## Fair Market Value at Wholesale of Marijuana

- NRS 453D requires the Department to determine the Fair Market Value at Wholesale of retail marijuana. Pursuant to NAC 453D.045, Fair Market Value is defined as the value established by the Nevada Department of Taxation (Department) based on the price that a buyer would pay to a seller in an arm's length transaction for marijuana in the wholesale market.
- NAC 453D.236(6) sets forth that the Department will calculate the Fair Market Value at Wholesale using reported sales or transfers of each category.
- The Fair Market Value at Wholesale rate will be posted to the Department's website and shall be used to calculate the tax on the Wholesale Marijuana Return.
- The Fair Market Value at Wholesale is utilized by the Department in levying the wholesale excise tax imposed pursuant to NRS 453D. 500 on the sale of marijuana by a marijuana cultivation facility.
- The Fair Market Value at Wholesale was calculated based on marijuana cultivator transactions recorded from October 1, 2018 through March 31, 2019, as requested by the Department.
- The next determination of the Fair Market Value at Wholesale Rate will be published for January 1, 2020. Detailed transaction reports shall be submitted by each marijuana cultivation facility to the Department by November 30, 2019. The reports must include transactions from April 1 through October 31, 2019.


## Beginning July 1, 2019, The Department will set the Fair Market Value at Wholesale to the following:

Fair Market Value at Wholesale

| Flower (lb) | Trim (lb) | Small <br> Bud (lb) | Wet Whole <br> Plant (lb) | Immature <br> Plant (ea) | Pre-Roll (ea) | Flower Approved <br> for Extraction (Ib) | Trim Approved for <br> Extraction (lb) |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 2,300$ | $\$ 599$ | $\$ 2,000$ | $\$ 145$ | $\$ 50$ | $\$ 5.00$ | $\$ 552$ | $\$ 510$ |

## Methodology

The Department determined that the excise tax upon wholesale sales of retail marijuana can effectively be levied upon eight product categories:

1. Flower
2. Small Bud
3. Trim
4. Wet Whole Plants
5. Immature Plants
6. Pre-Rolls
7. Flower Approved for Extraction
8. Trim Approved for Extraction

All of these categories are taxed by weight in pounds, except for pre-roll marijuana cigarettes/joints and immature plants which are taxed by individual unit.

The Department collected sales data for the period October 1, 2018 through March 31, 2019 from marijuana cultivators for each category to establish the Fair Market Value at Wholesale in order to comply with NRS 453D.

Summary Statistics (All Raw Data)

|  | Flower (lb) | Trim (lb) | Small Bud (lb) | Wet Whole Plant (lb) | Immature Plant (ea) | Pre-Roll (ea) | Flower Approved for Extraction (lb) | Trim Approved for Extraction(lb) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max | \$45,359 | \$6,804 | \$18,144 | \$425 | \$50 | \$35 | \$5,756 | \$800 |
| Min | \$6 | \$46 | \$100 | \$5 | \$13 | \$0.01 | \$5 | \$4.54 |
| Median | \$2,304 | \$603 | \$2,000 | \$145 | \$50 | \$5.00 | \$568 | \$510 |
| Mean | \$2,467 | \$681 | \$1,955 | \$185 | \$45 | \$5.15 | \$615 | \$494 |
| Mode | \$1,352 | \$299 | \$2,500 | \$5 | \$50 | \$5.00 | \$798 | \$299 |
| Standard Deviation | \$1,455 | \$626 | \$844 | \$157 | \$9 | \$2.43 | \$455 | \$171 |
| Number of Observations | 19,081 | 1,864 | 2,826 | 63 | 61 | 9,053 | 392 | 151 |

Summary Statistics (Excluding Outliers)

|  | Flower (lb) | Trim (lb) | Small Bud (lb) | Wet Whole Plant (lb) | Immature <br> Plant (ea) | Pre-Roll (ea) | Flower Approved for Extraction (lb) | Trim Approved for Extraction(lb) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max | \$4,344 | \$1,311 | \$3,846 | \$425 | \$50 | \$9.01 | \$1,102 | \$800 |
| Min | \$193 | \$46 | \$281 | \$5 | \$44 | \$0.50 | \$5 | \$5 |
| Median | \$2,300 | \$599 | \$2,000 | \$145 | \$50 | \$5.00 | \$552 | \$510 |
| Mean | \$2,269 | \$555 | \$1,923 | \$185 | \$48 | \$4.80 | \$536 | \$494 |
| Mode | \$1,352 | \$299 | \$2,500 | \$5 | \$50 | \$5.00 | \$798 | \$299 |
| Standard Deviation | \$679 | \$234 | \$675 | \$157 | \$3 | \$1.26 | \$248 | \$171 |
| Number of Observations | 18,532 | 1,709 | 2,798 | 63 | 53 | 8,727 | 371 | 151 |

For each taxable category, the raw transaction data (including outliers) were analyzed and the maximum price, minimum price, median, mean, mode and the population standard deviation were calculated.

Outliers were determined by first finding the range between the $25^{\text {th }}$ percentile and $75^{\text {th }}$ percentile prices and multiplying that range by 1.5 . Any reported values lower than the $25^{\text {th }}$ percentile by this amount, or greater than the $75^{\text {th }}$ percentile by this amount, were determined to be outliers and excluded from the subsequent analysis of the data. This method of finding outliers is commonly known as Tukey's rule.

The Fair Market Value at Wholesale is determined to be the median price after outliers (if any) are removed from the data.

The Department has eliminated the wholesale category for seeds as of January 1, 2019 due to a lack of reported transactions.

