%
GLASF	21%	4%	89%
GNRS	-100%	-100%	-100%
GRAMF	-24%	-26%	-85%
GDNSF	-27%	-27%	-88%
GTBIF	-13%	-10%	-40%
GRUSF	-4%	44%	260%
JUSHF	-16%	-16%	-78%
LOWLF	-4%	-11%	-87%
MRMD	-33%	-38%	-59%
PLNHF	-7%	-12%	-72%
RWBYF	-52%	nm	-91%
SHWZ	-26%	-29%	-49%
STHZF	-13%	-22%	-93%
TSNDF	-3%	2%	-13%
TLLTF	-25%	-48%	-87%
TCNNF	-19%	-14%	-71%
VRNOF	-10%	-5%	-49%
VEXTF	-11%	-18%	-51%

Stock Performance			
Ticker	Last 30d	Last 90d	Last 12mo
Canada			
ALEAF	-25%	-59%	-74%
ACB	-2%	-14%	-72%
CBWTF	-11%	4%	-79%
AVTBF	26%	27%	-18%
BZAMF	-20%	-43%	-84%
CGC	0%	-63%	-90%
CRON	-12%	-4%	-51%
DBCCF	-2%	6%	36%
ETRGF	-13%	-16%	-70%
HITI	-4%	-6%	-17%
NVACF	6%	-21%	-44%
OGI	-15%	-30%	-73%
ROMJF	12%	-8%	-45%
SNDL	13%	-5%	-50%
TLRY	52%	5%	-41%
VFF	50%	32%	-69%
CBD, CPG, Pharma, International			
CBDHF	na	-90%	-100%
CRDL	16%	49%	-26%
CLVR	5%	-9%	-78%
CVSI	-21%	1%	33%
CWBHF	24%	-1%	-60%
GNLN	-14%	-74%	-98%
IMCC	-6%	10%	-87%

Stock Performance			
Ticker	Last 30d	Last 90d	Last 12mo
Service Providers			
AFCG	1%	19%	-31%
AGFY	-13%	-34%	-99%
CXXIF	-20%	1%	-15%
REFI	-2%	3%	-7%
GRWG	-19%	-26%	-52%
HYFM	5%	0%	-75%
IIPR	6%	14%	-22%
LFLY	-1%	-10%	-84%
NLCP	-13%	2%	-28%
PW	-25%	-40%	-92%
RIV	0%	1%	-25%
SMG	-24%	-26%	-39%
SSIC	13%	10%	4%
SBIG	-42%	-60%	-87%
UGRO	-26%	-35%	-82%
MAPS	13%	11%	-61%
CBD, CPG, Pharma, International			
INCR	-7%	-35%	-75%
JAZZ	10%	6%	-13%
LGPPF	na	na	na
PCLOF	-24%	-31%	-74%
TPB	4%	13%	-2%
YCBD	-5%	-30%	-94%

Source: FactSet



Appendix III: Bio and Disclaimers



Analyst Bio

Pablo Zuanic is a well-known and highly rated equity analyst following the cannabis and psychedelics sector. Over the past four years he launched coverage of over 35 companies (MSOs, LPs, CBD, ancillary, psychedelics), kept close track of sectoral trends, and followed the reform process in the US and elsewhere. His firm Zuanic & Associates publishes equity research on the cannabis and psychedelics sectors, both from a macro/sectoral level in a thematic manner, as well as specific reports on listed stocks. The research service is aimed at institutional investors and corporations. The firm is also available for short term consulting and research advisory projects (www.zuanicassociates.com). At various points in his career, Pablo was II ranked and called as expert witness in industry investigations. He has a deep global background having covered stocks over the past 20 years in the US, Europe, Latin America, and Asia, across consumer sub sectors. Prior employers include JP Morgan, Barings, and Cantor Fitzgerald. An MBA graduate of Harvard Business School, he started his career as a management consultant, which brings a strategic mindset to his approach to equity research. Pablo can be contacted at pablo.zuanic@zuanicgroup.com.



Disclosures and Disclaimers

About the firm: Zuanic & Associates is a domestic limited liability company (LLC) registered in the state of New Jersey. The company's registered address is Five Greentree Centre, 525 Route 73, N Suite 104, Marlton, New Jersey 08053, USA. Pablo Zuanic is the registered agent. The firm publishes equity research on selected stocks in the cannabis and psychedelics sector, as well as thematic macro industry notes. The firm also provides consulting and advisory services. Potential conflicts of interest are duly reflected in the respective specific company reports.

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