Mleaflink
2022 WHOLESALE CANNABIS
Pricing Guide

## 2022 WHOLESALE CANNABIS

## Pricing Guide

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## Introduction

The Wholesale Cannabis Pricing Guide 2022 explores pricing data from 10 US cannabis markets across five product categories: flower, cartridges, concentrates, edibles \& ingestibles, and pre-rolls, to uncover the true impact of product pricing.

We leverage data to anticipate how our community partners can expand regionally and nationally by leveraging insights into the best price to buy and sell products.

The depth of LeafLink's pricing dataset enables us to examine how wholesale pricing impacts sales at a national level and within the represented markets. In the guide, you'll find an in-depth analysis of 2021's average wholesale pricing across each category, the impact on sales performance, and year-over-year changes across our 10 most prominent markets.

## ABOUT LEAFLINK

LeafLink, the unified B2B cannabis platform, has led the growth of the cannabis industry by creating efficiencies in how cannabis operators buy, sell, ship, pay, and get paid. Over 10,000 cannabis businesses across 30 North American markets trust LeafLink to process over $\$ 4.5$ B in annual orders, an estimated $42 \%$ of US wholesale cannabis commerce.

## Methodology

LeafLink analyzed over 296,900 SKUs across our 10 US markets with the highest order volume in this guide. The study examines 2021's average wholesale pricing for five categories: flower, cartridges, concentrates, edibles \& ingestibles, and pre-rolls. Within each category the guide highlights pricing on both the national and market level, as well as year-over-year (YoY) changes. We also share national takeaways for an additional category, beverages, which is included in the market-level analysis for edibles \& ingestibles. Over $\$ 3.2$ billion of wholesale orders placed between January 1 to October 31 of 2021 on LeafLink were used to determine the impact of pricing on sales.

## UNITS OF MEASURE

The units used in this year's guide are as follows:

## Cartridges: 1 gram

## Concentrates: 1 gram

Edibles \& Ingestibles: 1 milligram
Flower: 1 pound
Pre-Rolls: 1 gram

All SKUs analyzed were listed in the above units of measure, or converted to ensure comparability across products and markets. For example, the pricing of a flower product listed at 0.5 of a pound was doubled to estimate
its value at 1 pound. When comparing wholesale product pricing in your market, be sure to convert the product in question to the referenced units.

## GEOGRAPHIES

In this guide, we included pricing data from the following US cannabis markets: Alaska, Arizona, California, Colorado, Massachusetts, Michigan, Nevada, Oklahoma, Oregon, and Washington. These markets were selected based on the availability of pricing data for each of the five product categories analyzed.

## INCLUDED IN EACH STATE PROFILE:

- Most Popular Category: Category making up the largest percentage of 2021 Gross Merchandise Value (GMV) within the market
- Most Competitive Category: Category with the highest number of SKUs listed on LeafLink in that market
- Least Competitive Category: Category with the lowest number of SKUs listed on LeafLink in that market
- Biggest Pricing Change Since Last Year: Category with the greatest change in average pricing since last year's guide
- Wholesale Start Date: The month of the market's first orders on LeafLink
- Number of Active Retailers: Number of retailers in the market using LeafLink at the time of publication
- Category Pricing Rank: How the average price for a product category in one market compares to the 9 other markets included
- Pricing Score: The average of all Category Pricing Ranks for a given market. Closer to 1 indicates higher average pricing across categories, whereas closer to 10 indicates lower average pricing.


## Pricing Overview

Average pricing per category varies greatly across different markets．To help you judge where a specific market falls compared to the others analyzed in this guide，we assigned a Pricing Score to each market． Pricing Scores are determined by averaging all of a market＇s Category Pricing Ranks， 1 being the most expensive， 10 being the least expensive．You can find these scores in the Market Profiles．

## Pricing Score by Market

| $\leftarrow$ | More expensive |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AK | MA | AZ | NV | MI | CO | CA | OK | OR | WA |
| 1.6 | 1.6 | 4.4 | 4.4 | 4.8 | 6.0 | 7.0 | 8.0 | 8.4 | 8.8 |

Wholesale Pricepoints：National Average

| CARTRIDGES | CONCENTRATES | EDIBLES \＆ <br> INGESTIBLES | FLOWER |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 23.38$ |  |  |  |
| perg | $\$ 16.60$ <br> perg | $\$ 0.07$ <br> permg | $\$ 1847$ <br> perlb |

Pricing Rank：Most to Least Expensive by State


| CONCENTRATES |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AK | MA | MI | AZ | NV | co | CA | OK | OR | WA |



| $c$ | FLOWER |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MA | AK | MI | AZ | NV | OK | CA | WA | CO | OR |



## Impact of Pricing on Product Sales

In addition to category average pricing, this guide examines the distribution of sales by wholesale price. In other words, do retailers in a particular market order more premium or affordably priced products? And how does that vary by product category?

To analyze this, we looked at the total range of price points available for a given product category and divided that range into quintiles.

Then, for each category, we analyzed the percent of sales for products within that pricing quintile during 2021.

Below, you will find the sales distribution by pricing quintile for each included category in 2021.



## Units of Measure

Cartridges: 1 g , Concentrates: 1 g Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

Measuring sales distribution for the second consecutive year allows us to track changes in purchasing behavior from 2020 to 2021. In 2021, pre-roll sales skewed more to the first quintile - almost 60\% of all sales occurred at the \$1-\$7 per gram range versus $40 \%$ in 2020. Flower continued to have the most balanced sales distribution, with no single quintile accounting for more than $40 \%$ of sales volume. Cartridge sales distribution was virtually unchanged since 2020 with nearly $60 \%$ of purchases at $\$ 19-\$ 33$ per gram. Edibles $\&$ ingestibles
distribution did shift slightly: more sales occurred at the \$0.04$\$ 0.08$ per mg range than any other in 2021. In 2020, more edibles \& ingestible sales occurred at the \$0.08-\$0.12 range.

For a more in-depth understanding of which markets favored premium-priced products or more affordable products within each category, please see the Market Profiles in the next section.

## Market Profiles

Alaska

## Pricing Overview

| Most Popular Category: | Flower |
| :--- | :--- |
| Most Competitive Category: | Cartridges |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing <br> Change Since Last Year: | Edibles \& Ingestibles |
| Wholesale Start Date: | July 2018 |
| Number of Active Retailers: | 150 |
| Category Pricing Rank: | Highest Priced Pre Rolls, <br> Concentrates |

Pricing Score: 1.6

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

Alaska Pricing Analysis


## Alaska

The average price of flower in Alaska was \$2,807 in 2021, down 7\% year-over-year but it remained the most expensive flower market of those analyzed, with prices over $\$ 700$ more per pound than the national average.






## Arizona

## Pricing Overview

| Most Popular Category: | Cartridges |
| :--- | :--- |
| Most Competitive Category: | Concentrates |
| Least Competitive Category: | Pre-Rolls |
| Biggest Pricing <br> Change Since Last Year: | Pre-Rolls |
| Wholesale Start Date: | October 2017 |
| Category Pricing Rank: | 127 |

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

Arizona Pricing Analysis

|  | Average Pricing | Lower Quintile (20\%) | Median | Upper Quintile (80\%) | Category Pricing Rank ( 1 = most expensive) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ 31.37 | \$23.00 | \$31. 00 | \$36. 00 | 3 OF 10 |
|  | \$ 20.55 | \$15.00 | \$20.00 | \$ 25.00 | 4 OF 10 |
|  | \$0.0649 | \$0.05 | \$0.06 | \$0.08 | 9 OF 10 |
|  | \$2,311.05 | \$1, 600.00 | \$2,591.95 | \$2,942. 22 | 4 OF 10 |
|  | \$9.87 | \$ 6.00 | \$9.00 | \$15.00 | 2 OF 10 |

## Arizona

Limited cultivation licenses and continued strong demand after the legalization of adult-use in 2020 have lifted Arizona pricing. In fact, prices grew in every category except for pre-rolls. Flower prices grew 5\% in Arizona to \$2,311 per pound, the second-fastest growth rate after Colorado.






## California

## California Pricing Analysis

Pricing Overview

| Most Popular Category: | Flower |
| :--- | :--- |
| Most Competitive Category: | Flower |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing <br> Change Since Last Year: | Cartridges |
| Wholesale Start Date: | May 2017 |
| Number of Active Retailers: | 1,128 |
| Category Pricing Rank: | Consistently low pricing across <br> most categories |

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

|  | Average Pricing | Lower Quintile (20\%) | Median | Upper Quintile (80\%) | Category Pricing Rank (1 = most expensive) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$24.17 | \$20.00 | \$ 25.00 | \$29.80 | 7 OF 10 |
|  | \$16. 25 | \$12.50 | \$16.00 | \$17.00 | 7 OF 10 |
|  | \$0.0690 | \$0.05 | \$0.07 | \$0.09 | 8 OF 10 |
|  | \$1, 858.88 | \$1,166. 38 | \$1,619.97 | \$2,721.55 | 7 OF 10 |
| $$ | \$6.56 | \$ 4.58 | \$6.00 | \$8. 00 | 6 OF 10 |

## California

Average flower prices were flat in 2021 compared to 2020 at $\$ 1,859$. However, California prices continued to be depressed in early December 2021 as growing conditions were more favorable compared to 2020. New entrants came into the market anticipating a post-pandemic recovery, and downward pressure from the illicit market continued.


EDIBLES \& INGESTIBLES



PRE-ROLLS


## Colorado

## Pricing Overview

| Most Popular Category: | Concentrates |
| :--- | :--- |
| Most Competitive Category: | Concentrates |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing <br> Change Since Last Year: | Cartridges |
| Wholesale Start Date: | June 2016 |
| Number of Active Retailers: | 952 |
| Category Pricing Rank: | Scattered pricing around <br> the median |

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g


## Colorado

Flower prices in Colorado have continued to steadily decline since 2020. This market has the second cheapest wholesale flower in the US after Oregon. $80 \%$ of Colorado flower sales occur below \$2,150 per pound.



EDIBLES \& INGESTIBLES


FLOWER


## Massachusetts

Pricing Overview

| Most Popular Category: | Flower |
| :--- | :--- |
| Most Competitive Category: | Flower |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing <br> Change Since Last Year: | Cartridges |
| Wholesale Start Date: | October 2018 |
| Number of Active Retailers: | 119 |
| Category Pricing Rank: | Highest priced Flower |

Pricing Score: 1.6

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

Massachusetts Pricing Analysis


## Massachusetts

Massachusetts is a new market in our analysis this year. The average price of flower is $\$ 3,702$ per pound, the most expensive amongst the markets analyzed. More than $80 \%$ of wholesale flower sales happen above \$2,915 per pound. This imbalance will likely correct itself as more supply enters the market.






## Michigan

## Pricing Overview

| Most Popular Category: | Flower |
| :---: | :---: |
| Most Competitive Category: | Flower |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing Change Since Last Year: | Flower |
| Wholesale Start Date: | July 2018 |
| Number of Active Retailers: | 799 |
| Category Pricing Rank: | A high number of categories were priced near the median |
| Pricing Score: 4.8 |  |
| Units of Measure |  |
| Cartridges: 1 g , Concentrates: 1 g , Ed | Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: |


|  | Average Pricing | Lower Quintile (20\%) | Median | Upper Quintile (80\%) | Category Pricing Rank ( 1 = most expensive) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ 25.30 | \$19.00 | \$22.00 | \$ 27.50 | 6 OF 10 |
|  | \$26.78 | \$20.00 | \$ 25.00 | \$ 35.00 | 3 OF 10 |
|  | \$0.0711 | \$0.04 | \$0.06 | \$0.10 | 7 OF 10 |
|  | \$2,341.37 | \$1,400.00 | \$2,267.96 | \$3, 239.94 | 3 OF 10 |
|  | \$ 7.14 | \$ 4.25 | \$ 6.00 | \$9.09 | 5 OF 10 |

## Michigan

Average pricing for all categories in Michigan declined in 2021. Flower had the most significant decrease, falling by $23 \%$ which doesn't come as a surprise, as Michigan faced significant product shortages in 2020 after adult-use sales began in December 2019.

EDIBLES \& INGESTIBLES


CARTRIDGES


FLOWER


CONCENTRATES


PRE-ROLLS


Nevada

Pricing Overview

| Most Popular Category: | Cartridges |
| :---: | :---: |
| Most Competitive Category: | Flower |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing Change Since Last Year: | Edibles \& Ingestibles |
| Wholesale Start Date: | April 2017 |
| Number of Active Retailers: | 108 |
| Category Pricing Rank: | A high number of categories were priced near the median |
| Pricing Score: 4.4 |  |
| Units of Measure |  |
| Cartridges: 1 g , Concentrates: 1 g , Ed | Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: |

Nevada Pricing Analysis

|  | Average Pricing | Lower Quintile (20\%) | Median | Upper Quintile (80\%) | Category Pricing Rank (1 = most expensive) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$29.89 | \$19.00 | \$ 32.00 | \$ 36.00 | 4 OF 10 |
|  | \$17.82 | \$12.00 | \$20.00 | \$22.00 | 5 OF 10 |
|  | \$0.0820 | \$0.05 | \$0.09 | \$0.11 | 4 OF 10 |
|  | \$2, 222.18 | \$1, 814.37 | \$2,267.96 | \$2, 721.55 | 5 OF 10 |
|  | \$8.49 | \$5.00 | \$10.00 | \$10.00 | 4 OF 10 |

## Nevada

Pricing trends were mixed in Nevada in 2021. Flower, cartridges, and concentrates increased in price, but edibles $\mathcal{A}$ ingestibles, and pre-rolls saw declines. Tourism in Nevada has not fully recovered to preMarch 2020 levels, which could be a major reason behind these trends. The average price per pound of flower during the year was up $2 \%$ to $\$ 2,222$.
edibles \& Ingestibles


CARTRIDGES


FLOWER


CONCENTRATES


PRE-ROLLS


## Oklahoma

Oklahoma Pricing Analysis


## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

## Oklahoma

In 2021, Oklahoma had the steepest decline in flower prices at a $28 \%$ decrease since 2020. The decline has been steady in all product categories throughout the year. Pre-rolls is the only category that didn't see a double-digit decline, which is likely the result of increased competition. The number of products available for sale on LeafLink has increased by double-digit percentages for most categories, including a $50 \%$ increase in flower products available.


CONCENTRATES


PRE-ROLLS


## Oregon

Pricing Overview

| Most Popular Category: | Flower |
| :--- | :--- |
| Most Competitive Category: | Flower |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing <br> Change Since Last Year: | Pre-Rolls |
| Wholesale Start Date: | April 2017 |
| Category Pricing Rank: | Consistently low pricing across <br> most categories |

Pricing Score: 8.4

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

Oregon Pricing Analysis

|  | Average Pricing | Lower Quintile (20\%) | Median | Upper Quintile (80\%) | Category Pricing Rank (1 = most expensive) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$15.27 | \$12.50 | \$15.00 | \$18.00 | 9 OF 10 |
|  | \$11.96 | \$7.00 | \$10.00 | \$15.00 | 9 OF 10 |
|  | \$0.0746 | \$0.04 | \$0.05 | \$0.10 | 5 OF 10 |
|  | \$1,043.79 | \$600.00 | \$900.00 | \$1,500.00 | 10 OF 10 |
| $$ | \$ 4.69 | \$2.00 | \$ 3.00 | \$6.00 | 9 OF 10 |

## Oregon

$93 \%$ of flower sales in Oregon occurred below \$1,955 per pound. Average prices were $\$ 1,044$ per pound, making Oregon the cheapest market for wholesale flower out of the 10 markets analyzed.






## Washington

## Pricing Overview

| Most Popular Category: | Flower |
| :--- | :--- |
| Most Competitive Category: | Concentrates |
| Least Competitive Category: | Edibles \& Ingestibles |
| Biggest Pricing <br> Change Since Last Year: | Flower |
| Wholesale Start Date: | October 2016 |
| Number of Active Retailers: | 457 |
| Category Pricing Rank: | Lowest priced Pre-Rolls, |

Pricing Score: 8.8

## Units of Measure

Cartridges: 1 g , Concentrates: 1 g , Edibles \& Ingestibles: 1 mg , Flower: 1 lb , Pre-Rolls: 1 g

Washington Pricing Analysis


## Washington

Average flower pricing was down 9\％ compared to 2020．Production of isolate may have been a factor，but increased regulation of isolate may stabilize prices in 2022. Washington flower prices have a barbell distribution with $22 \%$ of sales commanding more than $\$ 4,535$ per pound and $15 \%$ of sales for cheaper than $\$ 1,166$ per pound．
edibles \＆ingestibles



FLOWER


CONCENTRATES


PRE－ROLLS


## Conclusions

HOW DOES 2021 WHOLESALE PRICING COMPARE TO 2020？

Though there are exceptions by market and by category，wholesale pricing declined on average in 2021．Cannabis pricing responds to a number of unique factors that led to its decline in 2021：
－New cultivators，producers，and sellers entered the market in 2020 in anticipation of benefiting from high wholesale prices（particularly flower，which was up 18\％in 2020），which resulted in downward pressure placed on cannabis prices．
－Cultivators also invested more in technology to become more efficient in response to more competition while making an effort to withstand variations in climate．This supported production levels and further led to higher supply，driving prices down．
－The dominance of legal cannabis is undeniable，but the illicit market is still prevalent and its expansion has likely taken market share from the regulated market，thus resulting in downward pricing pressure．

## Conclusions

## FLOWER

Flower prices declined 6\% year-over-year on average across the 10 markets analyzed. Oklahoma and Michigan saw the largest declines at $28 \%$ and $22 \%$, respectively. Colorado saw the largest increase in wholesale flower pricing at 7\%, however, anecdotally, we have heard about downward pricing pressure surfacing early this year. Arizona flower prices increased $5 \%$ in comparison to 2020. The continued strong demand from legalization of adult-use in 2020 may sustain Arizona's growth through the first quarter of this year as well.

## CARTRIDGES

The cartridges category was the only one to see year-over-year growth, increasing by 6\%. Specific markets saw dramatic year-over-year price shifts, including a $27 \%$ decline in Oklahoma concentrates, and a $17 \%$ decline in Michigan cartridges. By contrast, strong demand in Arizona pushed prices up 8\% year-over-year.

## CONCENTRATES

Overall, the national average price of concentrates declined by $3 \%$ year-over-year. However, most markets saw increases. Oklahoma and

Michigan saw the largest declines, down $27 \%$ and $16 \%$ respectively, while Alaska, Arizona, Colorado, Massachusetts, Oregon and Nevada all saw single-digit increases.

## EDIBLES \& INGESTIBLES

The average price of edibles $\&$ ingestibles declined by $7 \%$. Nine out of 10 markets saw declines with the exception of Arizona, which grew $4 \%$. Within edibles \& ingestibles, beverages have emerged as a growing category. Average beverage pricing declined by $6 \%$ year-over-year. Colorado and Arizona saw favorable trends, with prices increasing by $5 \%$ and $3 \%$ respectively.

## PRE-ROLLS

The national average wholesale price of pre-rolls declined by $5 \%$. Alaska, Massachusetts, and Washington all grew by single digits, while Oregon experienced the largest decline (down $15 \%$ ).

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## 2022 WHOLESALE CANNABIS Pricing Guide

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## Want more data-driven insight into the wholesale cannabis industry?

Get in touch at pricingguide@leaflink.com or head to leaflink.com to learn more.

