



IT ISN'T MAGIC, IT'S DATA – SUCCESSFULLY EXPAND YOUR CANNABIS BUSINESS

Roy Bingham | Co-Founder BDSA

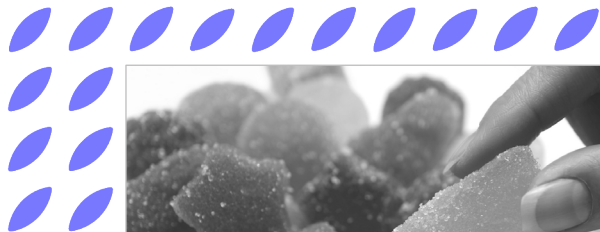
MJ Unpacked

May 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

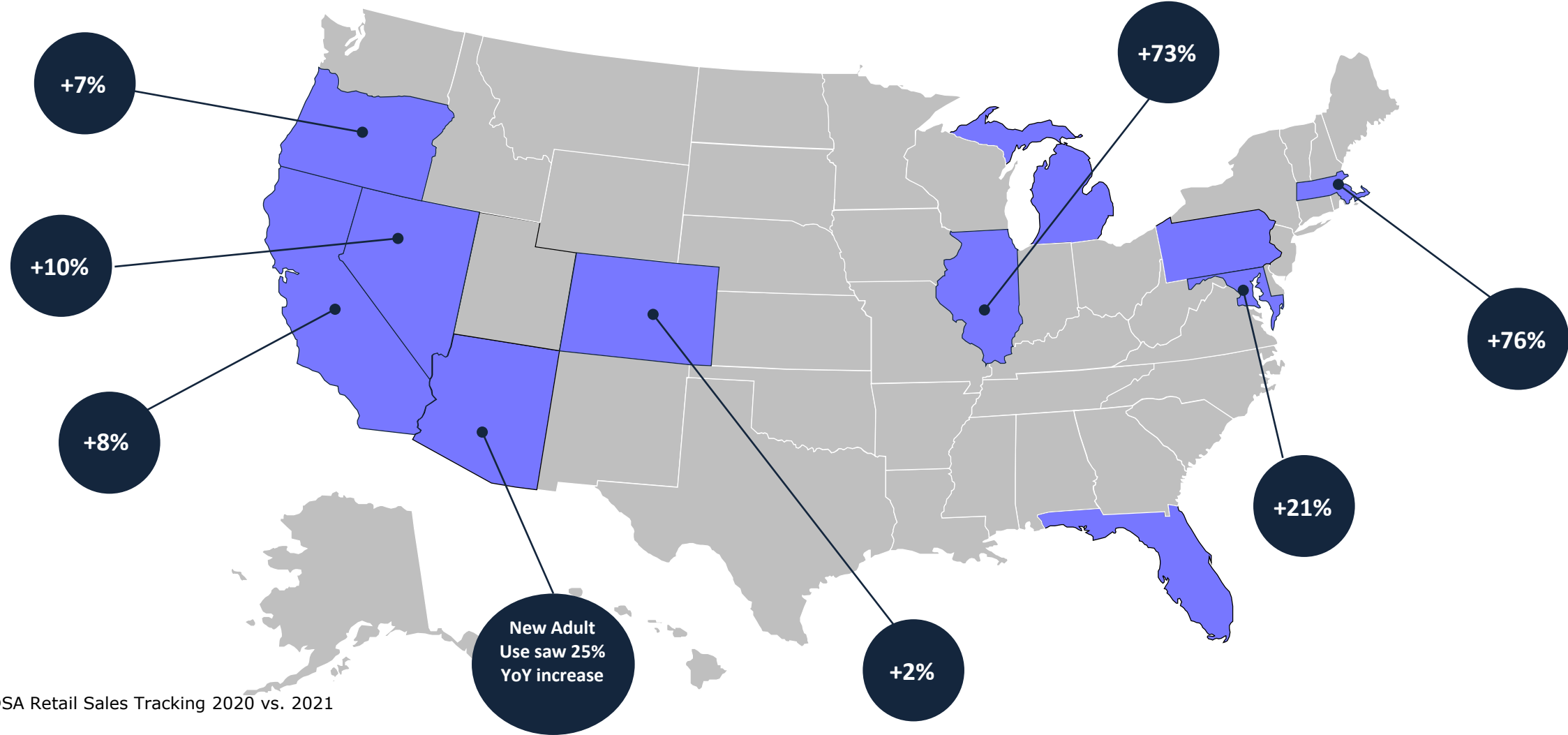


STATE OF THE INDUSTRY



2021 SAW SUBSTANTIAL GROWTH

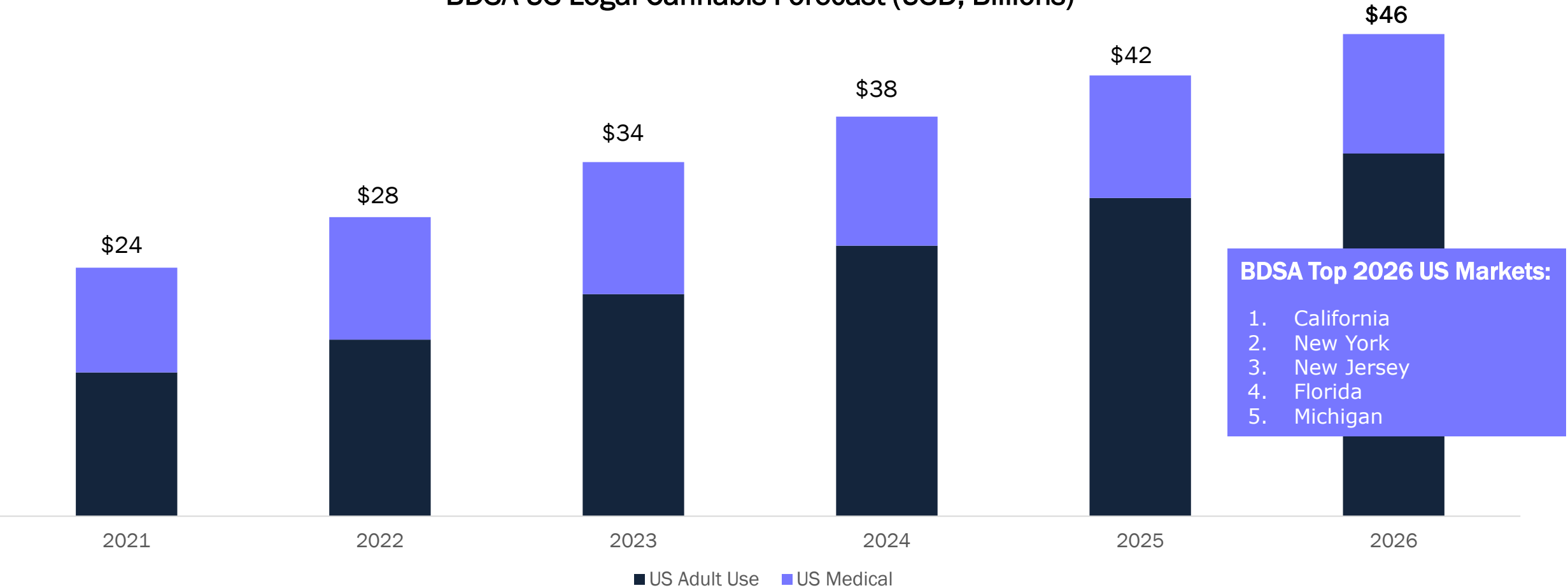
BDSA tracked markets



Source: BDSA Retail Sales Tracking 2020 vs. 2021

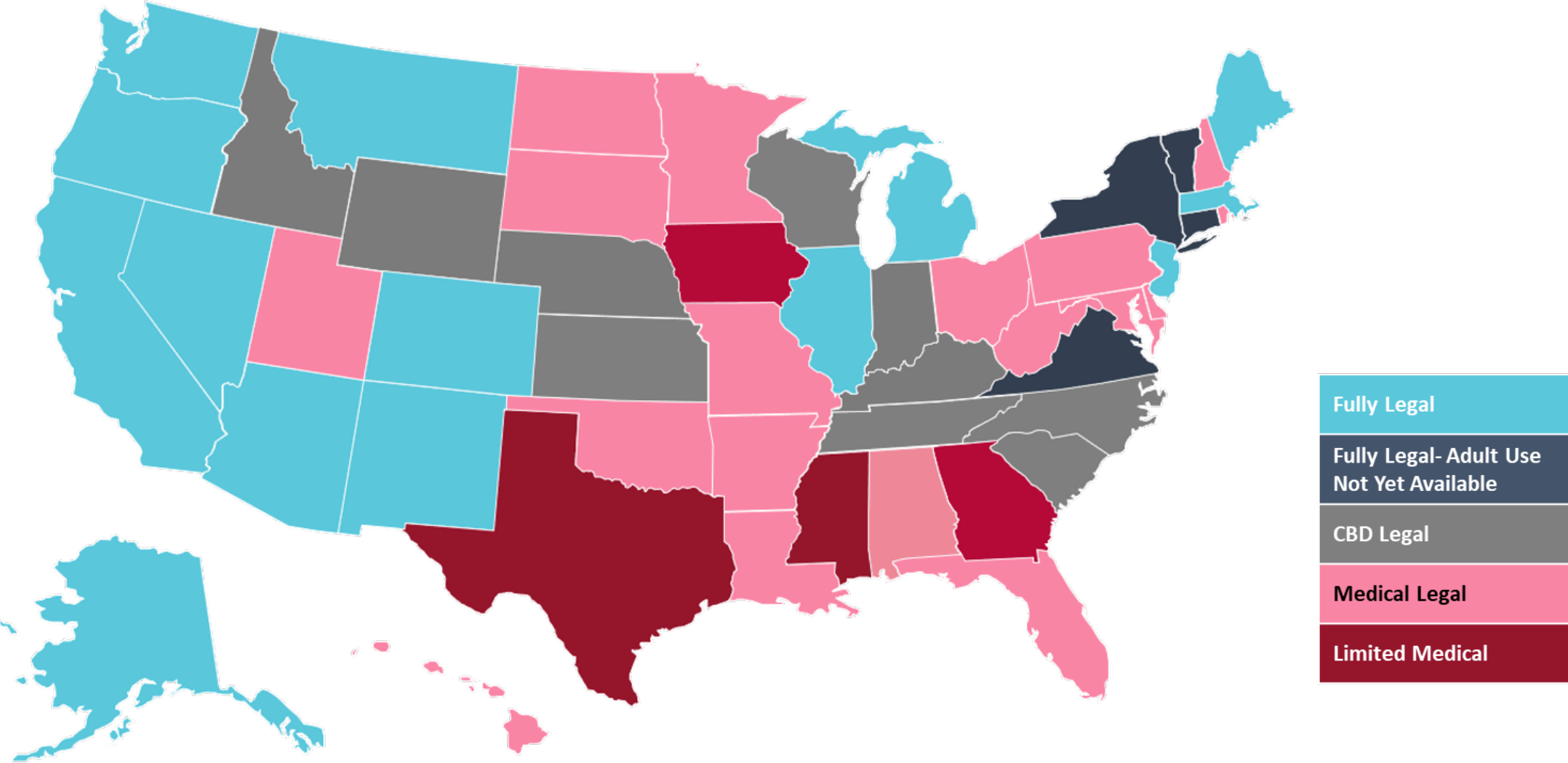
GLOBAL MARKET (\$61B) DRIVEN BY US; US DRIVEN BY ADULT-USE

BDSA US Legal Cannabis Forecast (USD, Billions)



Source: BDSA Forecast, as of February 2022

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



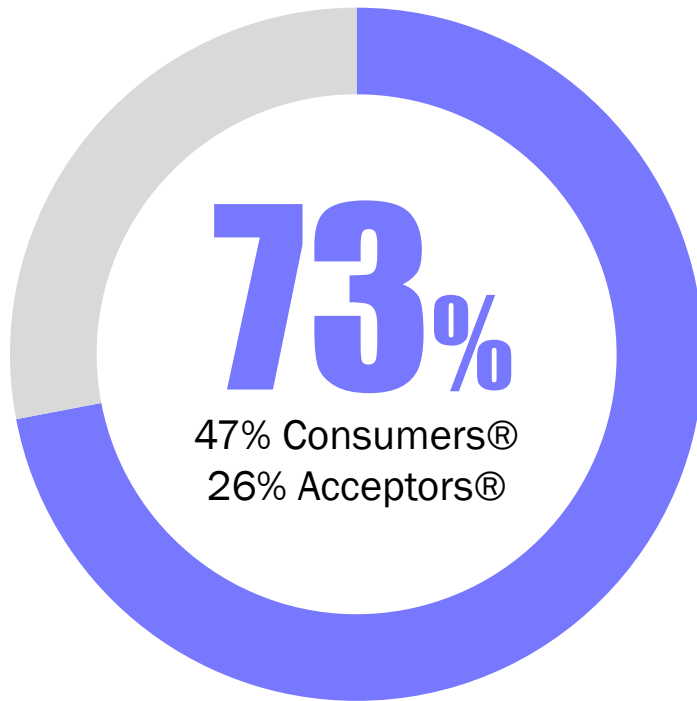
NEW STATES LEGALIZE; US MARKET GROWS

| | <u>MEDICAL</u> | <u>ADULT-USE</u> |
|------|---|--|
| 2021 | West Virginia | Arizona, Marianas |
| 2022 | Georgia, Mississippi, South Dakota, US Virgin Islands | Connecticut, Guam, Montana, New Jersey, New Mexico, Rhode Island, Vermont |
| 2023 | Alabama, Kentucky, North Carolina, South Carolina, Wisconsin, Wyoming | Delaware, D.C., New York, North Dakota, Ohio |
| 2024 | Idaho, Indiana, Kansas, Nebraska, Tennessee | Florida, Maryland, Missouri, Pennsylvania, South Dakota, Virginia |

Source: BDSA Forecast, as of February 2022

Note: Timeline refers to start of retail sales; as of BDSA market forecast released February 2022

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



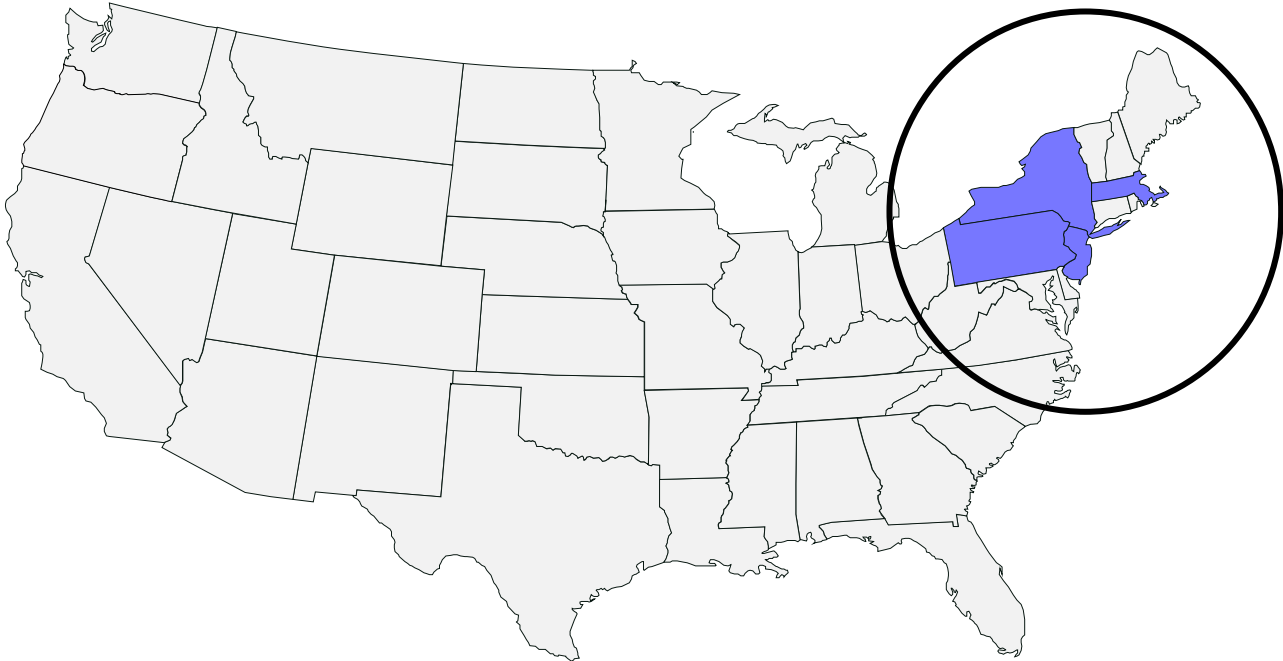
66% in CANADA

...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

THE NORTHEAST IS SLATED TO PROVIDE HUGE REVENUE OPPORTUNITY



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

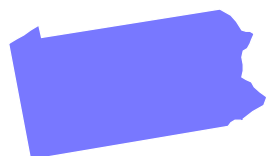
TOP BDSA MARKETS BY 2026

| 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

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

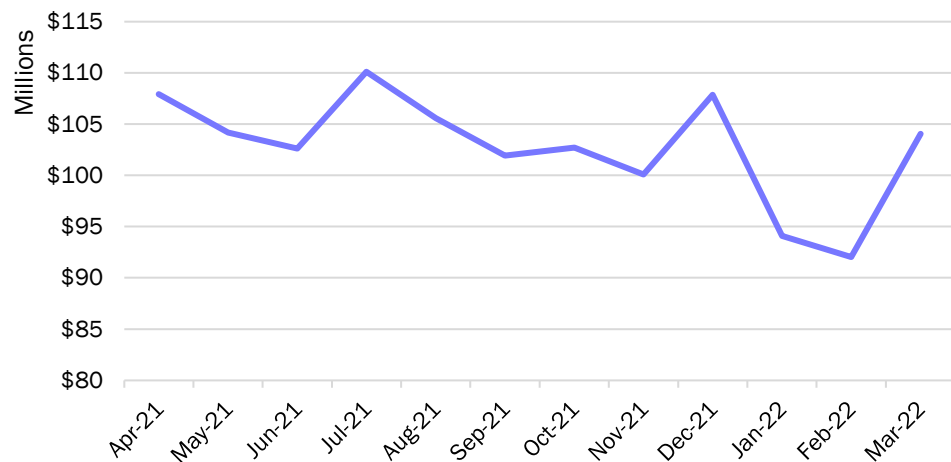
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| | 2022 | % CHG vs. 2021 |
|---------------------|-----------|----------------|
| Registered Patients | 406,454 | 26.8% |
| | Per Month | Per Trip |
| Patient Spend | \$117 | \$100 |

| 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% |



SIZING THE TOTAL ADDRESSABLE MARKET



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

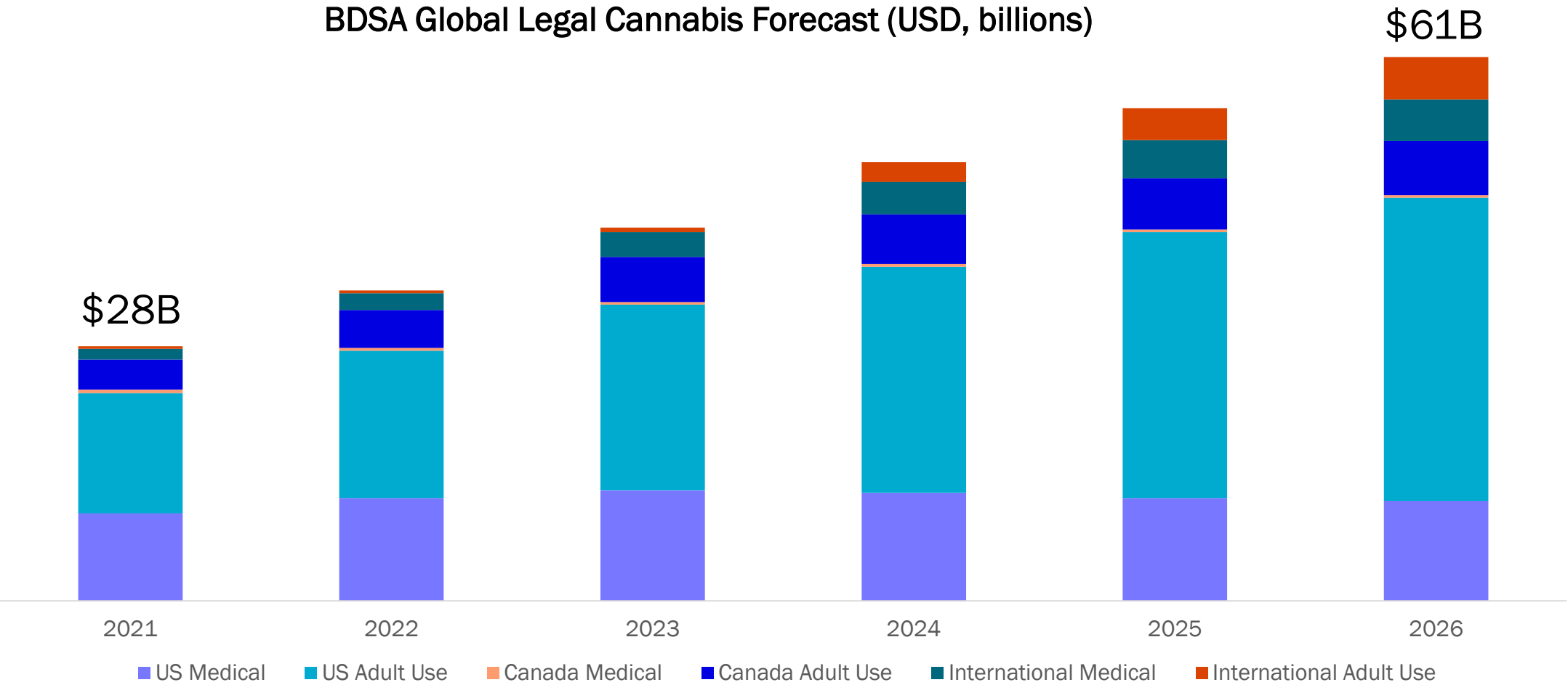
MATURE cannabis states such as California, Oregon, and Colorado continue to grow

NEW legal cannabis states such as Illinois, Massachusetts, Michigan and new medical markets are developing at an ever-increasing rate

EMERGING legal cannabis states, like New York, are expected to yield huge contributions to BDSA's forecasted market growth out to 2026

NOT SURPRISINGLY, THE US REMAINS THE LARGEST GLOBAL LEGAL MARKET

BDSA Global Legal Cannabis Forecast (USD, billions)



Source: BDSA Forecast, as of February 2022

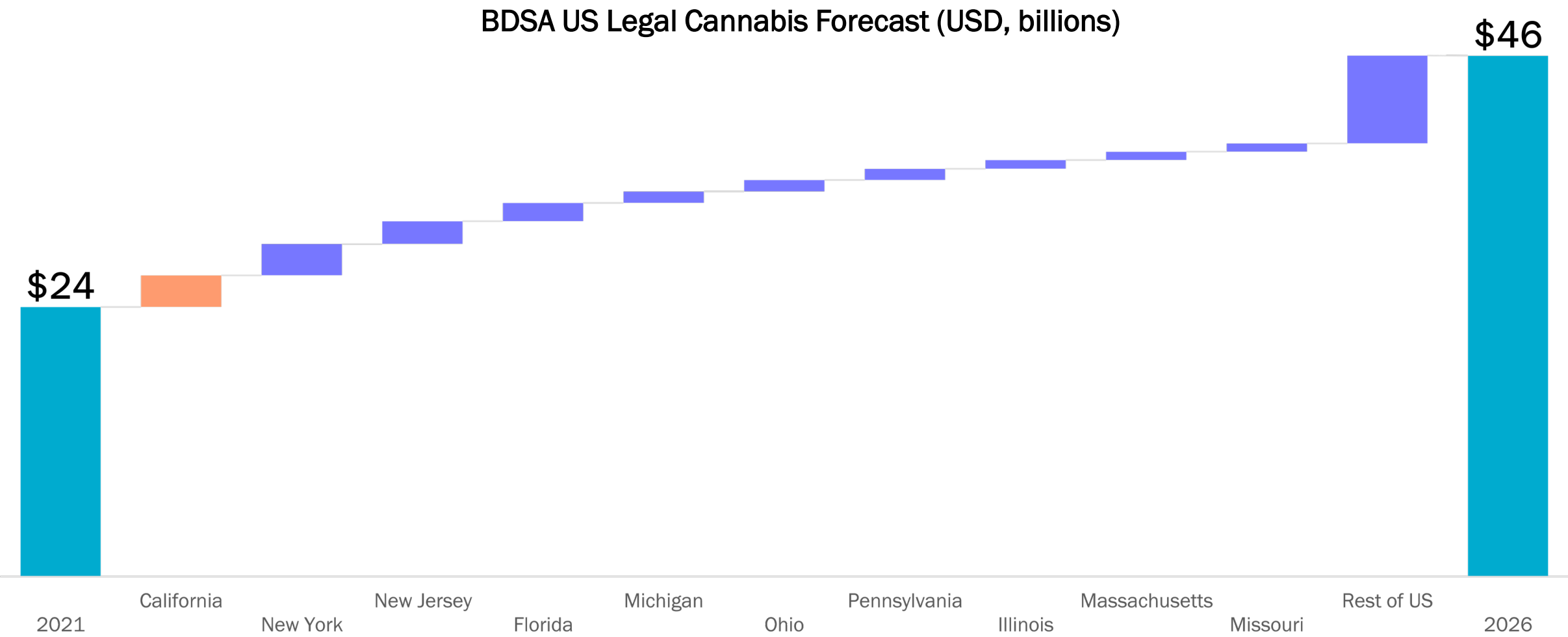
TOP TEN CONTRIBUTORS TO GLOBAL GROWTH

BDSA Legal Cannabis Forecast (USD, Billions)

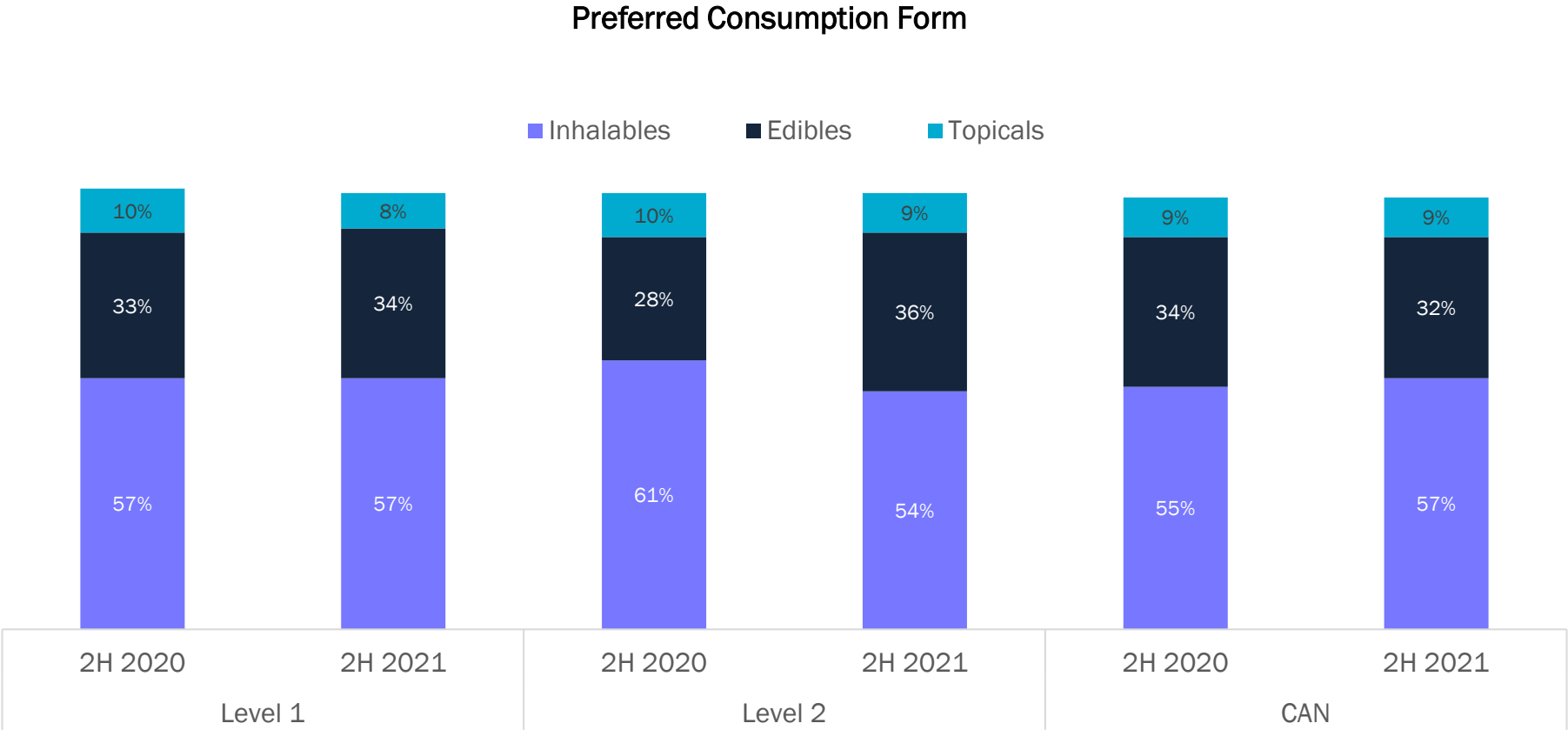


Source: BDSA

CALIFORNIA CONTINUES TO DRIVE THE US MARKET



CONSUMER ADOPTION GREW IN 2021, AND CONSUMERS ARE CONSUMING 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

SPEED TO MARKET

OBSERVED RANGE OF TIMING (*as of April 2022*)

Fastest: ~60 days

Slowest: ~3 Years



Arizona

Illinois

New Mexico

Michigan

New Jersey

Massachusetts

Ohio

What dictates timing?

1. Alignment of state government
2. Retail development
3. Production capacity vs. demand



ARIZONA OFFICIALLY THE
FASTEST STATE TO OPEN ADULT
USE:
~60 days from election

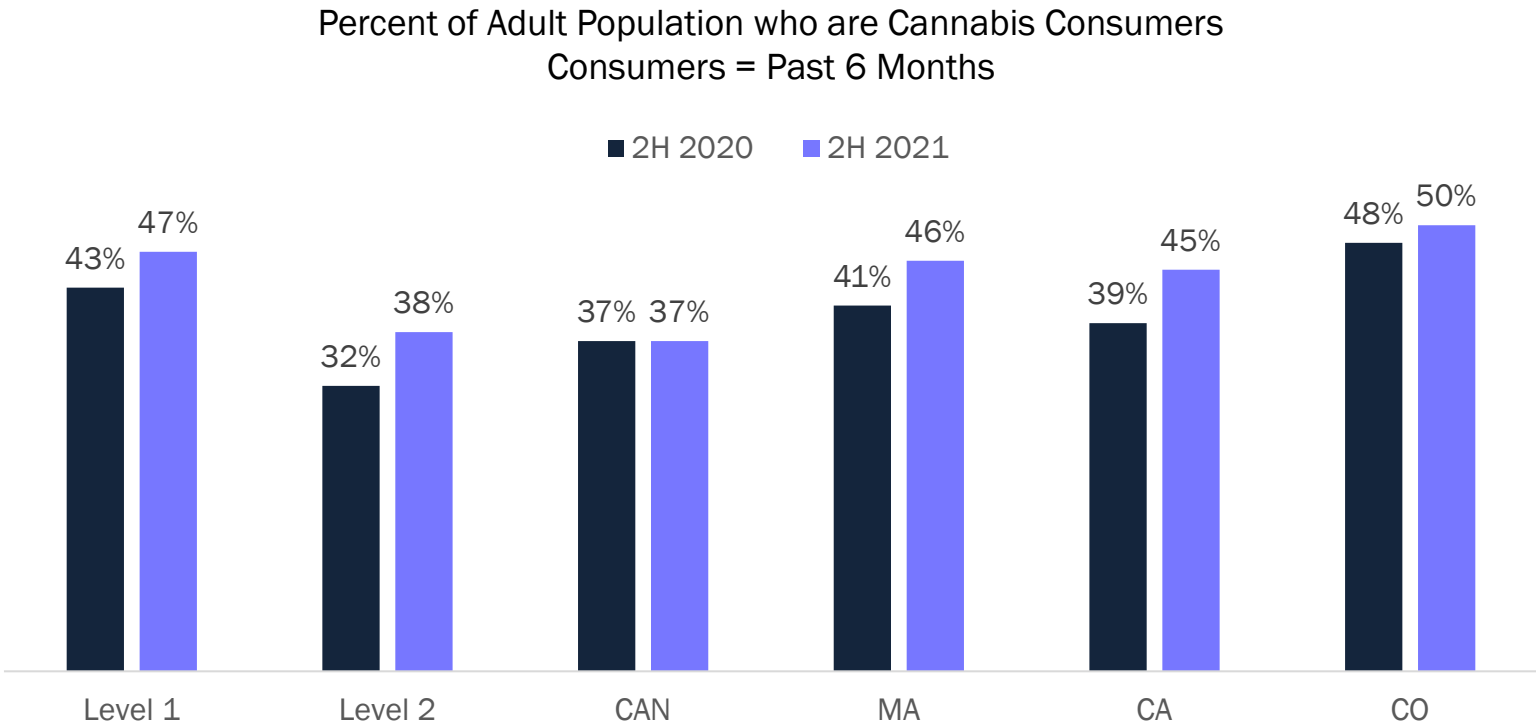
Source: BDSA



HOW TO ENTER CANNABIS MARKETS THE “RIGHT” WAY: CONSUMERS



THE CONSUMER POPULATION, EVEN IN MATURE MARKETS, GREW IN 2021



IMPORTANT BDSA CONSUMER INSIGHTS TERMINOLOGY:
Consumer: Adult who has consumed cannabis in the past 6 months
Level 1: Aggregate of fully legal adult-use states
Level 2: Aggregate of medically legal states

Source: BDSA Trending Consumer Insights, 2H 2020-2H 2021

CONSUMERS RELY ON CANNABIS FOR PHYSICAL AND EMOTIONAL BENEFITS



| | |
|-------------------------|-----|
| 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

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

WHAT DRIVES INHALABLES PURCHASING DECISIONS?

Among Dispensary Shoppers Preferring Inhalables



Source: BDSA Trending Consumer Insights, 2H 2021 in Fully Legal states

WHAT DRIVES EDIBLES PURCHASING DECISIONS?

Among Dispensary Shoppers Preferring Edibles

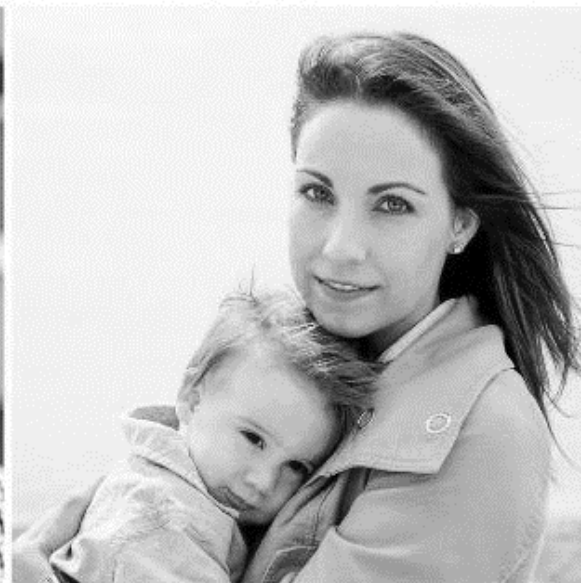
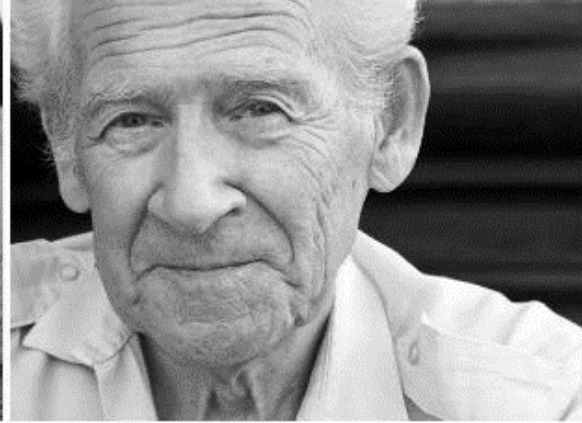


Source: BDSA Trending Consumer Insights, 2H 2021 in Fully Legal states

THERE IS NO ONE CANNABIS CONSUMER

Cannabis Consumers Span:

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



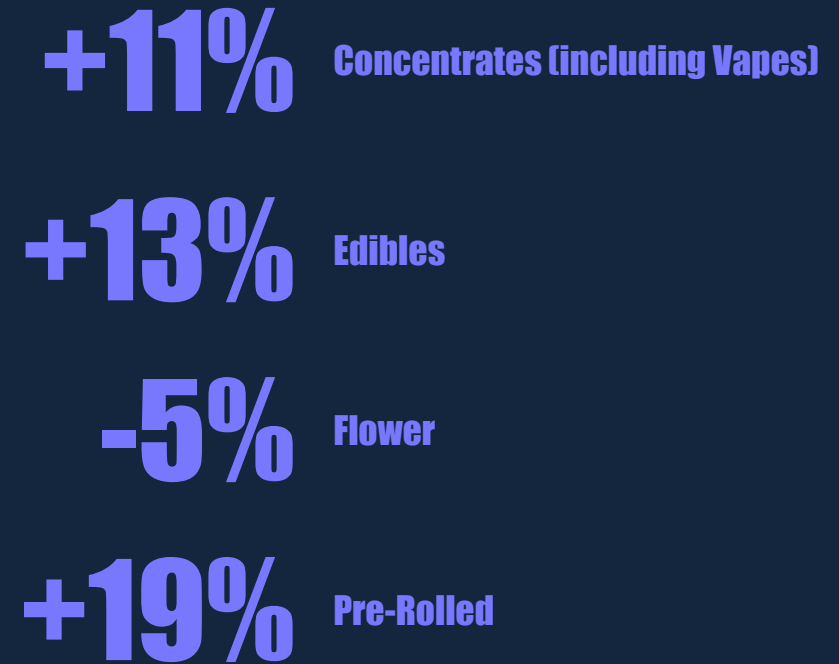
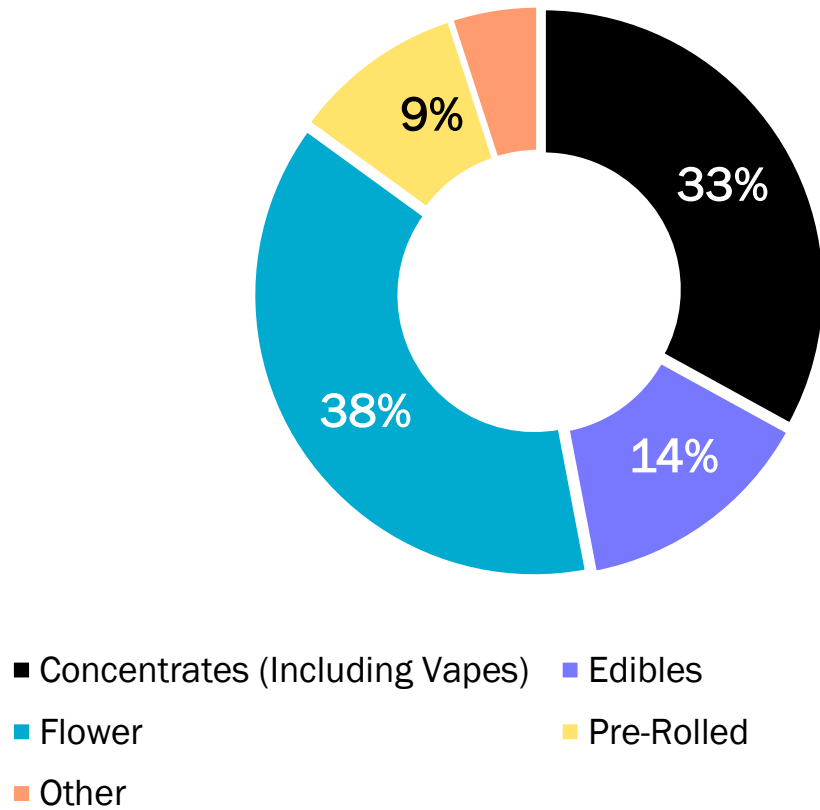


HOW TO ENTER CANNABIS MARKETS THE “RIGHT” WAY: PRODUCT AND PRICING



CATEGORIES: WHAT FORMATS ARE WINNING?

Dollar Share by Category Q1 2022

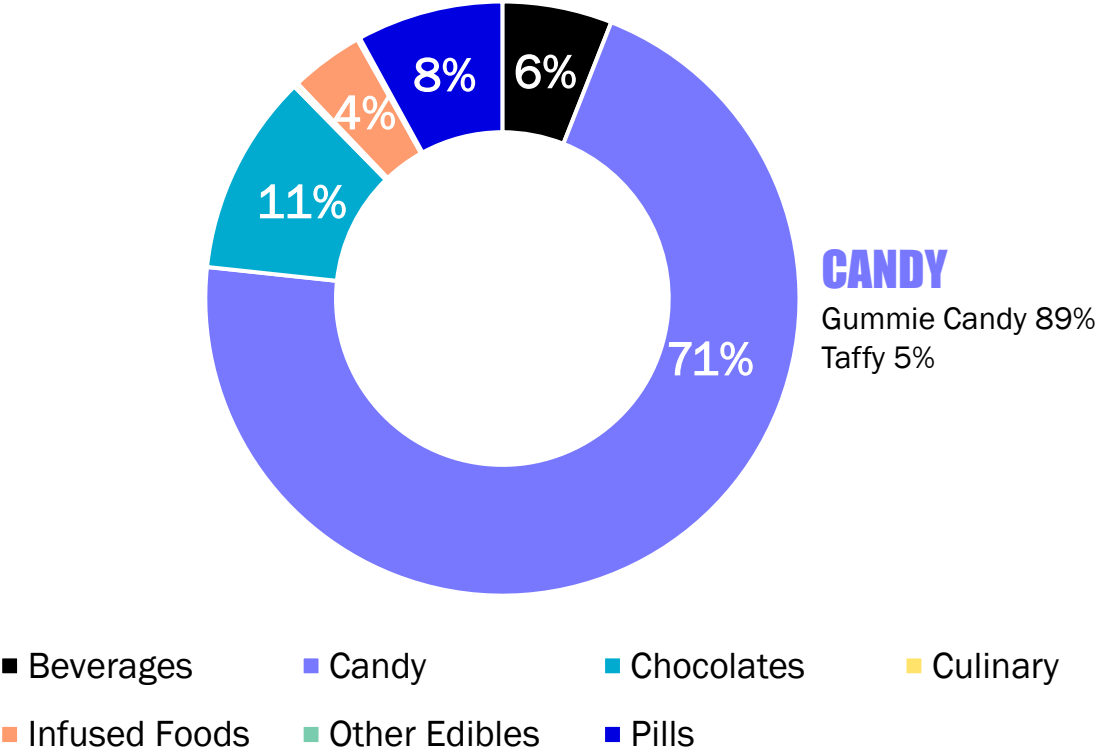


Q1 2022 Growth vs. Q1 2021

*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



HOW TO ENTER CANNABIS MARKETS THE “RIGHT” WAY: COMPETITION



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 |

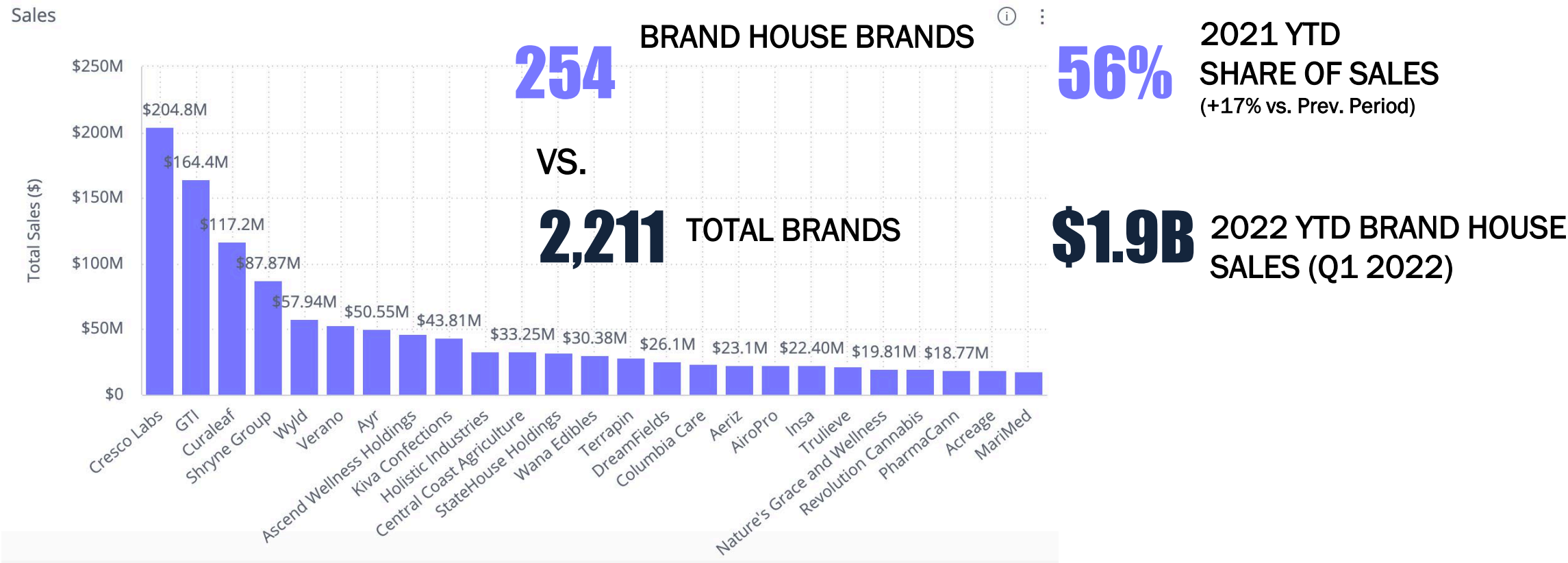
Source: BDSA US Retail Sales Tracking

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

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

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



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





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

BDSA QUICK HITS: SOLVENTLESS EDIBLES

Some Examples...

710 Labs Hash Rosin Gummi



LEVEL Hashtab



Wana Spectrum



dialed in...gummies



BDSA QUICK HITS: MINOR CANNABINOID

Some Examples...

WYLD (CBG)



WANA (THCV)



KIVA (CBN)



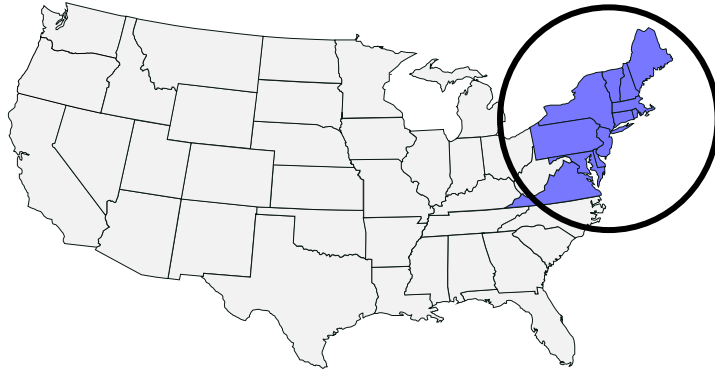


WHAT IS IN STORE FOR 2022?



NEW LEGISLATION

New Jersey: Gateway to NE



TOP-15 BDSA MARKETS BY 2026

New York
Massachusetts
New Jersey
Pennsylvania
Maryland

**Additional +16% adult-use population
with full Northeast seaboard**

New Jersey



21+ Population: 6.8 million

Medical sales active: December 2012

Adult-Use Sales active: April 2022

2022 Total Legal Sales Forecast: \$800M

2026 Total Legal Sales Forecast: \$2.3B

Source: BDSA Market Forecast, Updated February 2022

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

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

DO THE RULES OF CPG APPLY TO CANNABIS....YES & NO

PRICE MATTERS

“PRICE” is consistently a top-3 claimed driver of product choice with ~30% saying that price influences their purchase decision. It falls just behind taste/flavor and high THC content.

Price alone does not indicate quality or premium. BUT there are drivers and product attributes that cannabis consumers WILL pay more for.

BUT NOT NATIONAL

There are no national standards- the exact same product (same size, variety, THC content, etc.) can have dramatically different pricing by state/province

BRANDS MATTER...ISH

Brand alone doesn't seem to matter at the surface, BUT a good experience, trusted recommendation, and brand familiarity does. These benefits tie back to brand.

Brand dominance does not yet exist and brand rankings shift constantly.

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

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