

CANNABIS INTELLIGENCE BRIEFING

Concentrates: The Hottest Product Category in Cannabis



Executive Summary

Concentrates: The Hottest Product Category in Cannabis

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**Retail consumer appeal is
propelling concentrates toward an estimated
\$8 billion in retail sales by 2022,
outpacing growth in traditional flower sales**

Letter from the Editor

The reunion of technology and cannabis, after their 80-year forced separation, has quickly yielded profitable results in the form of concentrates. A product category that was just 10% of legal sales in the United States in 2014, should amount to 27% of the market this year after just a few years of advancements in extraction technology, battery miniaturization and optimization, heating element development, and form-factor design.

In our forecast model, concentrates grow to nearly match flower sales, in the \$8-billion range, by 2022. If the pace of legalization quickens to move more states from limited, medical-only status to allow adult use, concentrates will more quickly exceed flower sales in legal states.

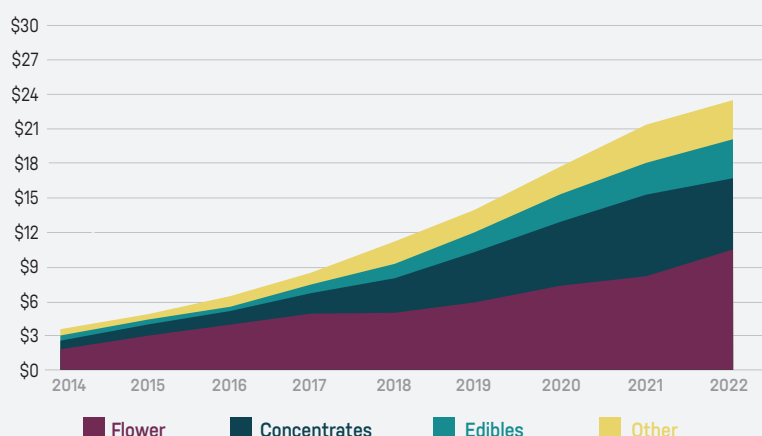
Of course, factoring in the immense illicit market that will likely remain flower-dominant, concentrates will still be a niche product five years hence. But there is clearly a growing consumer preference for vaping

versus smoking that is also happening with tobacco consumption, and the concentrates revolution will affect every aspect of the legal cannabis business.

For consumers, it's a discreet and healthier choice that will likely make cannabis consumers of people who would never dream of inhaling smoke. That will cause the category to represent ever more retail display space, and likely spawn vape-only stores and on-premises consumption venues.

Concentrates will cut costs at every stage of the supply chain—every milligram of cannabinoids delivered to consumers as an extract is cheaper to distribute than as flower. But the main savings will be at the agriculture level, where expensive warehouse and greenhouse grows designed to provide pretty buds give way to traditional outdoor growing of a commodity crop. The cost savings—and broader consumer appeal of concentrates—will prove critical as the legal market struggles under the weight of heavy tax and regulatory loads to compete with the illicit market.

US Cannabis Spending by Category (In Billions)



Source: BDS Analytics' GreenEdge



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METHODOLOGY

The foundation of GreenEdge™ data is BDS Analytics' panel of participating dispensaries that contribute daily point of sales data. Dispensary panels are recruited to be both statistically significant as well as representative of the makeup of dispensaries in the market. Panel recruitment is ongoing and whenever possible, new participating dispensaries provide historic sales data that is incorporated into the data of record. As the underlying sample increases over time, historic data also undergoes changes that could impact category mix, brand/product share, and average retail prices. When conducting analysis, it is recommended to update the historic data in your comparisons rather than rely on previously downloaded information.

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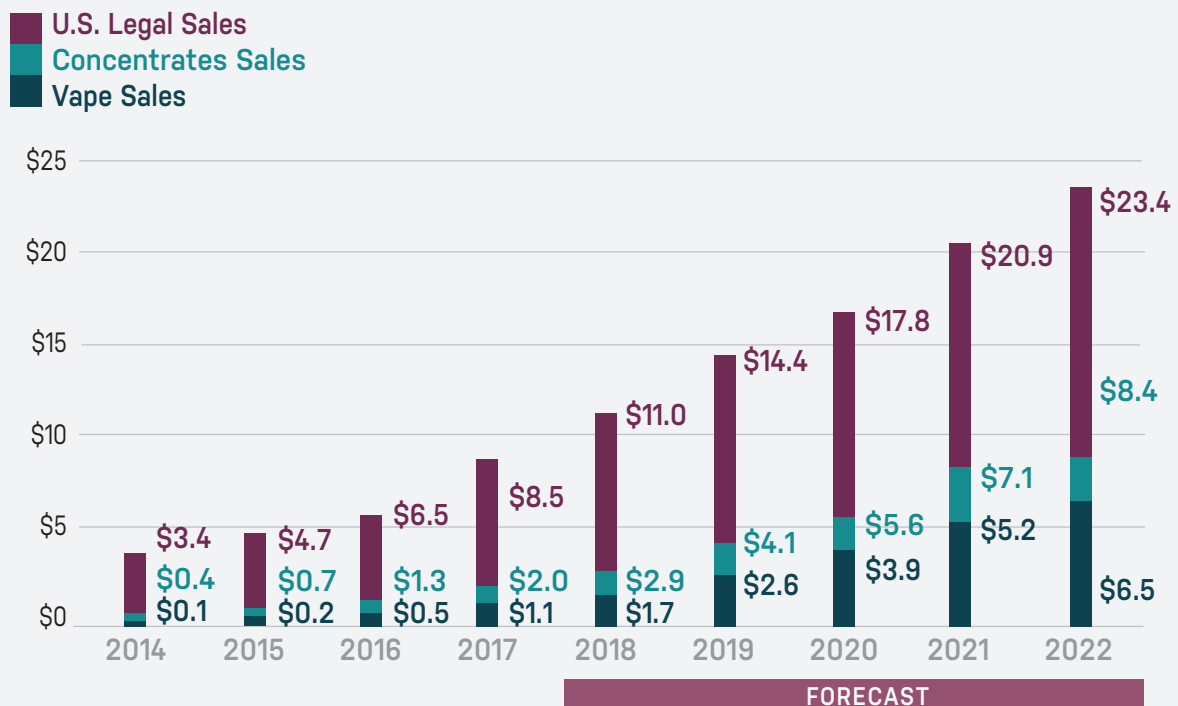


The Rapid Rise of Concentrates

Cannabis concentrates have emerged as the fastest-growing of the three major segments of the legal cannabis market—flower, concentrates and edibles. BDS Analytics' GreenEdge point-of-sale tracking ser-

vice data shows that consumers, particularly those in adult-use markets, are gravitating toward this stronger, discrete, portable product category. Retail consumer appeal is propelling concentrates toward an estimated

U.S. Legal Cannabis, Concentrates & Vape Sales 2014-2022 (In Billions)



Source: BDS Analytics' GreenEdge

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\$8 billion in retail sales by 2022, outpacing growth in traditional flower sales. For the first time, concentrates are establishing a unique identity and retail subsectors.

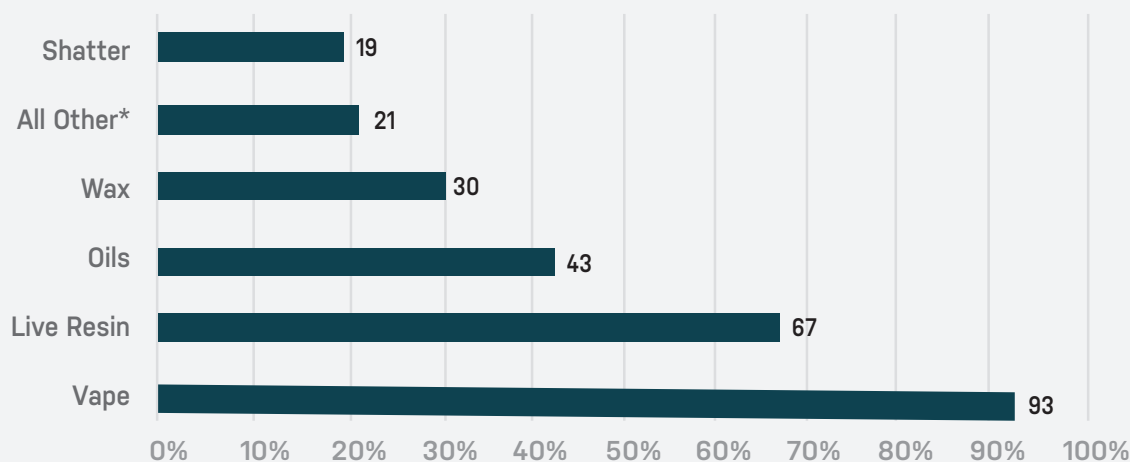
When Colorado commenced legal adult sales in January 2014, the fledgling concentrates category made up just over 15% of the total, overshadowed by traditional flower's 69%. As adult-use legalization spread, largely due to the addition of the California market, that percentage has more than doubled to 26.6%, yielding a noteworthy \$2 billion in 2017 for all U.S. legal sales.

Much growth can be attributed to the beginner-friendly, brand-identified vaporizer cartridge subcategory. A once-overlooked category with sales of under \$100 million in 2014, cartridges now surpass the specialized subcategories of resins, waxes, etc. In 2017, vapes made up more than half of total U.S. concentrate sales, at just over \$1 billion. The subcategory's multifaceted appeal

suggests this pattern will continue, with cartridges expected to garner nearly \$6.5 billion in total U.S. sales in 2022, almost 80% of concentrate dollar sales that year. Vaporizer product sales in Colorado, Washington and Oregon grew by 93% in 2017, the greatest gain by any concentrate product that year. This category was followed by live resin products, which grew by 67%, then oils at 43% growth. Wax and shatter remain substantial favorites, growing by 30% and 19% in 2017.

As the cartridge segment has grown, so have the footprints of multimarket brands. While expanding to markets in new states is often costly and can be unfruitful, it can bring huge top-line growth if efforts prove successful. Only two concentrate brands appear more than once in BDS Analytics's GreenEdge top-20 ranking of concentrate brands in California, Colorado, Oregon and Washington, but both of these brands were among the top five in brand share of dollar sales across all four

2017 vs 2016 % Growth by Product Subcategory: CO, WA, OR



*All Other includes: Bubble Hash, Crystalline, Hash, Kief and Rosin.

Source: BDS Analytics's GreenEdge

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states. This illustrates just how early we are in the development of a national legal cannabis market. But ultimately, cross-state expansion will be a requirement for brands looking for long-term growth; hence expansion to new markets should be a top consideration for concentrate manufacturers once they achieve leadership positions in their home states.

Cross-state expansion will be a requirement for brands looking for long-term growth

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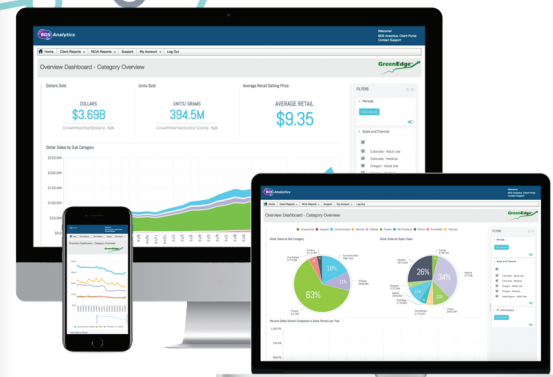
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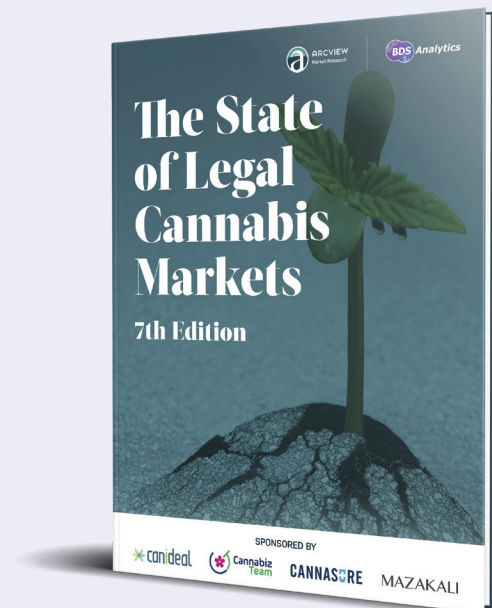
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