



AN INVESTORS PERSPECTIVE ON LEGAL CANNABIS: TOO BIG TO IGNORE

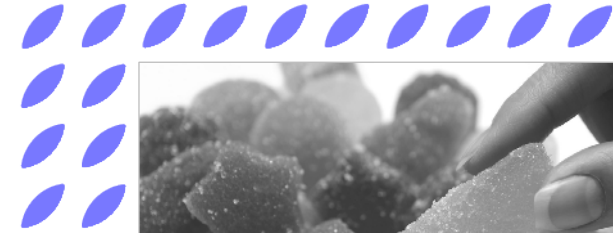
Roy Bingham | BDSA

Jefferies Cannabis Summit
June 2022

LEGAL CANNABIS IS...



Everyone



So.Many.Product.Forms.

Rapid Innovation



Mainstream



HOWEVER, IT IS ALSO...

Confusing



Different than “CPG”



Challenged



Financial Stress



BDSA PROVIDES A COMPLETE VIEW OF THE GLOBAL CANNABIS MARKET OF TODAY AND TOMORROW



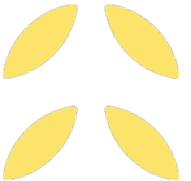
RETAIL SALES TRACKING

Know exactly what is selling where, when, and at what price point



MARKET FORECASTS

Gain a comprehensive understanding of market size and future opportunity



CONSUMER INSIGHTS

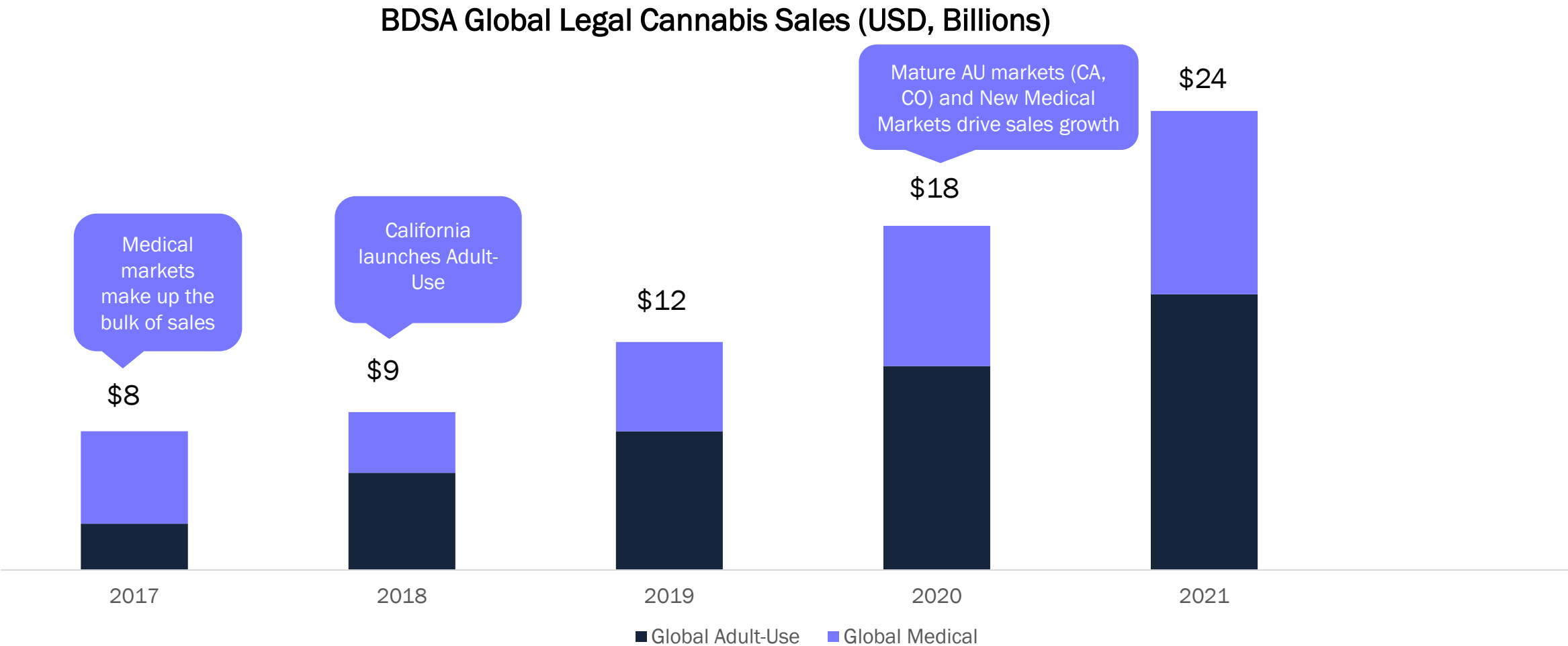
Understand consumer (and non-consumer) segments, sizing, behavior, consumption patterns, purchase habits, and more



HISTORICAL GROWTH OF LEGAL CANNABIS



PAST GROWTH WAS DRIVEN INITIALLY BY US MEDICAL, THEN ADULT-USE MARKETS



Source: BDSA Forecast, Historical Global sales, updated February 2022

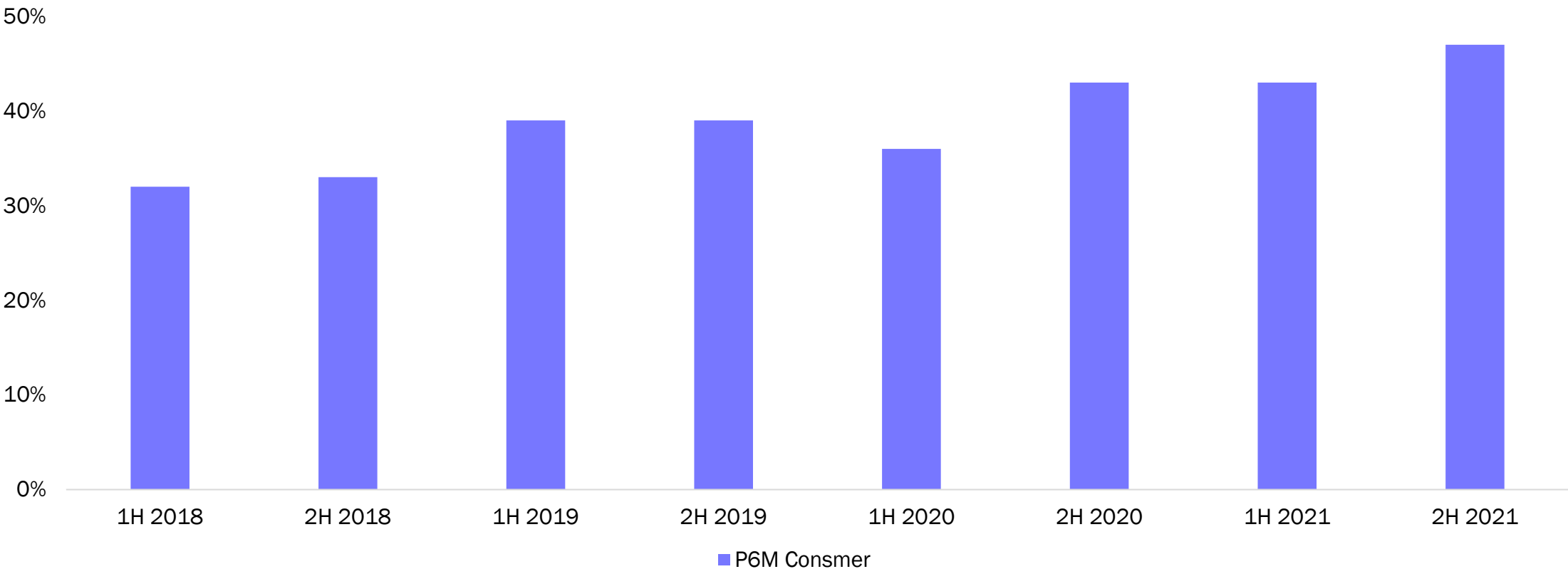
DESPITE SHARP DECLINES IN CANNABIS STOCKS, LEGAL MARKETS STILL HOLD HUGE POTENTIAL



Source: New Cannabis Ventures, Historical Global Cannabis Stock Index as of May 2022

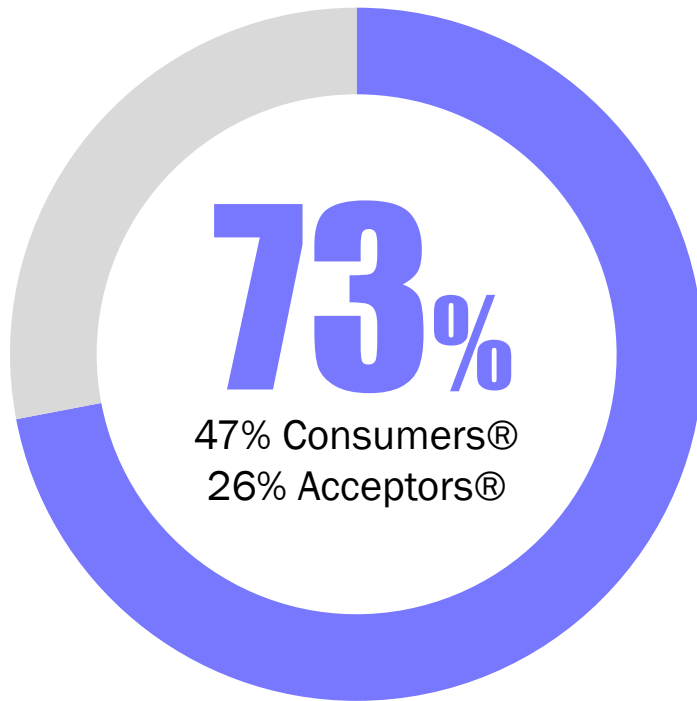
CONSUMER PENETRATION HAS RISEN ~15% SINCE 2018

BDSA Consumer Insights Consumer Growth Trends



Source: BDSA Consumer Research: 1H 2018- 2H 2021 U.S. Adults 21+ in Legal Level 1 States

IN FULLY LEGAL STATES, ~75% OF ADULTS ARE “BOUGHT IN” TO CONSUMING



66% in CANADA

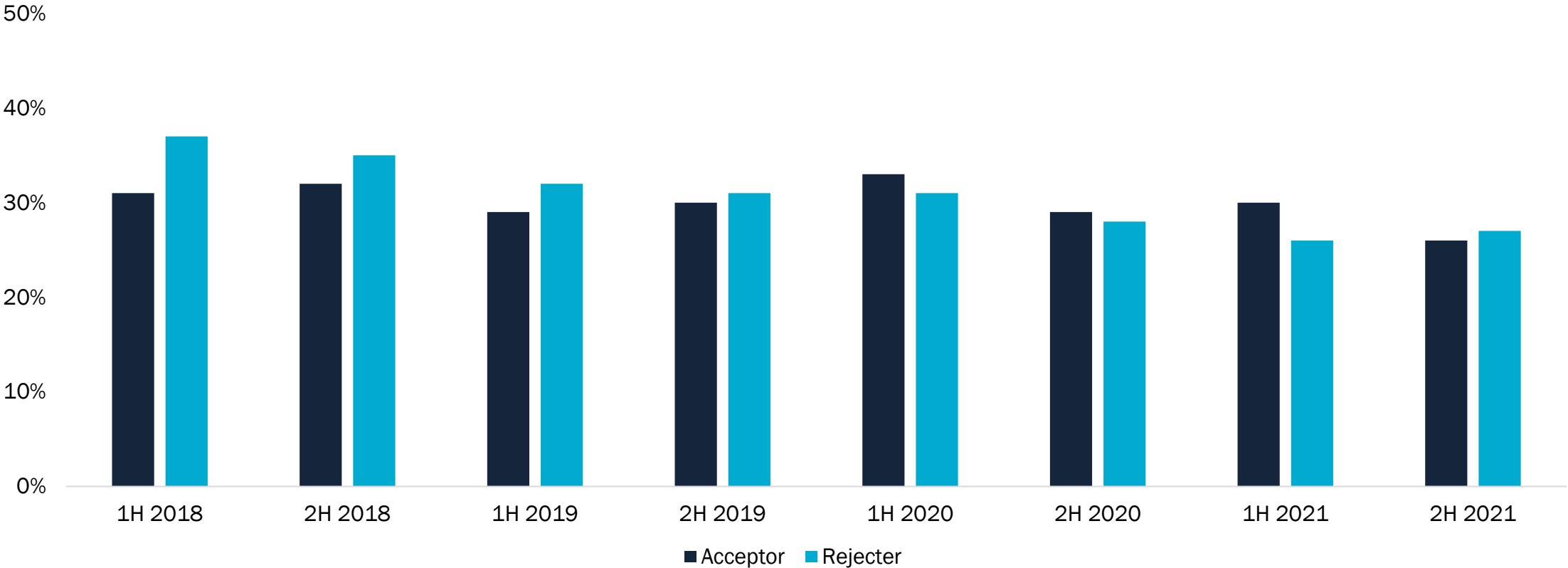
...of adults 21+ in fully legal U.S. states consumed cannabis in the past 6 months or are open to consuming cannabis

27% are Rejecters®
(would not consider in the future)

Source: BDSA Consumer Research: Fall 2021 U.S. Adults 21+ in Legal Level 1 States

SHARE OF REJECTERS HAS STEADILY FALLEN, DOWN ~10% SINCE 2018

BDSA Consumer Insights Consumer Trends



Source: BDSA Consumer Research: 1H 2018- 2H 2021 U.S. Adults 21+ in Legal Level 1 States

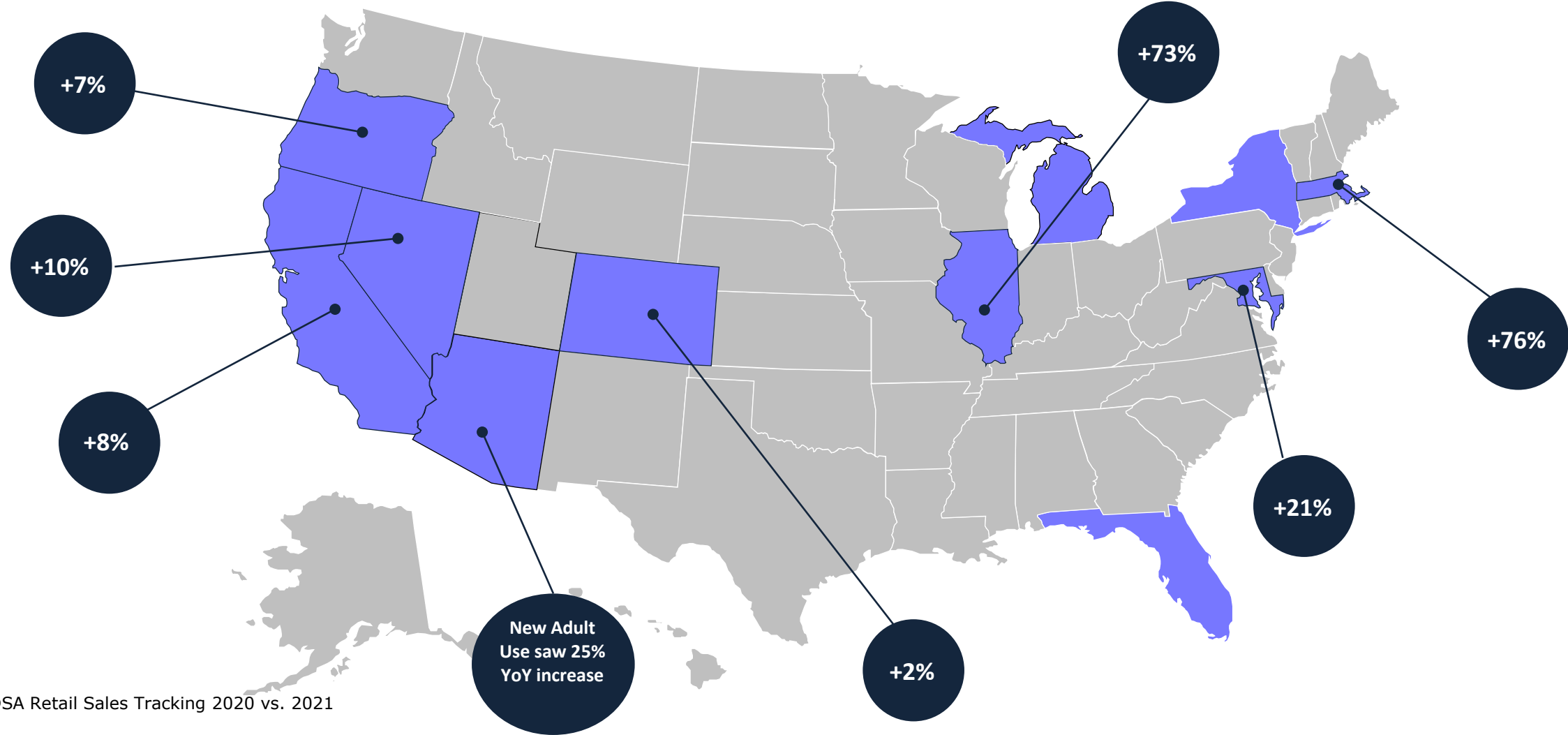


CURRENT STATE OF THE INDUSTRY



2021 SAW SUBSTANTIAL GROWTH

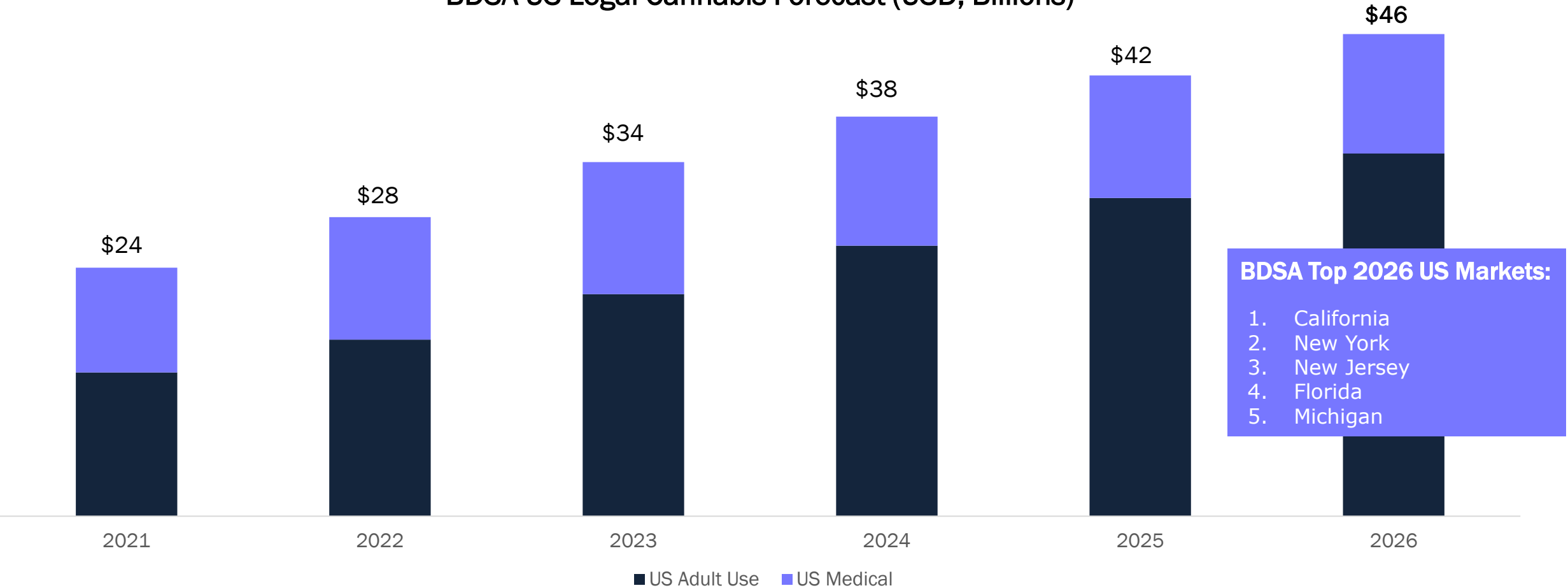
BDSA tracked markets



Source: BDSA Retail Sales Tracking 2020 vs. 2021

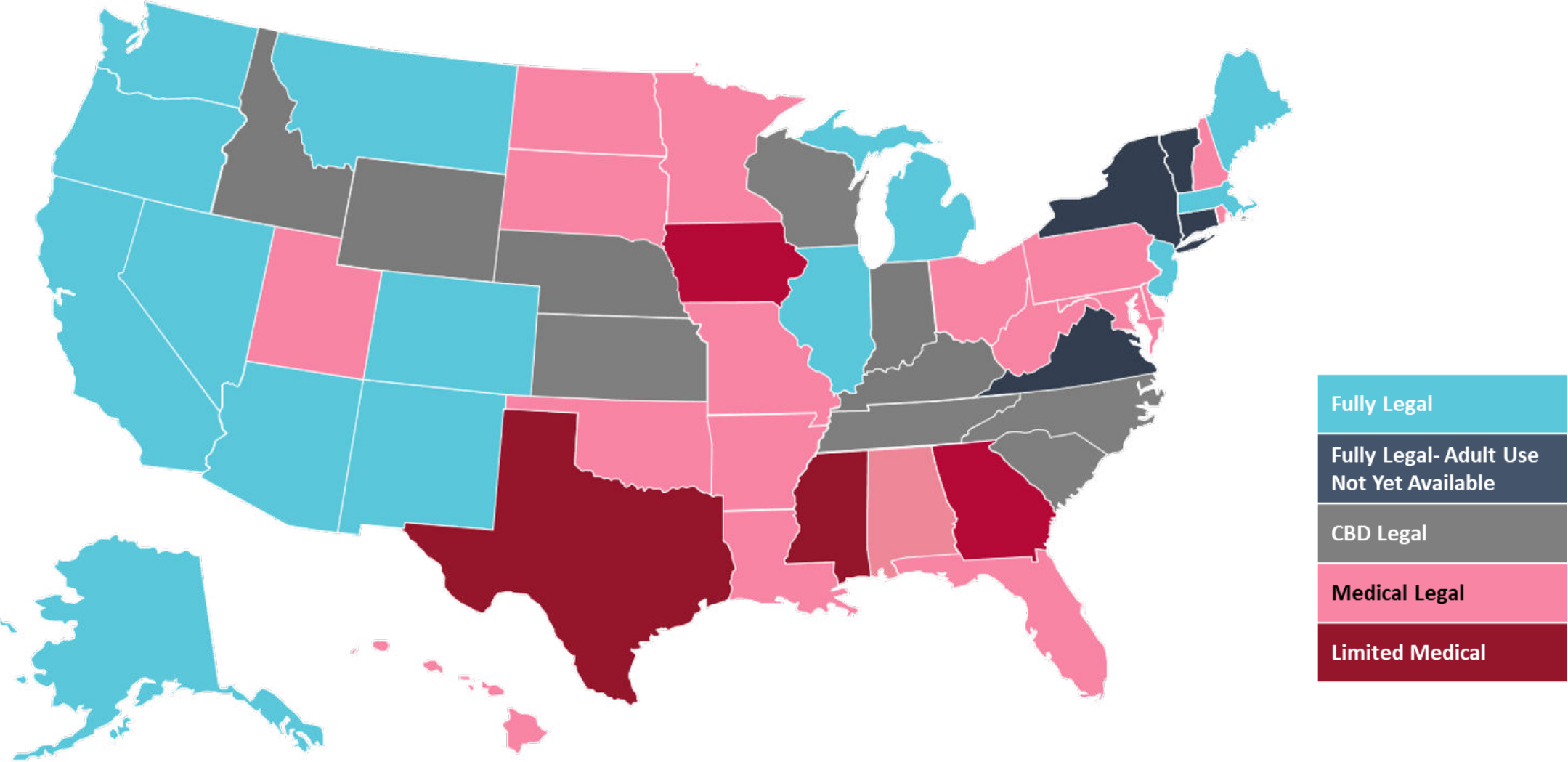
GLOBAL MARKET (\$61B) DRIVEN BY US; US DRIVEN BY ADULT-USE

BDSA US Legal Cannabis Forecast (USD, Billions)

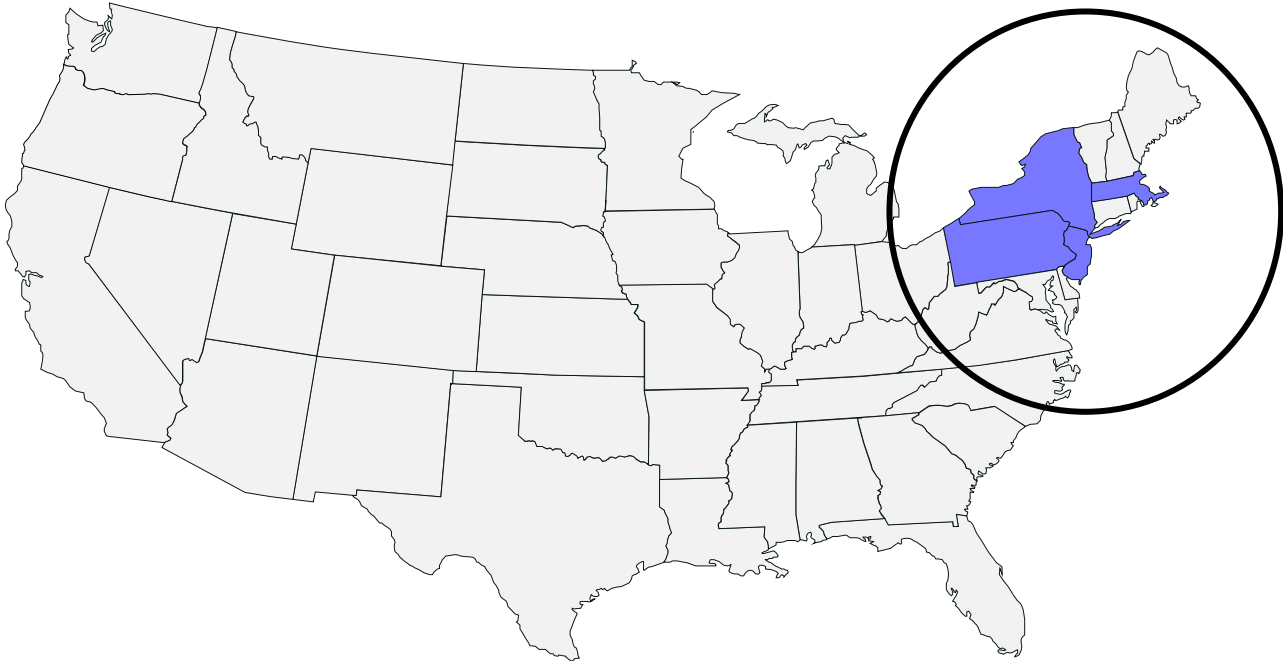


Source: BDSA Forecast, as of February 2022

REGULATIONS LOOSENING ACROSS THE US (SEGMENTS AS OF MAR 2022)



THE NORTHEAST IS SLATED TO PROVIDE HUGE REVENUE OPPORTUNITY



Four densely populated states in NE expected to be combined ~\$9B opportunity by 2026

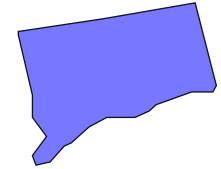
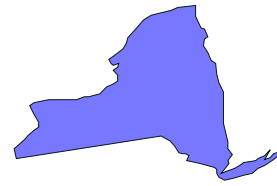
TOP BDSA MARKETS BY 2026

Market	Size	Spend / 21+ adult
California	\$6.55B	\$196
Florida	\$3.36B	\$189
New York	\$2.91B	\$192
Michigan	\$2.8B	\$380
Illinois	\$2.55B	\$270
Colorado	\$2.4B	\$485
Massachusetts	\$2.34B	\$430
New Jersey	\$2.25B	\$327
Pennsylvania	\$2.2B	\$222
Arizona	\$1.84B	\$311
Washington	\$1.8B	\$294
Ohio	\$1.37B	\$156
Oregon	\$1.36B	\$399

Source: BDSA Forecast, as of February 2022, US Census Bureau 21+ Adult Population 2020

TRI-STATE REGULATION & IMPLICATIONS

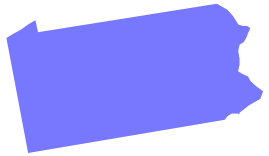
- License prioritization will likely lead to more fragmentation early on
- Delays in all market launches expected
- Markets will struggle with supply during ~6-12 months of roll-out
- Expect higher prices like IL and MA
- Most brands will perform well early on and delays on who are the dominant market leaders
- Markets will require indoor cultivation so higher prices than outdoor-viable markets
- Tighter regulations on cultivators due to indoor cultivation



	New York	New Jersey	Connecticut
Retail Opens	Early 2023	April 22	Before end of 2022
Home Cultivation	6 plants	None	7/1/23 - 6 plants / person; 12 plants / household
Weight Limits	3 oz flower, 24 grams concentrate	1 oz	up 6.5 oz cannabis or equivalent amount concentrates
Consumer Sales Tax	9% state, 4% local	7%	~20% (6.35% state, 3% municipal, ~10 - 15% of sale / THC content)
License Prioritization	Minority / women-owned businesses, applicants from communities disproportionately impacted by cannabis enforcement, distressed farmers, service-disabled Vets	Minority / women-owned businesses, businesses located in "economically distressed areas"	Reserve 50% of applications for eligible license types for "social equity applicants"
Cultivator License Caps	None - but individuals can't hold retail license or distribution license	37 (expires 02/23)	None - but applicants can only get approval for one license type

PENNSYLVANIA - MED TODAY, ADULT USE TOMORROW?

If as predicted the state goes adult-use it would bring legal cannabis access to another 10M US adults



+21
pop

9.74M

Q1 2022
Sales

\$290M

brands
w/ Sales

115

retailers
selling

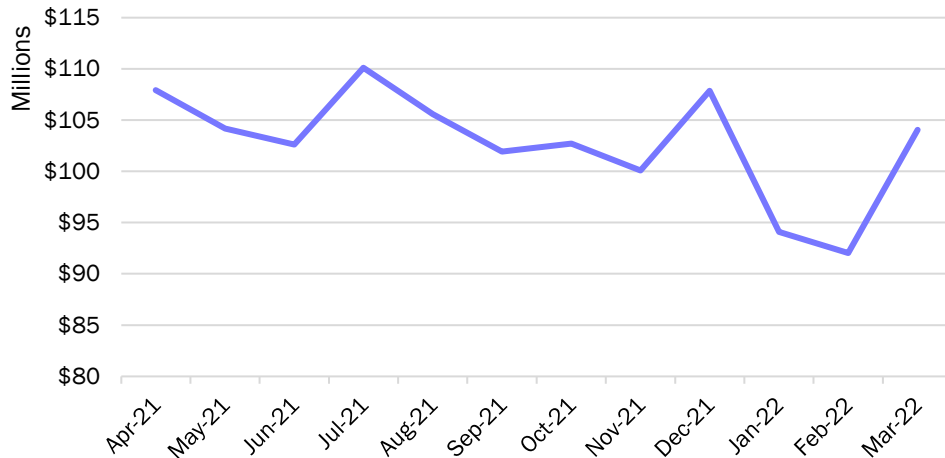
161

	2022	% CHG vs. 2021
Registered Patients	406,454	26.8%
	Per Month	Per Trip
Patient Spend	\$117	\$100

Purchase Influencers	
High THC Content	33%
Taste/Flavor	33%
Low Price	23%

Top reasons for consuming	
Relieve Pain	20%
Manage Anxiety	16%
Sleep Better	8%

Pennsylvania Medical Cannabis Monthly (\$) Sales,
April '21 - March '22



Format Trends	Past Three Months vs. Prior				
	Oct-Dec 2021		Jan-Mar 2022		\$, % Change
	\$M	\$ Share	\$M	\$ Share	
All Accessories	\$2.39	0.7%	\$2.28	0.8%	-5%
Pills	\$5.5	1.7%	\$5.66	2%	3%
Tinctures	\$6.77	2%	\$6	2%	11%
Dabbable Concentrates	\$43	14%	\$38.9	13%	-10%
Vape	\$109.2	35%	\$99.7	34%	-9%
Flower	\$142	46%	\$135.4	47%	-5%
Topicals	\$2.05	0.7%	\$1.78	0.6%	-13%



**HOW BIG OF AN OPPORTUNITY IS
LEGAL CANNABIS?**



IN THE US, 2021 GROWTH AND BDSA'S 2022 EXPECTATIONS COMING FROM MATURE, NEW, AND EMERGING MARKETS

MATURE cannabis markets were early movers in legal cannabis, had long established medical programs, and are still seeing strong growth

NEW Adult-Use and Medical markets that are more recent entries and have established industries and are developing at an ever-increasing rate

EMERGING cannabis markets have recently legalized, and are expected to yield huge contributions to BDSA's forecasted market growth out to 2026

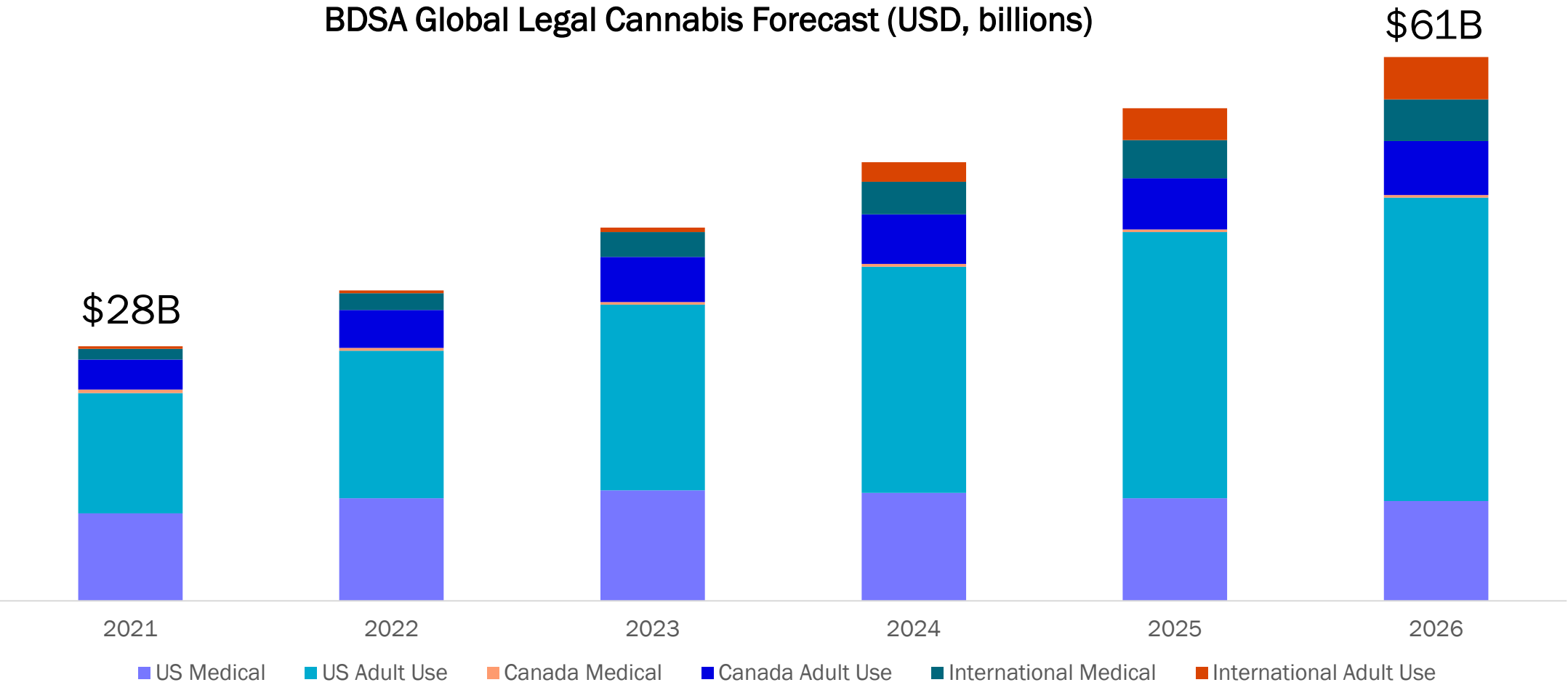
Colorado
California
Oregon
Washington

Illinois
Massachusetts
Michigan
Pennsylvania

New York
New Jersey
Connecticut
Ohio

NOT SURPRISINGLY, THE US REMAINS THE LARGEST GLOBAL LEGAL MARKET

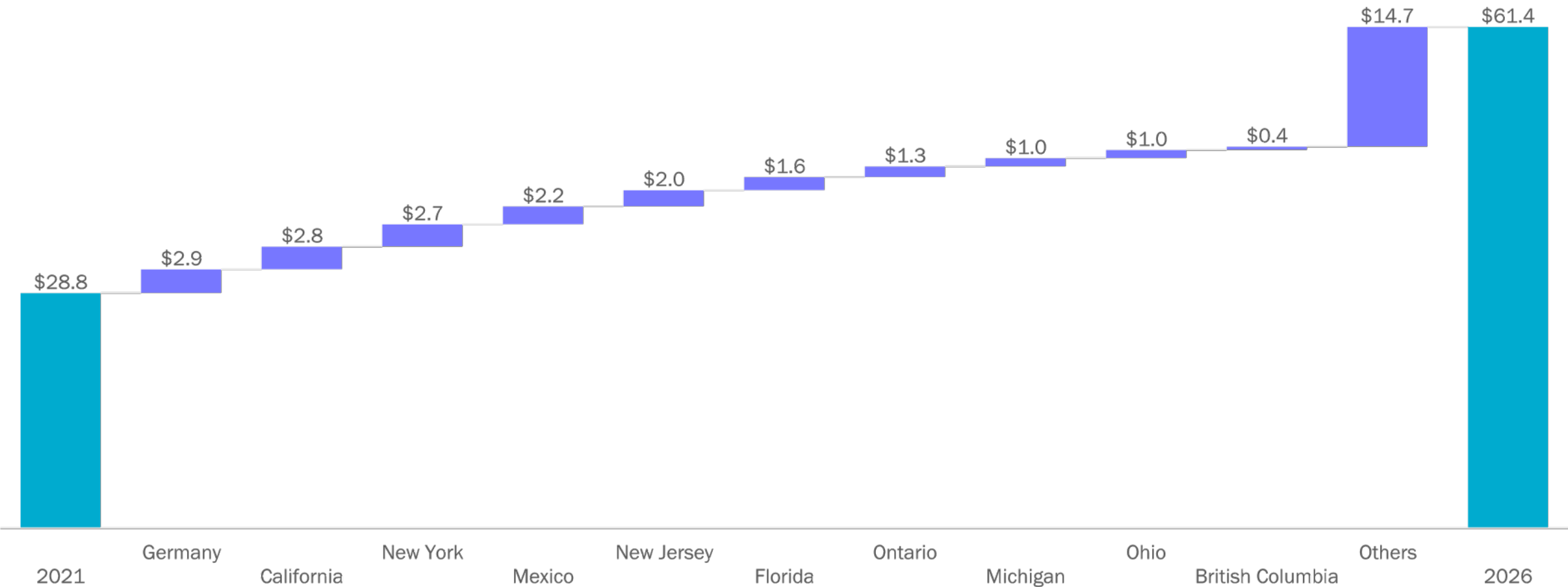
BDSA Global Legal Cannabis Forecast (USD, billions)



Source: BDSA Forecast, as of February 2022

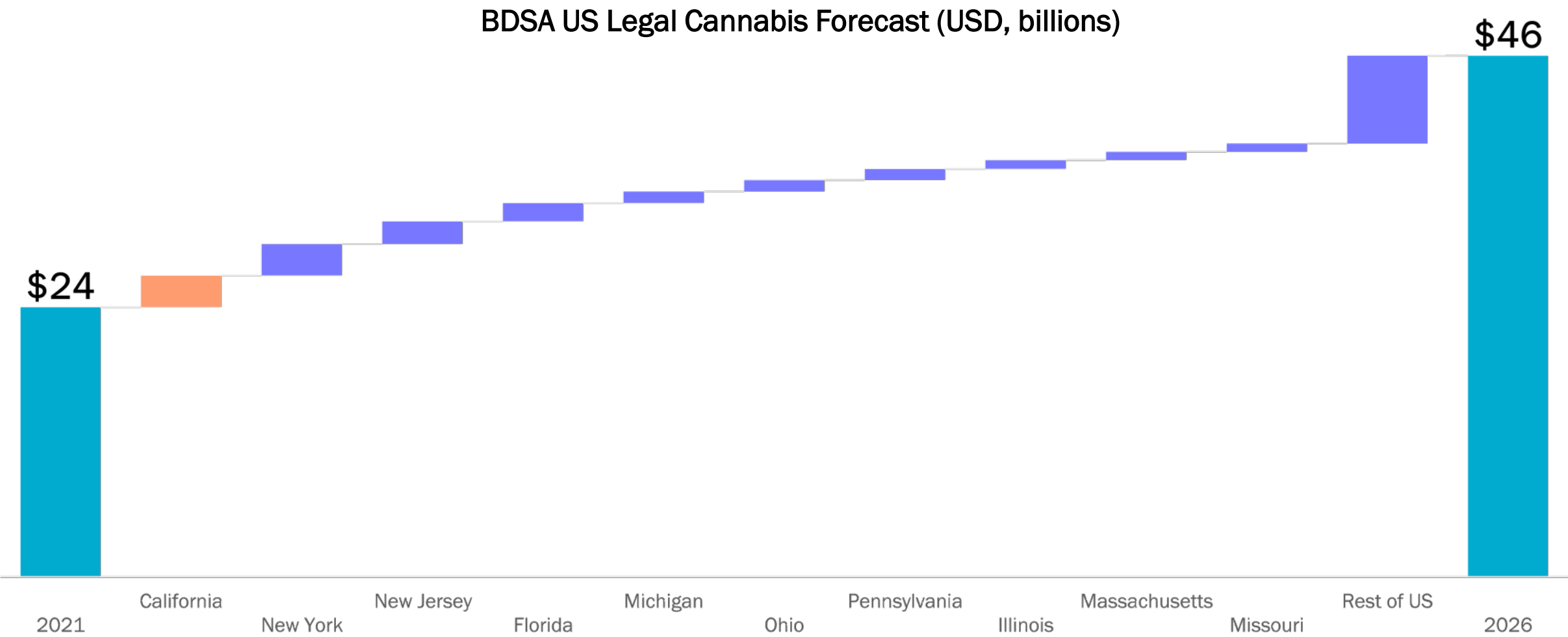
TOP TEN CONTRIBUTORS TO GLOBAL GROWTH

BDSA Legal Cannabis Forecast (USD, Billions)

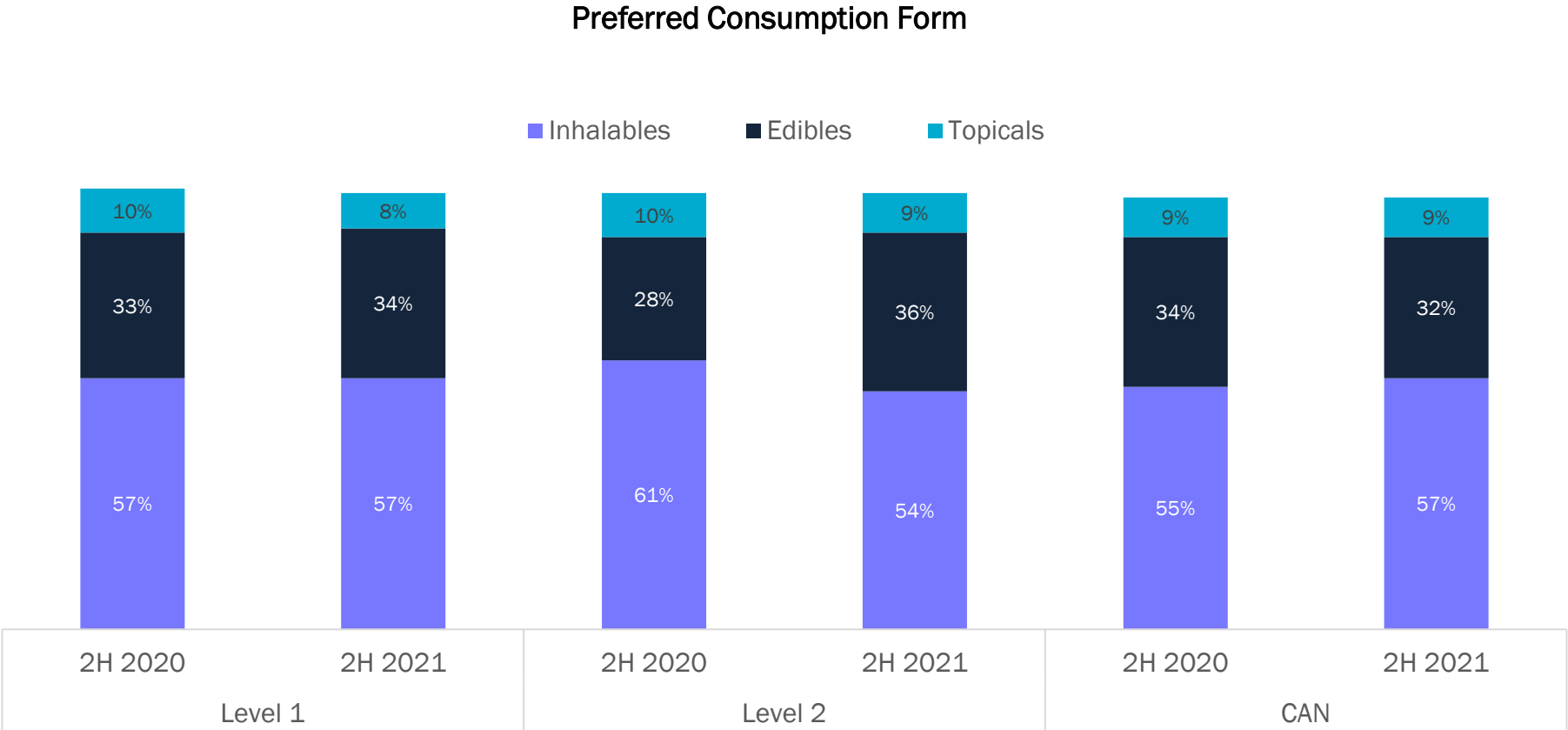


Source: BDSA

CALIFORNIA CONTINUES TO DRIVE THE US MARKET BUT.....



CONSUMER ADOPTION GREW IN 2021, AND CONSUMPTION IS ACROSS MORE FORMS AND MORE FREQUENTLY



Source: BDSA Trending Consumer Insights, 2H 2020 vs. 2H 2021

WHAT IF REGULATION WASN'T A FACTOR?

Top 15 States by Population
Total Population 21+



Source: BDSA Forecast, as of February 2022



KEYS TO CANNABIS INVESTMENT: CONSUMERS



CONSUMERS RELY ON CANNABIS FOR PHYSICAL AND EMOTIONAL BENEFITS



Global Pain
Relief Market:
US\$ 72.4B in
2021

Global Sleep
Aid Market:
US\$ 59.8M in
2020

Relieve Pain	14%
Sleep Better	10%
Relax/Be Mellow	9%
Manage Anxiety	9%
Manage Stress	6%
Get 'High' Or 'Stoned'	5%
Improve Quality of Life	4%
Have Fun	4%
Feel Peaceful	4%

Source: BDSA Consumer Research: 2H 2021 U.S. Adults 21+ in Legal Level 1 States; Precedence Research 2022 Pain Management Therapeutics Market Size Report; Allied Market Research 2022 Sleep Aids Report

CONSUMERS SEEK DIFFERENT BENEFITS BY FORM FACTOR



RELAX / BE MELLOW

#1 reported benefit
of consumption for
Inhalable consumers



RELIEVE PAIN

#1 reported benefit
of consumption for **Topical**
consumers



SLEEP BETTER

#1 reported benefit
of consumption for **Edible**
consumers

Source: BDSA Consumer Research: 2H 2021 U.S. Adults 21+ in Legal Level 1 States

THE LONG-TERM IMPACT IS INEVITABLE

Cannabis consumers are consuming less alcohol, while alcohol consumers are consuming more cannabis, both at the same time and separately

Q1 2021 Alcohol & Cannabis Consumption

Past 6 months in Legal Adult-Use States



Cannabis Consumers



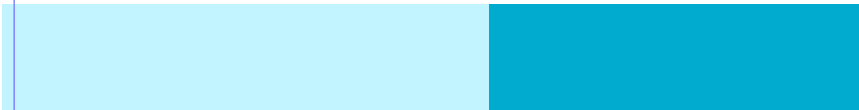
66%

Of Cannabis consumers **also** consumed Alcohol

Down from 67% in Q4 2020



Alcohol Consumers



56%

Of Alcohol consumers **also** consumed Cannabis

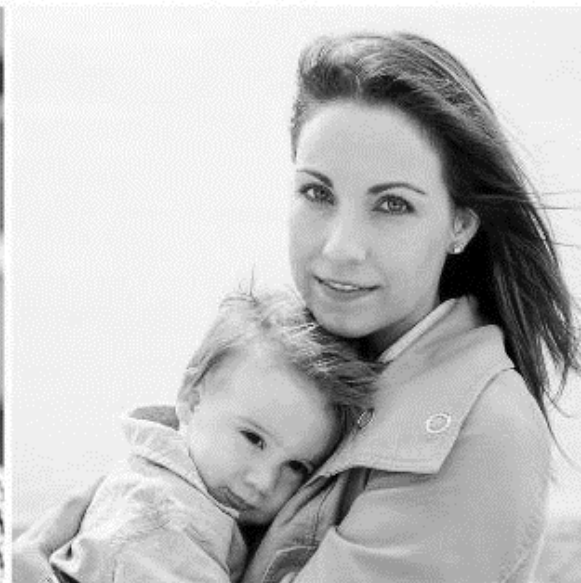
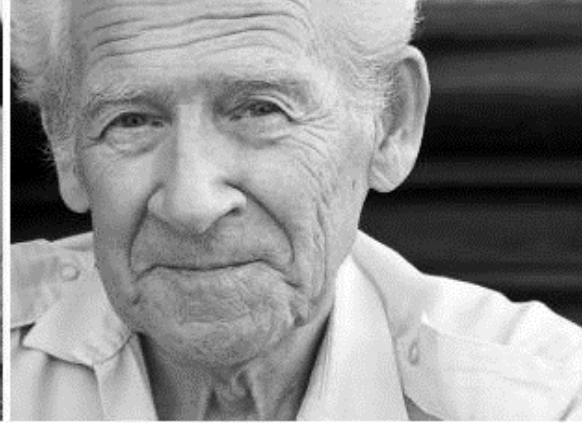
Up from 49% in Q4 2020

*Source: BDSA Consumer Research: Q4 2021 U.S. Adults 21+ in Legal Level 1 States

THERE IS NO ONE CANNABIS CONSUMER

Cannabis Consumers Span:

- Generations
- Gender
- Socio & Economic Backgrounds
- Motivations
- Need States
- Benefits
- Premium / Luxury / Economy





CANNABIS ROUTE TO MARKET



OVERSIMPLIFICATION OF COMPLEX LICENSING; DIFFERENT BY STATE



FORCED VERTICAL INTEGRATION: TRULIEVE IN FLORIDA



Trulieve®

Cultivation

Manufacturer

Distribution

Retail

MANUFACTURER + DISTRIBUTION: KIVA/KSS IN CALIFORNIA

KIVA™



Cultivation

Manufacturer

Distribution

Retail

DISTRIBUTOR ONLY: HERBL IN CALIFORNIA





TOP CANNABIS TRENDS FOR INVESTORS: CONSOLIDATION AND MULTI-STATE BRANDS



HOW BIG IS THE INFLUENCE OF MULTI-STATE OPERATORS IN CANNABIS?

WHAT THEY ARE

- MSOs are cannabis companies that span across multiple legal cannabis states. The ones you hear about are powerhouses in brands and retail

HOW THEY ARE CHANGING THE CANNABIS LANDSCAPE

- They are large organizations established to expand geographical footprint of brands, products, and retail
- 6 of the top 10 leading cannabis brands tracked by BDSA are owned by MSOs. They are dominating top brands in new markets such as Illinois and Massachusetts and are gaining share in mature markets such as California.
- More and more they are becoming the first entrants into up-and-coming states, either through expansion or M&A



VERTICAL/RETAILER DOMINANCE

Store brands (unbranded) OR brands associated with a vertically-integrated retailer or MSO have dominance – especially in less-mature markets

Flower Brand Distribution by Market: Full Year 2021

Total Flower Sales across AZ, CA, IL, MD, MA, NV, OR: \$4.5B

Market	Size of Market (Indexed to CA)	Total # of Brands	% Sales Branded	% Sales Unbranded (Store Brand, Not Wholesaled)	OF BRANDED: # of Top 5 that are MSO/Vertical Brands
AZ	41	61	51%	49%	3
CA	100	536	75%	25%	1
IL	46	36	94%	6%	5
MD	18	34	90%	10%	4
MA	46	56	59%	41%	5
NV	31	108	61%	39%	2
OR	36	408	52%	48%	1

Source: BDSA US Retail Sales Tracking

Younger markets show denser brand concentration given MSO and Vertical presence, while Western (and more mature) markets are more fragmented

BDSA TOP MSOS & BRANDS

Brands

Massachusetts*	Pennsylvania*	Missouri
Rythm	Cresco	Proper Cannabis
Cultivate	Rythm	Illicit Gardens
INSA	Grassroots Cannabis	Flora Farms
Sira Naturals	Moxie Seeds and Extracts	Sinse
Ozone Premium Cannabis	Double Bear	C4 Pharms

MSOs

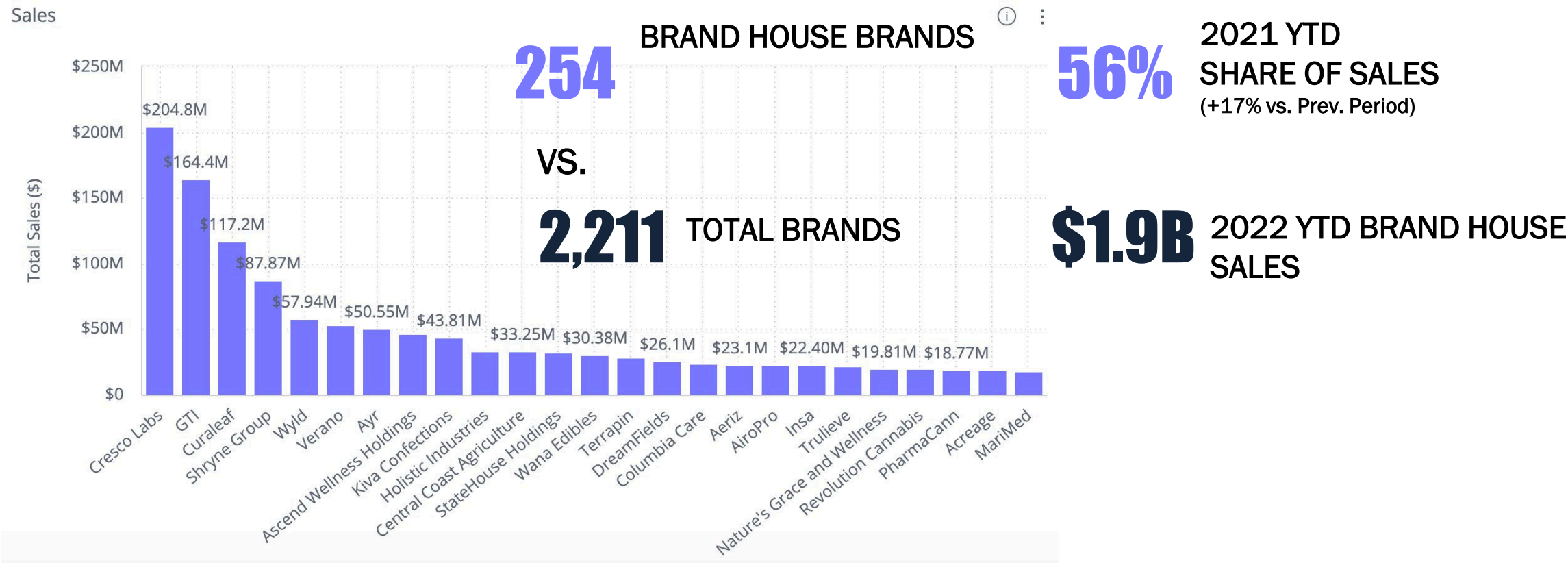
GTI	Cresco Labs	Terrapin
Cresco Labs	GTI	Wana Edibles
Ayr	Curaleaf	StateHouse Holdings
Insa	Terrapin	Curaleaf
MariMed	Moxie Seeds and Extracts	Timeless Vapes

*Source: BDSA Retail Sales Tracking - Massachusetts (Adult-Use + Medical); Pennsylvania (Medical), Q1 2022

THE LARGEST FIRMS CONTINUE TO TIGHTEN THEIR GRIP

And with inter-industry M&A consolidation continuing at rapid pace, fewer in the future will control majority share of US

TOP 25 PARENT COMPANIES BY BDSA TRACKED RETAIL SALES (YTD 2022)



Source: BDSA – Retail Sales Tracking – Brand House January 2022 – March 2022 AZ, CA, CO, IL, MA, MD, MI, MO, NV, OR, PA

MARKET TRAJECTORY SIGNALS THAT THE BIG WILL CONTINUE TO GET BIGGER

Number & size of transactions continued to increase in 2021 - exceeding values in 2020 & 2019

306 2021 M&A
TRANSACTIONS

VS.

86 2020 M&A
TRANSACTIONS
(SAME PERIOD)

209 2021 **US** M&A
TRANSACTIONS YTD



\$10.1B TOTAL US
CONSIDERATION

Source: Viridian Capital Advisers Deal Tracker – Jan-Dec, 2021

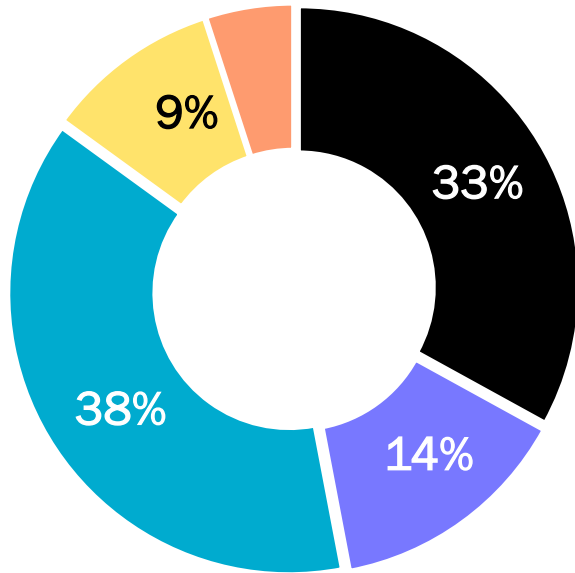


INVESTING IN CANNABIS THE “RIGHT WAY”: WINNING PRODUCTS AND BRANDS

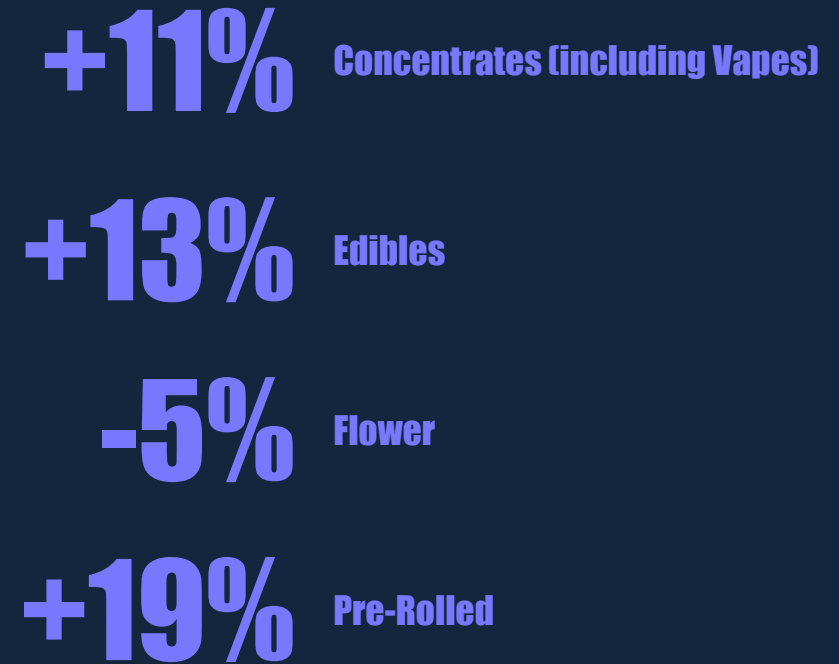


CATEGORIES: WHAT FORMATS ARE WINNING?

Dollar Share by Category Q1 2022



- Concentrates (Including Vapes)
- Flower
- Other
- Edibles
- Pre-Rolled

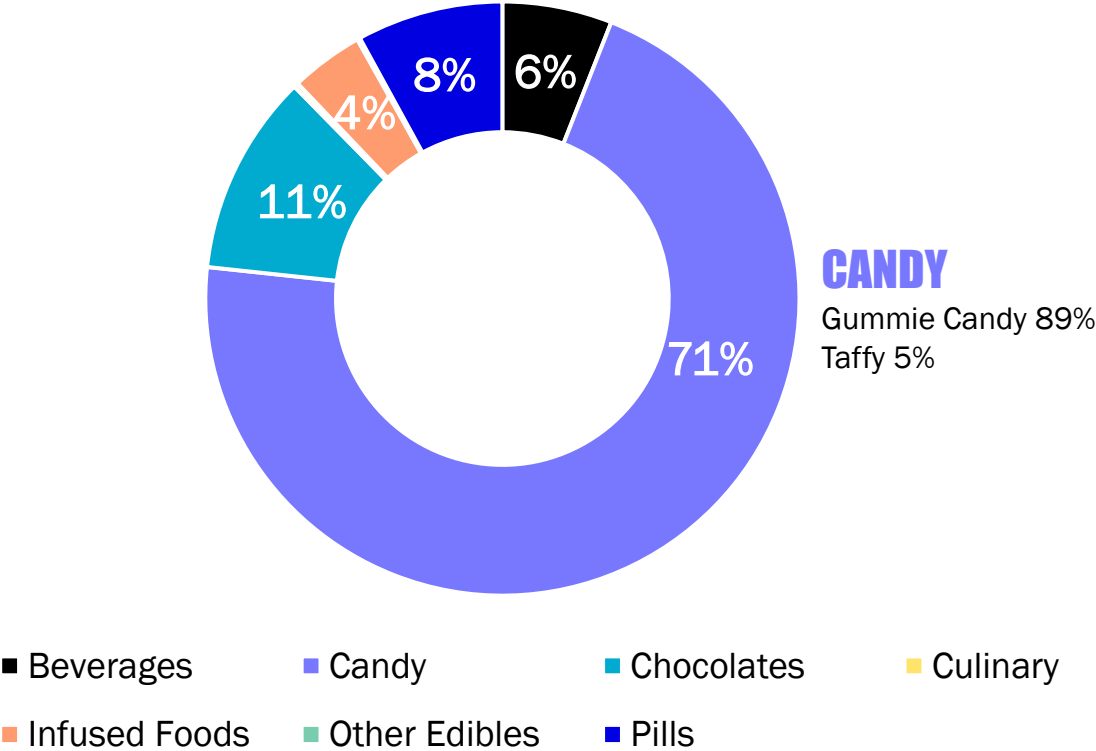


Q1 2022 Growth vs. Q1 2021

*Source: BDSA Retail Sales Tracking; Growth reflected across AZ, CA, CO, FL, IL, MA, MD, MI, MO, NV, OR

US EDIBLES DOMINATED BY CANDY, DRIVEN BY GUMMIES

Dollar Sales Spend Edibles Category



+30%

2021 Total Edibles \$
Growth vs. 2020

Source: BDSA Sales Tracking, Full year 2021 Dollar Sales: AZ, CA, CO, OR, NV, MD, MA, Mi, MO, IL, FL, PA

PRICE COMPARISONS BY MARKET

BDSA expects new adult-use markets in NE to have higher prices relative to those observed in IL & MA

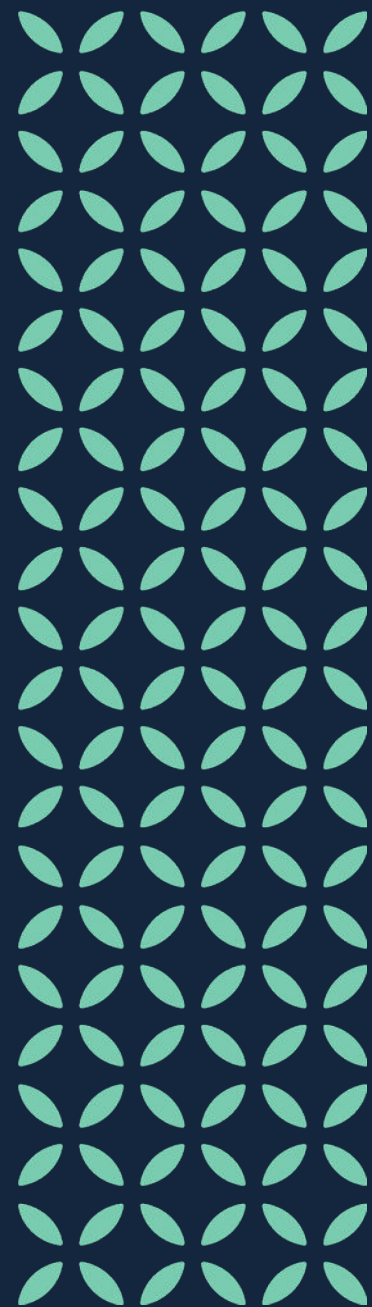
	Concentrates	Edibles	Flower	Pre-Rolled	Shake	Sublinguals	Topicals
California	\$31.71	\$17.08	\$6.95	\$16.90	\$2.71	\$40.94	\$28.60
Colorado	\$24.94	\$17.42	\$4.11	\$7.79	\$2.06	\$25.65	\$28.89
Illinois	\$49.07	\$23.59	\$12.24	\$22.91	\$8.50	\$33.08	\$39.47
Massachusetts	\$48.54	\$19.48	\$11.42	\$14.62	\$6.03	\$49.29	\$34.93
Michigan	\$26.97	\$10.61	\$6.10	\$10.58	\$5.30	\$32.56	\$20.80
Nevada	\$26.14	\$17.51	\$7.17	\$12.09	\$3.95	\$34.99	\$37.01
Oregon	\$22.01	\$8.70	\$4.68	\$8.11	\$1.95	\$35.50	\$34.19

shading denotes Highest / 2nd Highest Price per category

Source: BDSA Retail Sales Tracking – Average Retail Price – Q1 2022



WINNING BRAND TRENDS



Q1 2022 TOP SELLING (\$) BRANDS (AZ, CA, CO, IL, MA, MD, MI, MO, NV, OR, PA)

1 RYTHM (Green Thumb)

2 CRESCO CANNABIS (Cresco Labs)

3 STIIIZY (Shryne Group)

4 SELECT (Curaleaf)

5 WYLD

Source: BDSA RETAIL SALES TRACKING 2021—AZ, CA, CO, IL, MA, MD, MI, MO, NV, OR, PA

FOCUSING ON MOST POPULAR FORM FACTORS: A WINNING BRAND STRATEGY

Stiiizy
+96%

Vape \$ 2020 vs. 2021




STIIIZY

**#1 VAPE BRAND ACROSS BDSA
TRACKED MARKETS
26% OF VAPE \$ Sales in CA
for Q1 2022**

Next closest at 12%

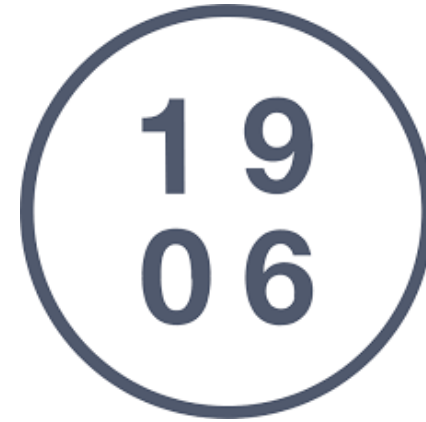
Source: BDSA 2020- 2021 Retail Sales Tracking

ANOTHER WINNING BRAND WITHIN A SMALLER SUBCATEGORY: 1906

PILLS: 1906

+39%

Pills \$ 2020 vs. 2021



#1 PILL BRAND
31% OF PILL \$ Sales in Q1
2022

Next closest at 10%

Source: BDSA 2020- 2021 Retail Sales Tracking



**WHAT SHOULD WE EXPECT IN
2022?**



BDSA FULL YEAR 2022 PREDICTIONS

1. Classification (indica, sativa, hybrid) will fade away as a designation of the consumer experience – cannabinoid content and terpene driven benefits are the way of the future
2. Brand recognition will grow, and dare we say, **brand loyalty** will emerge
3. More blatant quality cues will drive **greater pricing differentiation**
4. The race for **global cannabis dominance** is well on its way – but traditional CPG will not lead the way
5. The FDA will continue to limit the potential of the **mainstream CBD market** (indefinitely?)
6. **Vape will continue to survive** (and thrive) despite reputational hits

WHAT ABOUT FEDERAL LEGALIZATION?



BDSA DOES NOT PREDICT
FEDERAL LEGALIZATION BEFORE
2026, BUT AS ACCEPTANCE AND
CONSUMPTION OF CANNABIS
GROW, SMALLER REFORMS ARE
MORE LIKELY

such
as...

- The **SAFE Banking Act**, or similar legislation
- Passage of **decriminalization** at the Federal level
- Reforms regarding **IRS Code 280E**

Source: BDSA

CPG WILL BE SIDELINED IN US UNTIL FEDERAL REFORM, BUT ALC/BEV AND TOBACCO ARE FINDING A PLACE IN THE CBD SPACE

Strategic investments, joint ventures, and partnerships with beverage alcohol and tobacco subsidiaries by way of Canada are notable exceptions offering these firms a way into the US market through M&A post-federal reform



**IT'S A NEW GAME.
DATA. DEEPER.**

<https://bdsa.com/contact/>