

Monitoring Impacts of Recreational Marijuana Legalization

2016 Update Report



Introduction

In February 2015, a baseline report on the monitoring impacts of recreational marijuana legalization was released. Nine months later, in January 2016, that report was updated. This report marks the third in the series.

This report includes updated and additional data and, in a few instances, modifies some of the previous measures.

Highlights and key findings

1. HEALTH

- Among students surveyed, current marijuana use was higher in the older age groups: 26 percent of 12th graders, 17 percent of 10th graders, six percent of 8th graders and one percent of 6th graders reported use.
- Between 2006 and 2016, no trends were seen in usage for any of the grades assessed.
- Use among adults surveyed is highest for those ages 18 to 24, at 21 percent in 2015.
- All adult age groups showed an increasing trend in use. For all adults ages 18 and older use increased by an average of 14 percent per year.
- Among students who first used marijuana at ages 13 or younger, no trends were seen except among 10th graders – and that trend was downward at 2.3 percent per year.
- Among adults, 23 percent reported in 2015 that they were between ages 14 and 17 the first time they tried marijuana. First-time use for that age group increased by an average of 2.4 percent per year for 2011-15. No trends in age at first use were identified among other age groups.
- Among students, ease of access increased by grade, but no trends in increasing ease of access were identified over time in any of the grades surveyed.
- Between 2011 and 2013, there was an average of 155 marijuana-related calls per year to the Poison Control Center; from 2014 to 2016 the average number of calls was 268, a 73 percent increase.
- The number of youths receiving state-funded substance use disorder (SUD) treatment has decreased. The proportion receiving such treatment for marijuana has remained relatively constant since 2012.

1. HEALTH (continued)

- Population-based rates of state-sponsored SUD treatment for marijuana use among youths had been increasing by 5 percent per year from 2006 to 2012. However, from 2012 to 2015, those rates decreased by 13 percent per year. SUD rates for other drugs have been decreasing by nine percent per year from 2009 to 2015.
- Among drivers involved in a traffic fatality who are tested for drugs or alcohol, there is no trend in the percentage of those testing positive for marijuana in combination with other drugs and/or alcohol. Similarly, no trend was identified for those who tested positive for marijuana only.

2. ENFORCEMENT

- From 2012 to 2015 there was a 25 percent decrease in arrests for drug equipment and a 16 percent decrease in arrests for violations involving any drugs.
- Incidents* involving marijuana decreased by 63 percent between 2012 and 2015. Concurrently, incidents involving amphetamines increased by 72 percent and those involving heroin by 41 percent.
- Between 2012 and 2015, incidents* where marijuana was seized decreased appreciably. However, between 2014 and 2015 small increases in incidents for 3.5 grams or less and 14.1 grams or more showed a slight increase.
- Highways and roads are the most common location where marijuana incidents occurred, decreasing by 75 percent from 2012 to 2015. Decreases were also seen in all other identified locations..
- Among criminal activities involving marijuana, possession or consuming was the most common, decreasing by 65 percent from 2012 to 2015.

Highlights and key findings (continued)

2. ENFORCEMENT (continued)

- Drug-only DUI arrests, which do not differentiate marijuana from other drugs, decreased from a high of 1,710 in 2011 to a low of 1,222 in 2015, for an overall decrease of 28 percent.
- Marked decreases are seen in marijuana-related nonprison convictions, dropping from a high of 502 in 2011 to a low of 80 in 2015, and in-prison convictions, from 73 in 2011 to 10 in 2015.
- For the 2015-16 school year, 4 percent of all students were suspended or expelled. Of those suspended or expelled, 9 percent (or 0.4 percent of all students) were suspended or expelled due to marijuana possession.

3. REVENUES AND TAXES

- Sales increased by an average of 69 percent per month during the first three months of legalization. They then increased by 20 percent per month from October 2014 to May 2015. Between May 2015, and September 2016, sales have been increasing by six percent per month.
- In September 2016, sales had reached \$114 million with excise taxes reaching \$26 million.

4. PRODUCTION AND SALES

- In January 2017, there were 745 active licensed producers and 310 active licensed retailers in the state.
- Licensed producers and processors appear to be equally located in urban and rural locales. Similarly, high-volume producers/processors are also somewhat evenly distributed.

4. PRODUCTION AND SALES (continued)

- Retailers tend to be more commonly located in urban and suburban communities. However, some high-volume retailers are located in nonurban communities, particularly those that border other states.
- Of the six counties with the highest per capita sales, three (Spokane, Whitman and Asotin) are on the Idaho state border.
- The average price per gram dropped from a high of \$29 in August 2014 to a low of \$9 in April 2016, and has risen slightly since to \$10 in June, 2016.
- The number of retailers reached its all-time high of 267 in June, 2016, the last month of data currently available.

5. CITY AND COUNTY ORDINANCES

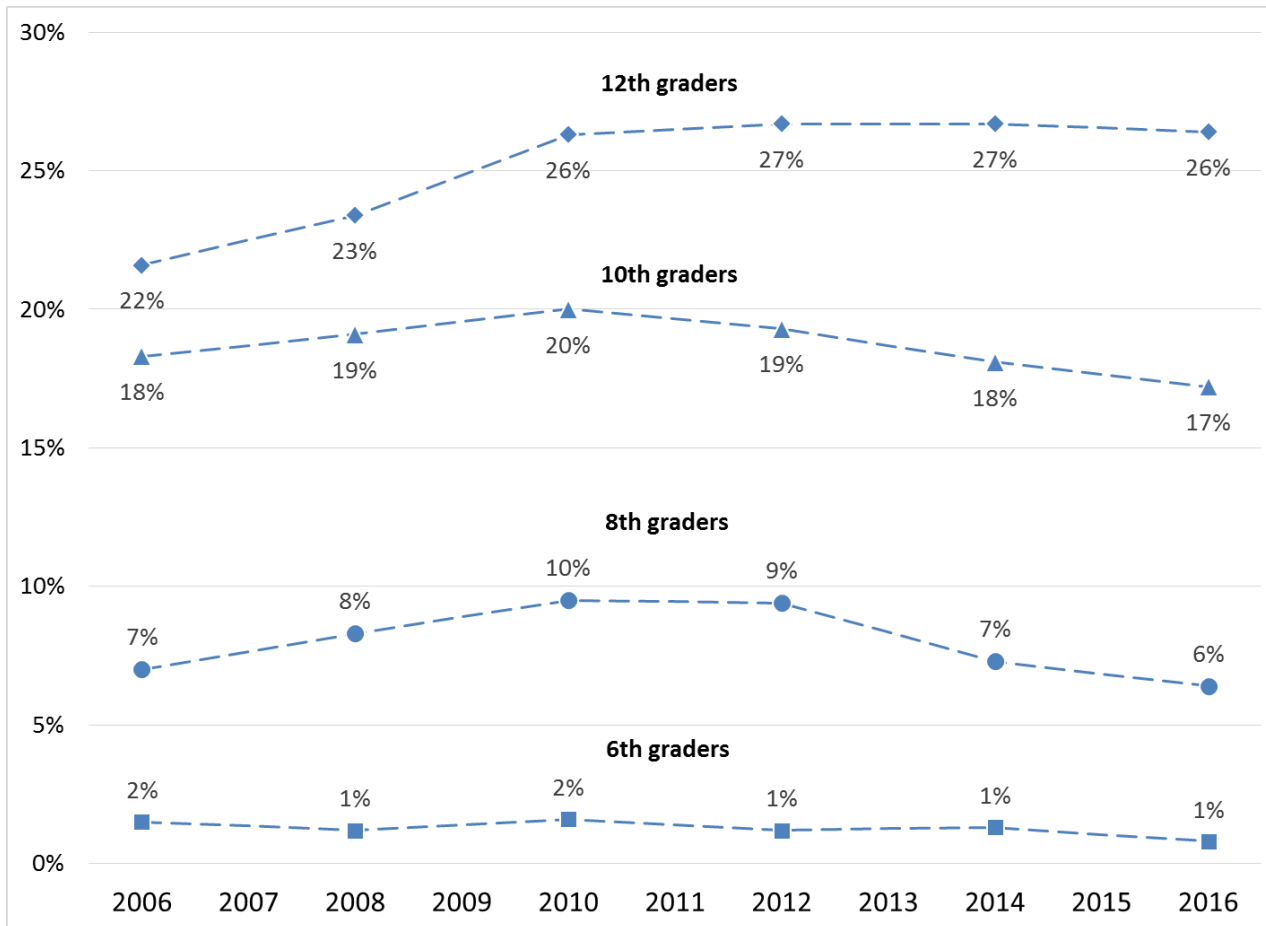
- Currently, 67 cities have prohibitions or moratoria on retail sales of recreational marijuana.
- Two counties have moratoria on the sale of recreational marijuana in their unincorporated regions and five have prohibitions; moratoria in three additional counties recently expired.

* As defined by the FBI, an “incident” occurs when any law enforcement officer investigates a scene or situation, whether that investigation results in an arrest or not. Incidents involving multiple illicit drugs or other criminal activities are counted only once, and are included in whichever category is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.

1.1 Current Use – Students

Among 6th, 8th, 10th and 12th graders asked, “Have you used marijuana in the past 30 days?” there were no significant trends seen. Difference between grades, however, were notable: about one-fourth of 12th graders reported current use as did about one percent of 6th graders.

Source: Washington State Health Youth Survey

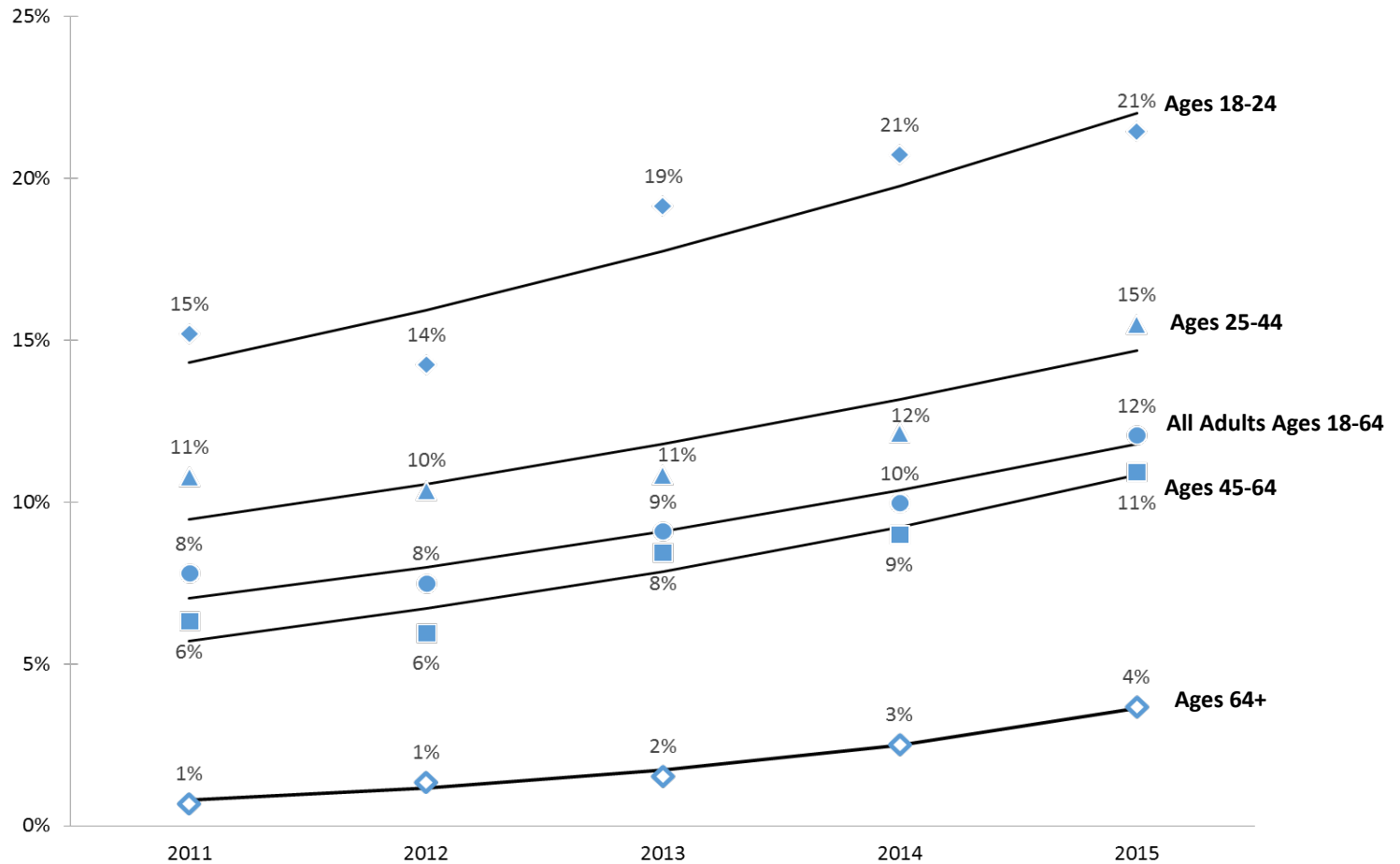


* No significant trend

1.2 Current Use – Adults

Current use among all adults, 12 percent in 2015, has increased by 14 percent per year since 2010. For those ages 18-24, current use was 21 percent in 2015, with an increase of 11 percent per year since 2010. Among those ages 25 to 44, 15 percent were current users in 2015, with a 12 percent per year increase from since 2010. Eleven percent of those ages 45 to 64 were current users in 2015, with a 17 percent per year increase in usage from 2010. Those ages 65 and older had the lowest percent of current usage in 2015, four percent; however, this constitutes a 46 percent per year increase since 2010.

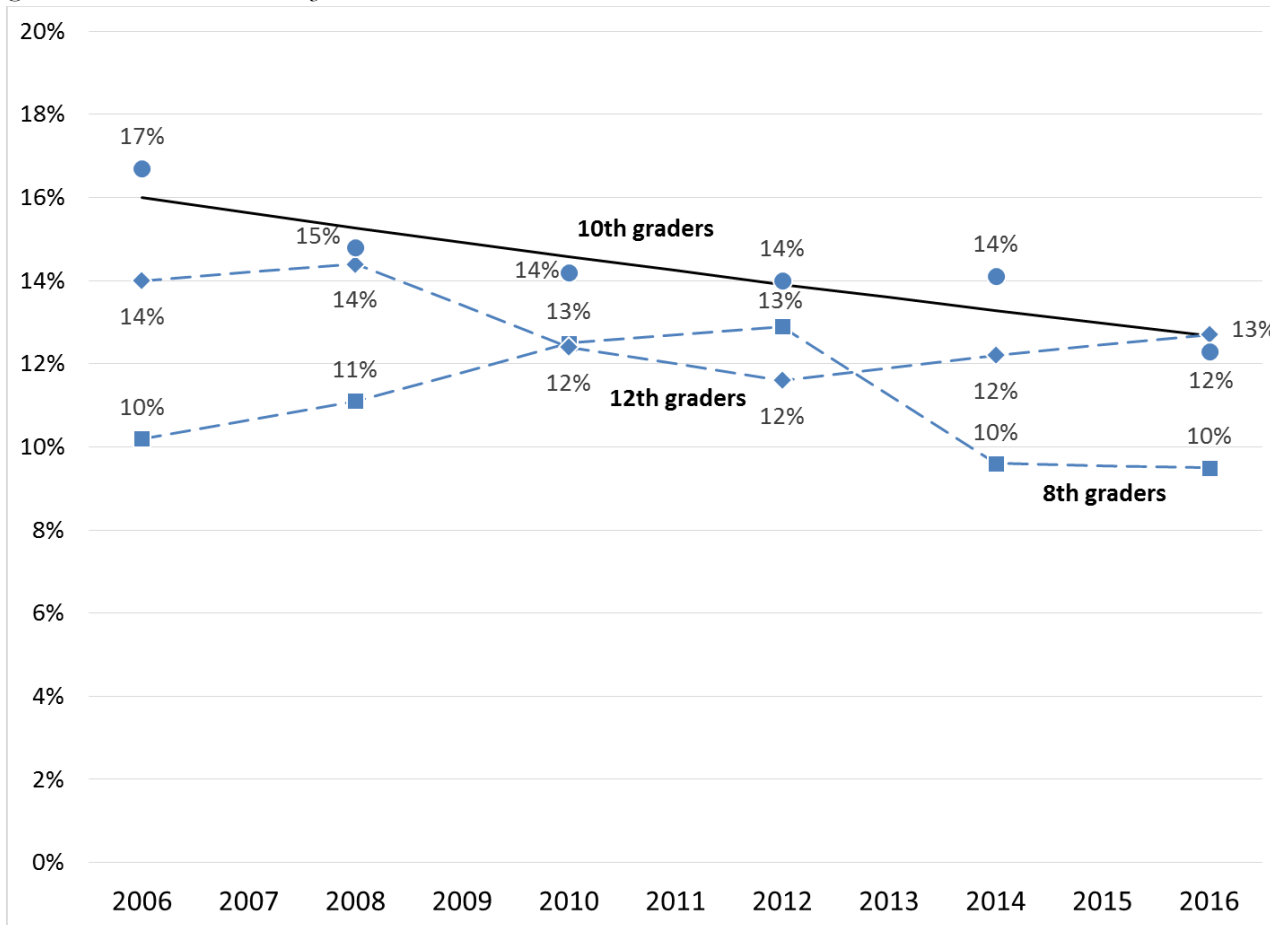
Source: Washington State Behavioral Risk Factors Surveillance System



1.3 Age at First Use – Students

Among 8th and 12th graders asked, “How old were you the first time you smoked marijuana?” no significant trends were seen among those responding that they were age 13 or younger; however, among 10th graders there is a 2.3 percent per year downward trend in those starting at age 13 or younger.

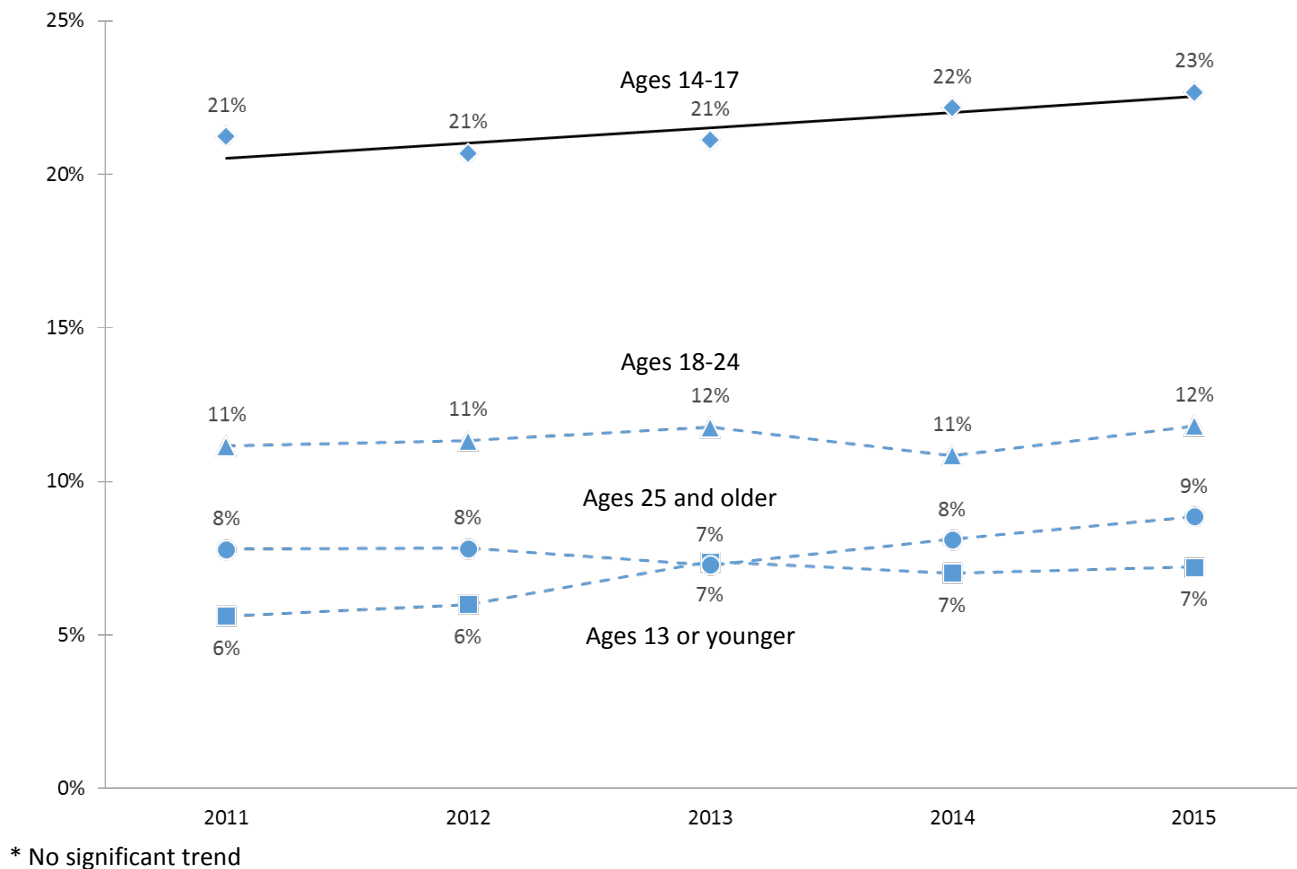
Source: Washington State Health Youth Survey



1.4 Age at First Use – Adults

Among adults who had ever used marijuana, there was a significant increase of 2.4 percent per year between 2011 and 2015 in the percentages of those respondents saying that they were between the ages of 14 and 17 when they first tried marijuana. There was no trend in the percentages of those reporting having first tried at ages 13 or younger, ages 18 to 24 or at ages 25 and older.

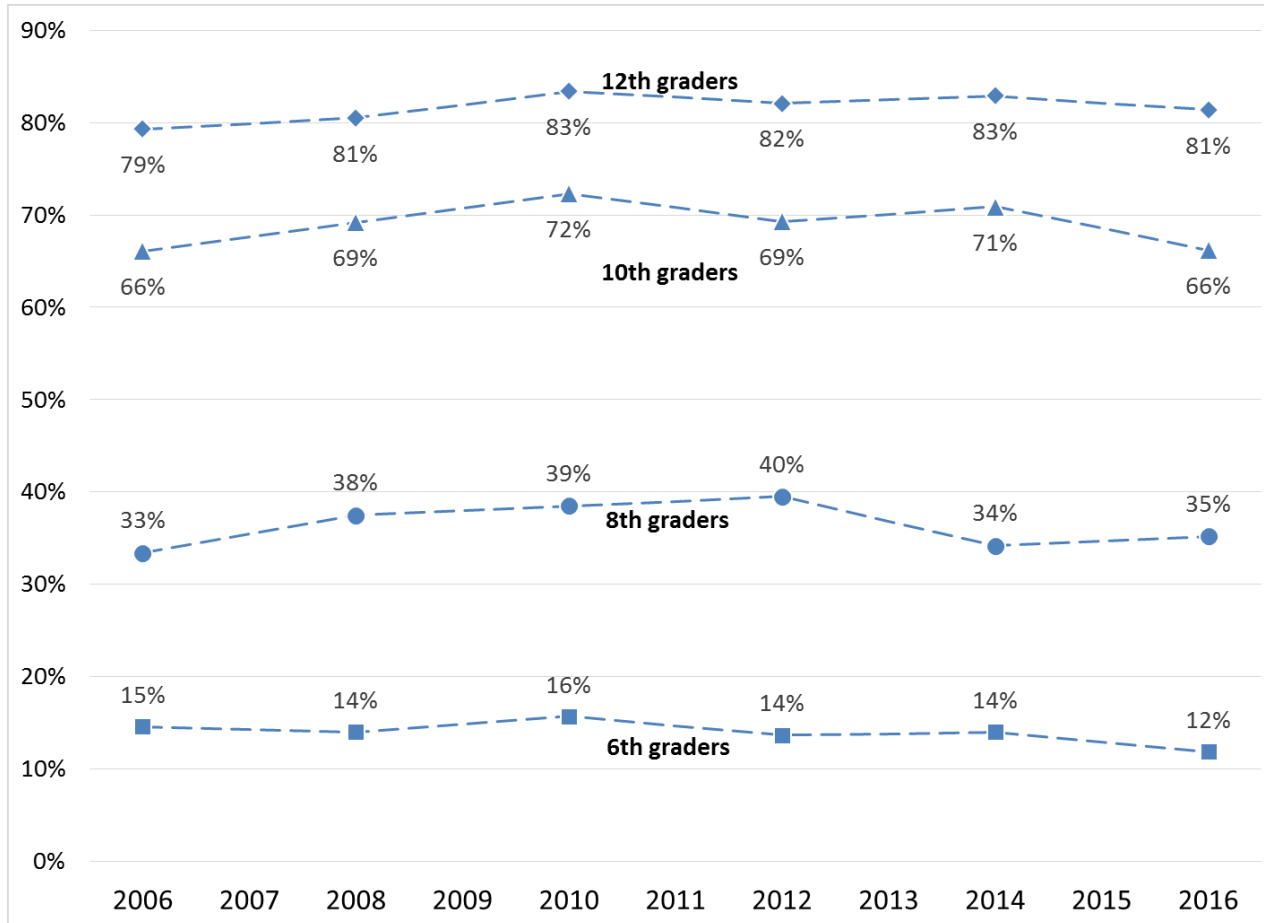
Source: Washington State Behavioral Risk Factors Surveillance System



1.5 Access – Students

In response to the question, “If you wanted to get some marijuana, how easy would it be to get some?” this measure includes, by convention, those answering “sort of hard,” “sort of easy” and “very easy.” While access differs by grade level, no significant trends are seen over time.

Source: Washington State Health Youth Survey

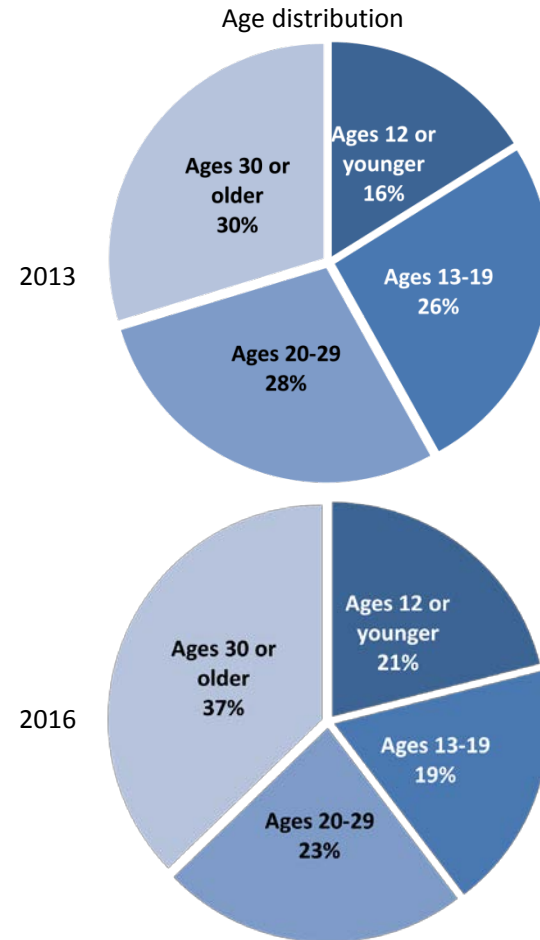
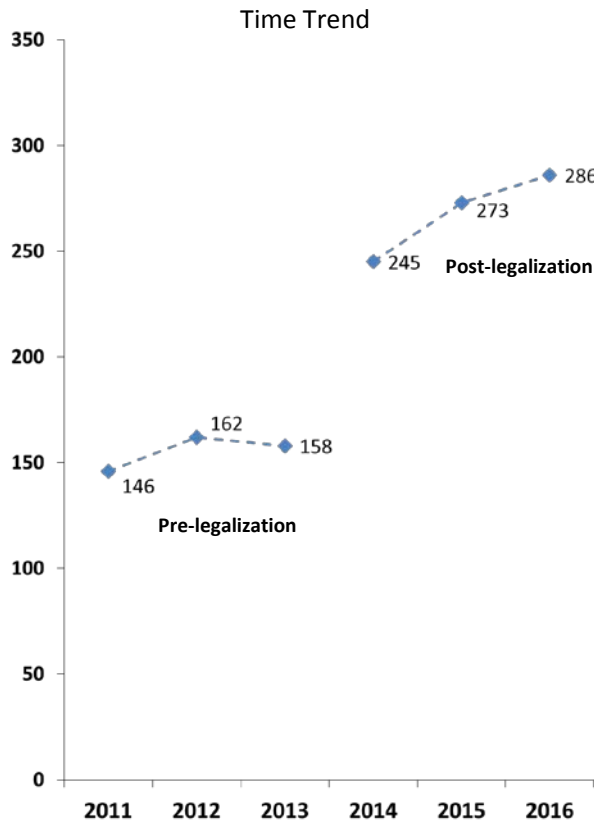


* No significant trend

1.6 Poisonings

The average number of marijuana-related calls to the Washington Poison Center for the three years pre-legalization (2011-13) increased by 70 percent compared to the three years post-legalization (2014-16). And while there appear to be shifts in the age distribution from the last year pre-legalization to the most current year post-legalization – where in 2013 more than half the calls were for those ages 13 to 29, while in 2016 more than half the calls were for those ages 12 or younger and 30 or older – those differences are not statistically significant.

Source: Washington Poison Center

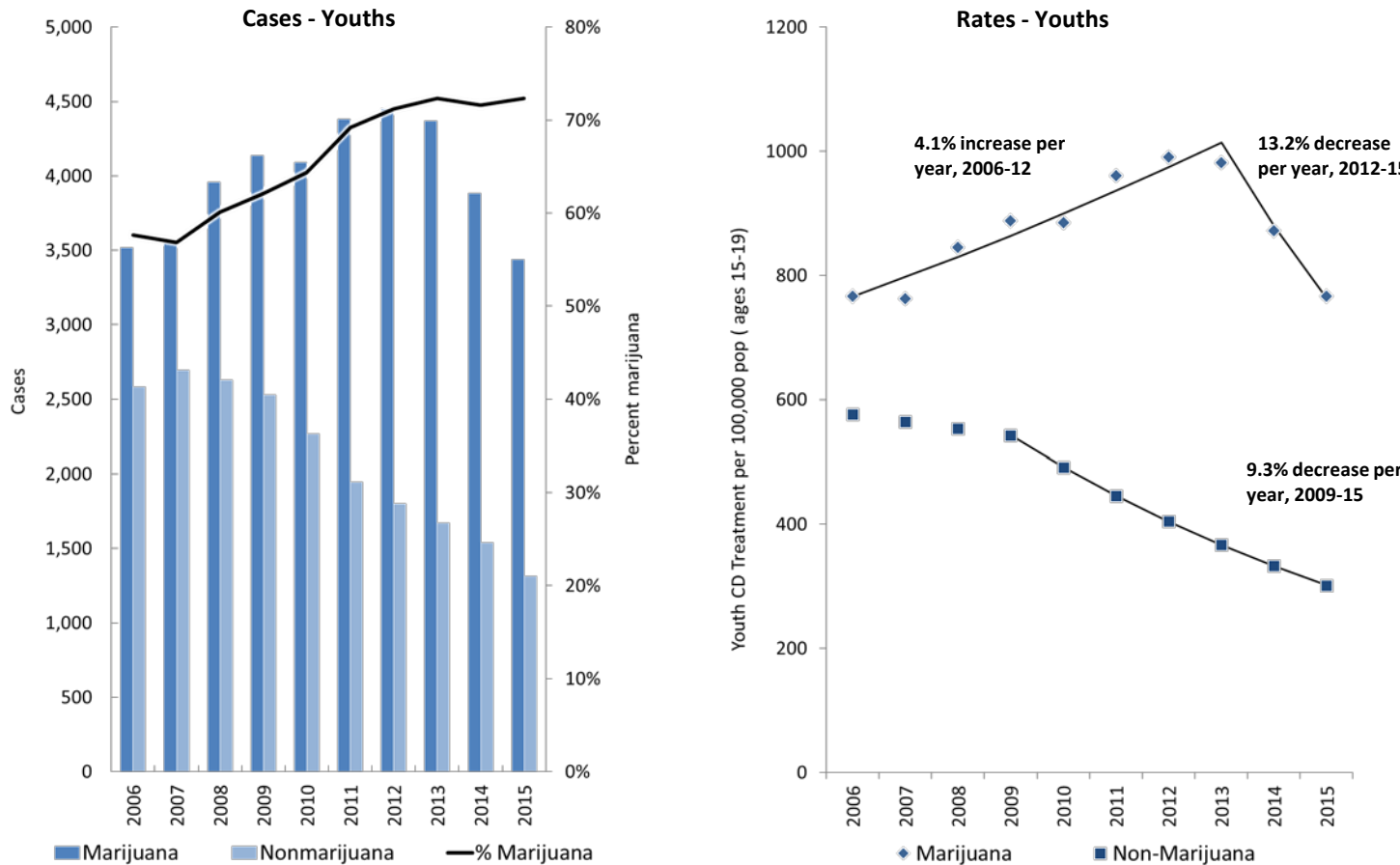


1.7 Substance Use Disorder Treatment Among Youths

Marijuana substance use disorder (SUD) treatment for youths ages 15 to 19 receiving publicly funded services reached a peak in 2012 and has been decreasing since. SUD treatment for non-marijuana substances has been decreasing since 2007. Of the total SUD youths in treatment, marijuana has constituted 72 percent of the cases since 2012.

Rates for youths in marijuana treatment had been increasing by six percent per year until 2012; however, since 2012 those rates have been decreasing by 13 percent per year. Treatment rates for drugs other than marijuana have been decreasing by nine percent per year since 2009.

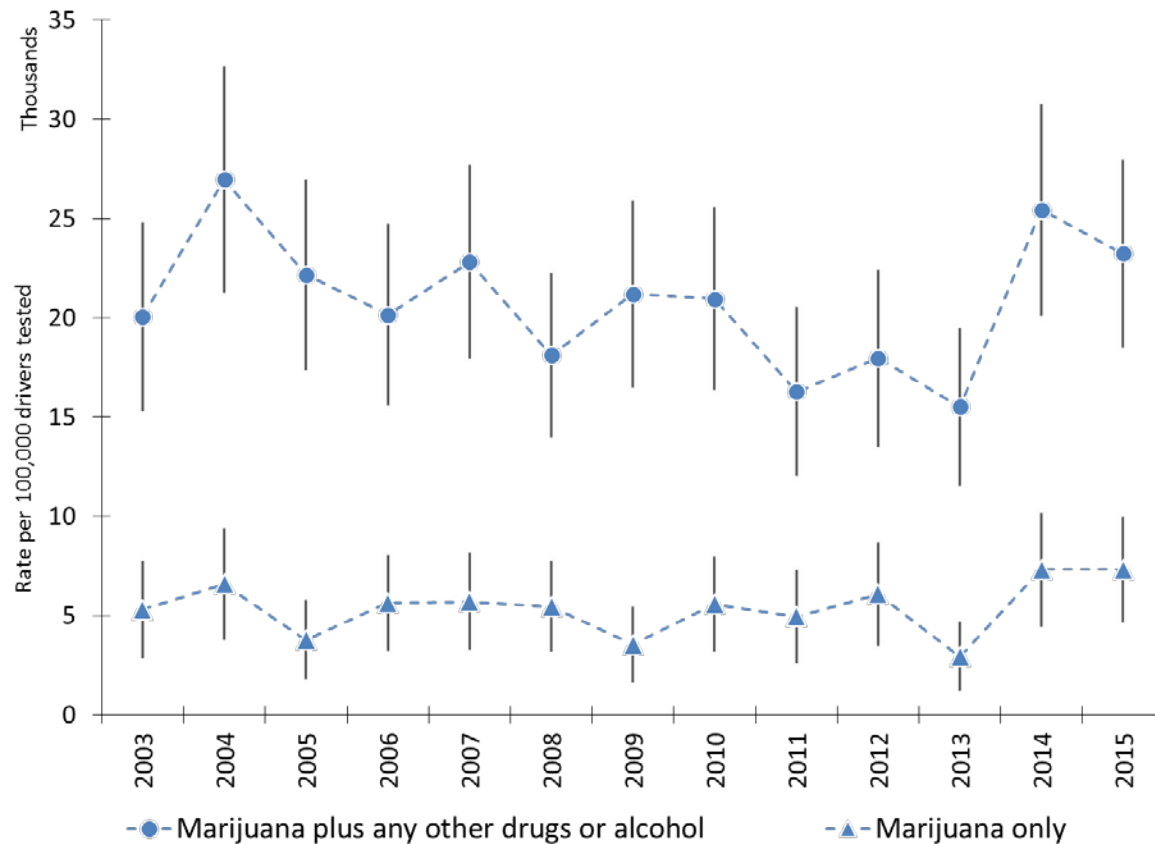
Source: Department of Social and Health Services (Behavioral Health and Service Integration Administration/ Chemical Dependency)



1.8 Traffic Fatalities

These time-series data include the total number of drivers involved in fatal crashes who were tested for drugs and alcohol and, of those tested, the number who tested positive. Rates for those tested and were found positive for marijuana plus alcohol or other drugs as well as rates for those who tested positive for marijuana only show no significant trend. Similarly, differences among the years' rates are generally not statistically significant. Detailed data on the presence of delta-9 THC in blood showed no difference between pre- and post-legalization.

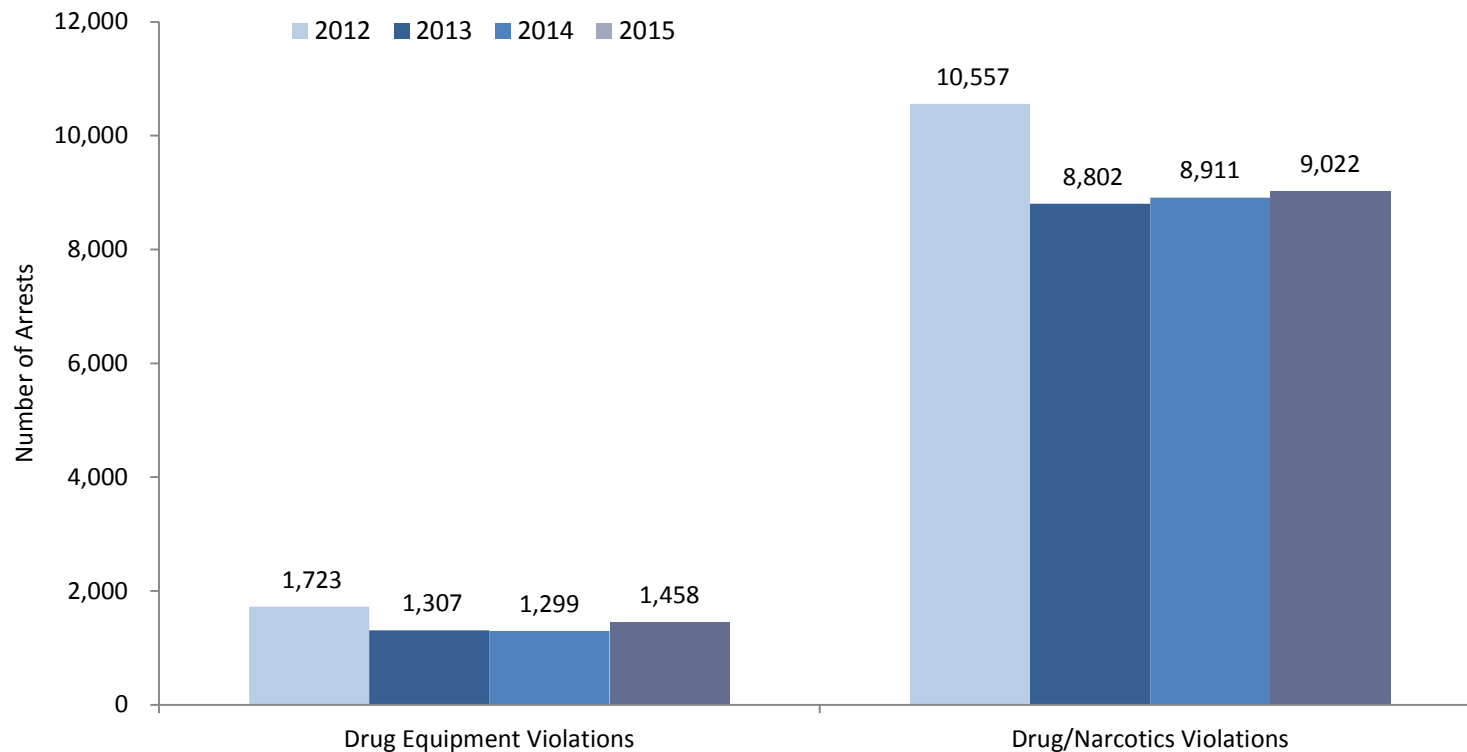
Source: Washington Traffic Safety Commission



2.1 Drug or Narcotic Arrests*

Between 2012 and 2015, there was a 25 percent decrease in arrests for drug equipment violations and a 16 percent decrease in arrests for drug or narcotic violations. However, from 2014 to 2015 there was a 12 percent increase for drug equipment violations and a one percent increase in arrests for drug or narcotic violations. Drug equipment refers to equipment or devices used in preparing and/or using drugs or narcotics.

Source: *Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)*

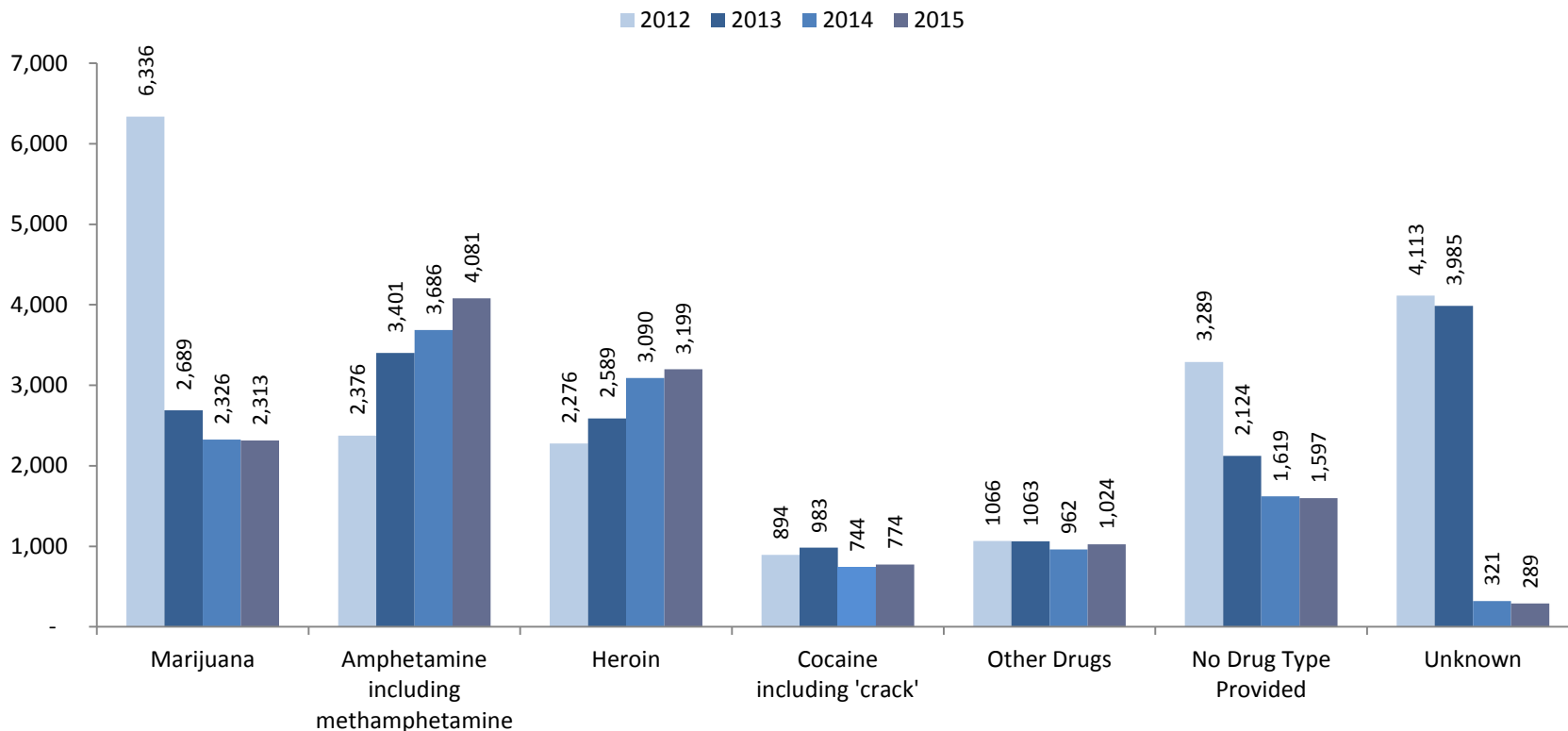


*Each of the arrests may include multiple drug and/or narcotic offenses. Arrests for both equipment and possession violations are counted only once, and are included in whichever category is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.

2.2 Drug or Narcotic Incidents*

The number of incidents involving marijuana decreased by 63 percent from 2012 to 2015. In contrast, during that same time period, incidents involving amphetamines or methamphetamines increased by 72 percent while those involving heroin increased by 41 percent.

Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)

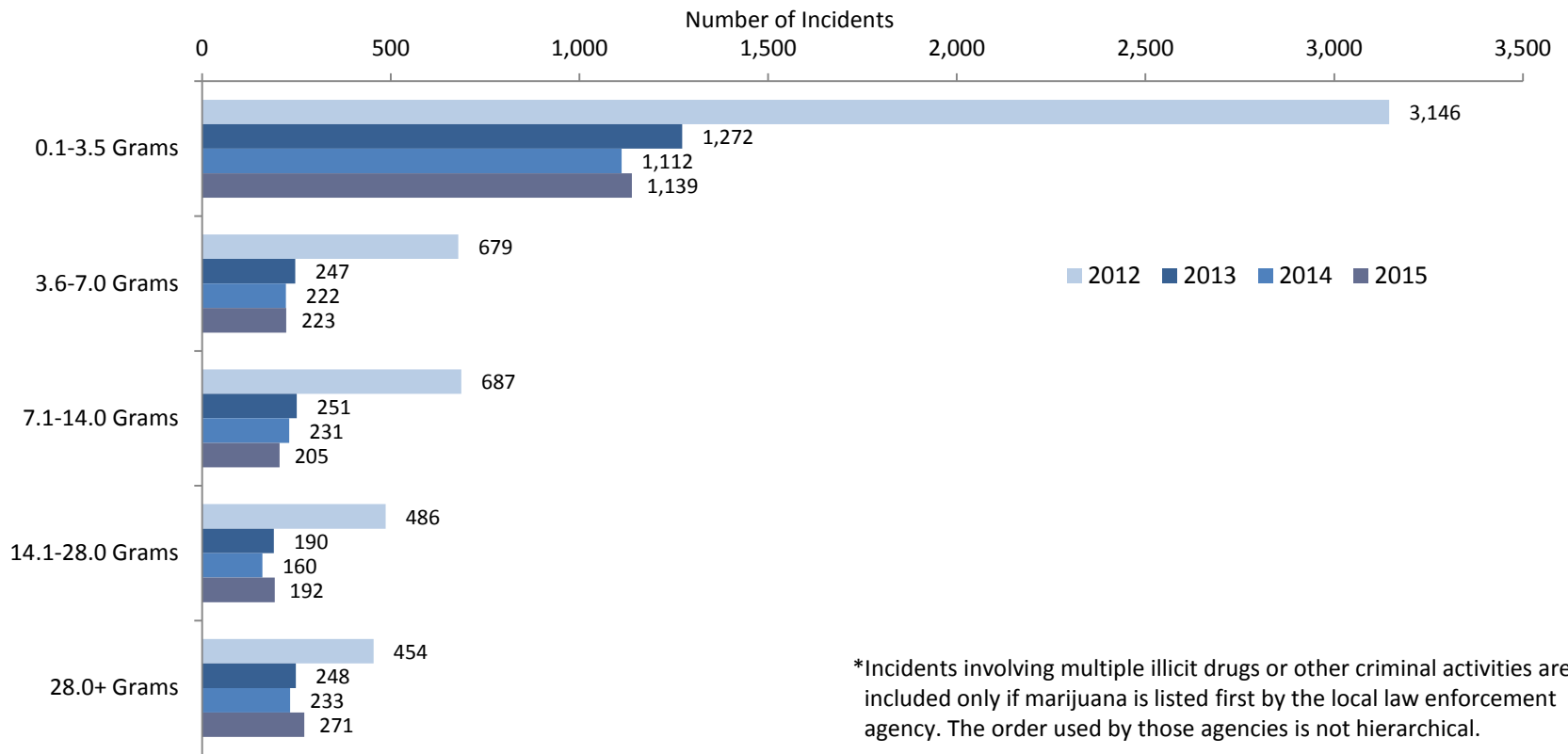


*As defined by the FBI, an “incident” occurs when any law enforcement officer investigates a scene or situation, whether that investigation results in an arrest or not. Incidents involving multiple illicit drugs or other criminal activities are only counted once, and are included in whichever category is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.

2.3 Marijuana Quantities Seized

Incidents where the quantity of marijuana seized was reported in grams (or in a unit that could be converted) are shown below.* For 2012–15, the most frequent number of seizures continues to be for quantities of 3.5 grams (an eighth of an ounce) or less, and yet, for the same time period, the number of such seizures dropped by 64 percent. Note, however, that there was a slight increase from 2014 to 2015 for that group as well as for arrest pertaining to higher quantities.

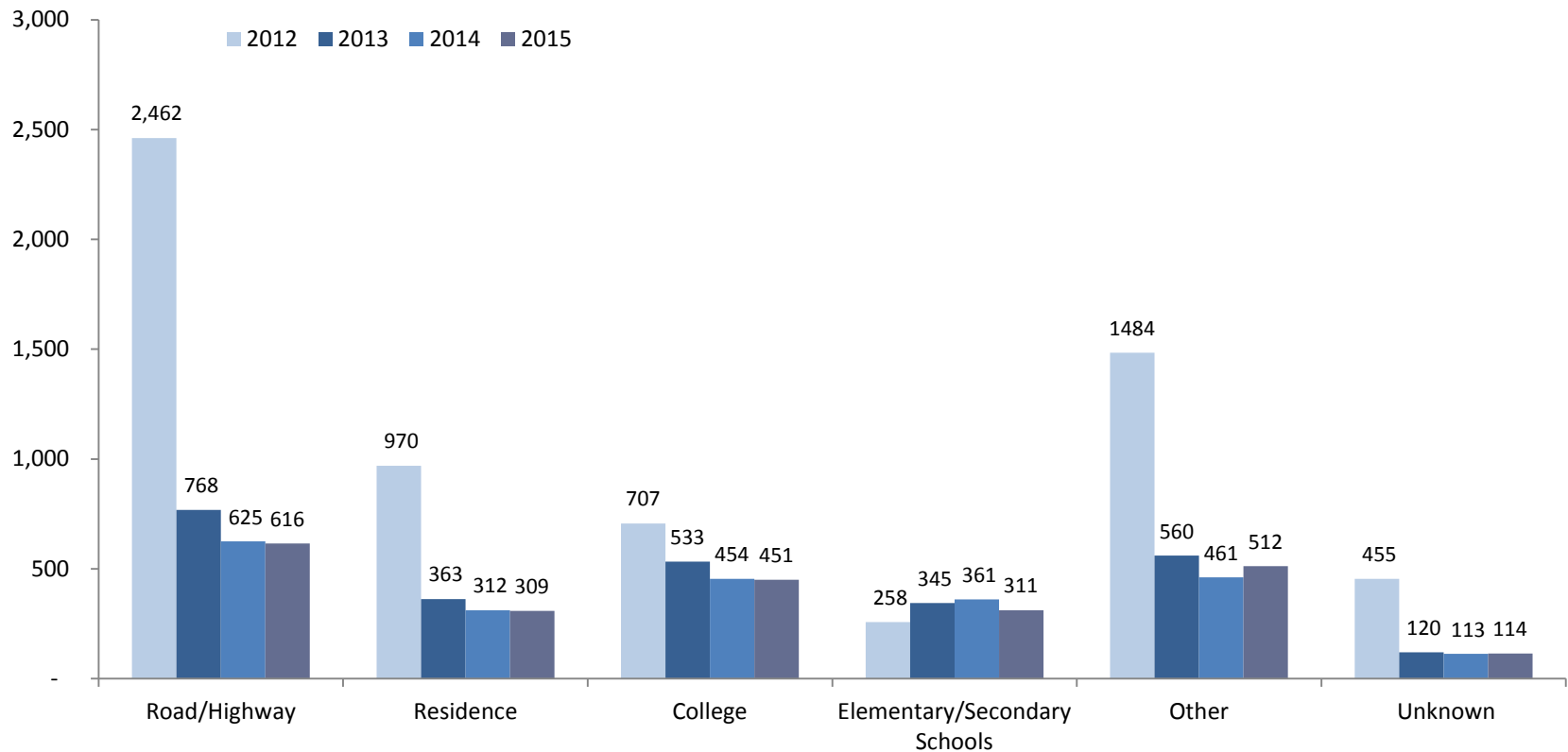
Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)



2.4 Incident Locations

Marked decreases were seen in nearly all locations where there were incidents involving marijuana.* For highways, roads or alleys, the number of incidents decreased by 75 percent, from 2,462 in 2012 to 616 in 2015. No increases are seen in any of the other identified locations.

Source: Washington Association of Sheriffs and Police Chiefs (does not include State Patrol data)

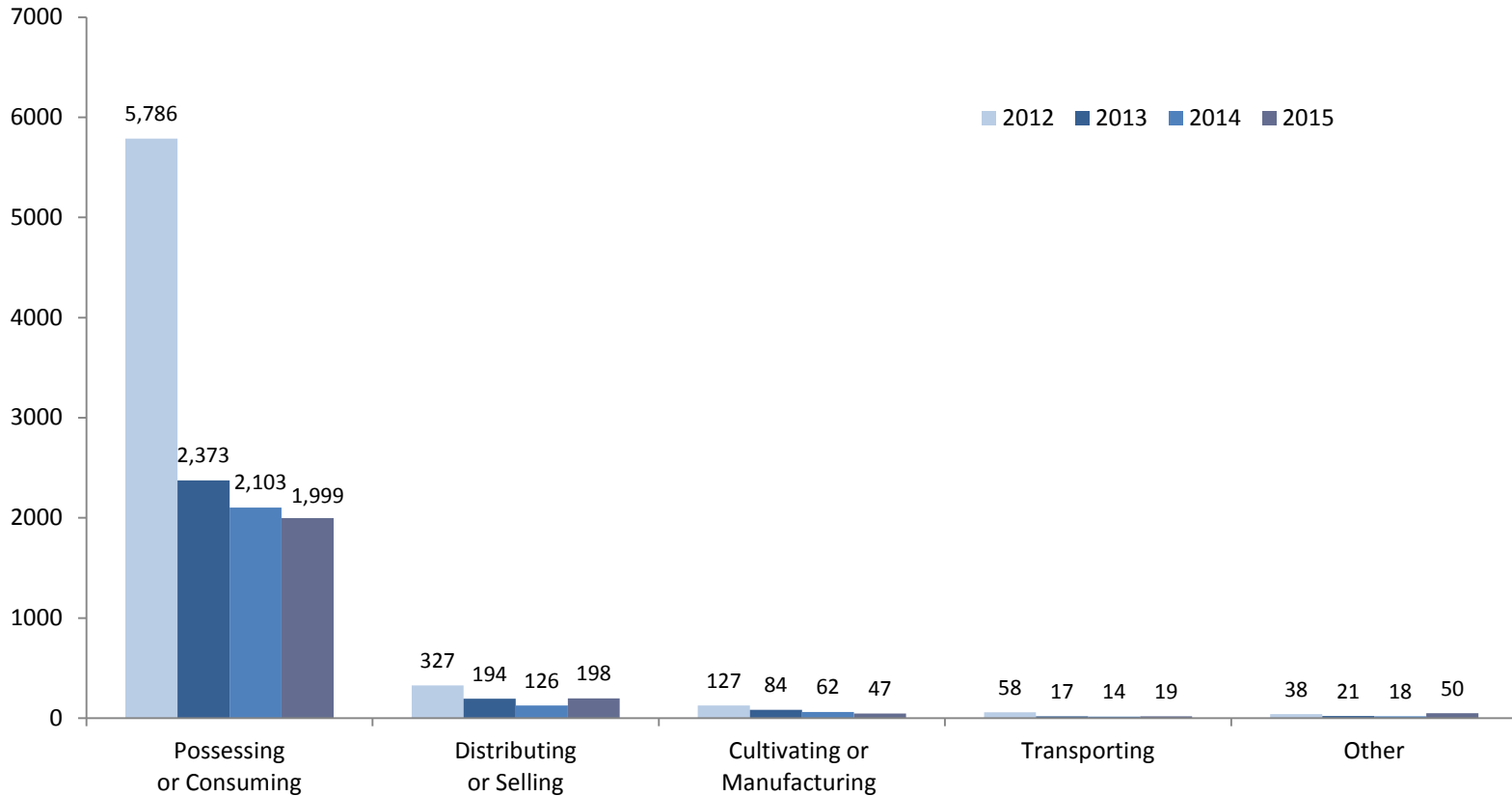


*Incidents involving multiple illicit drugs or other criminal activities are included only if marijuana is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.

2.5 Criminal Activities Involving Marijuana

From 2012 to 2015, possession and/or consuming was the most common criminal activity involving marijuana. However, the number of such incidents decreased by 65 percent during those four years.* Distribution or selling, however, increased by 57 percent from 126 in 2014 to 198 in 2015.

Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)

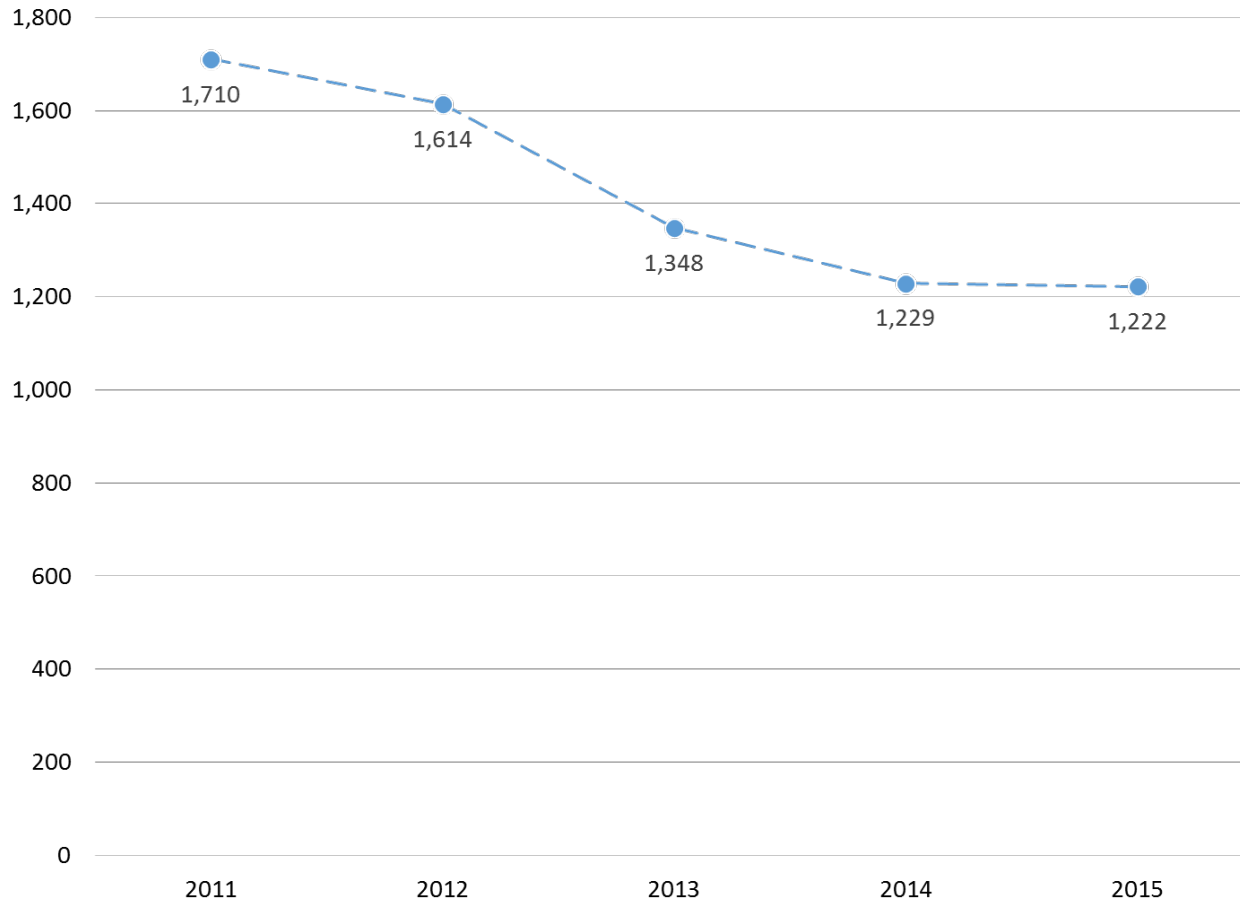


*Incidents involving multiple illicit drugs or other criminal activities are included only if marijuana is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.

2.6 Drug-only DUI Arrests

Drug-only DUI arrests do not differentiate marijuana from other drugs. These arrests moved from a high of 1,710 in 2011 to a low of 1,222 in 2015, for an overall decrease of 29 percent during those four years.

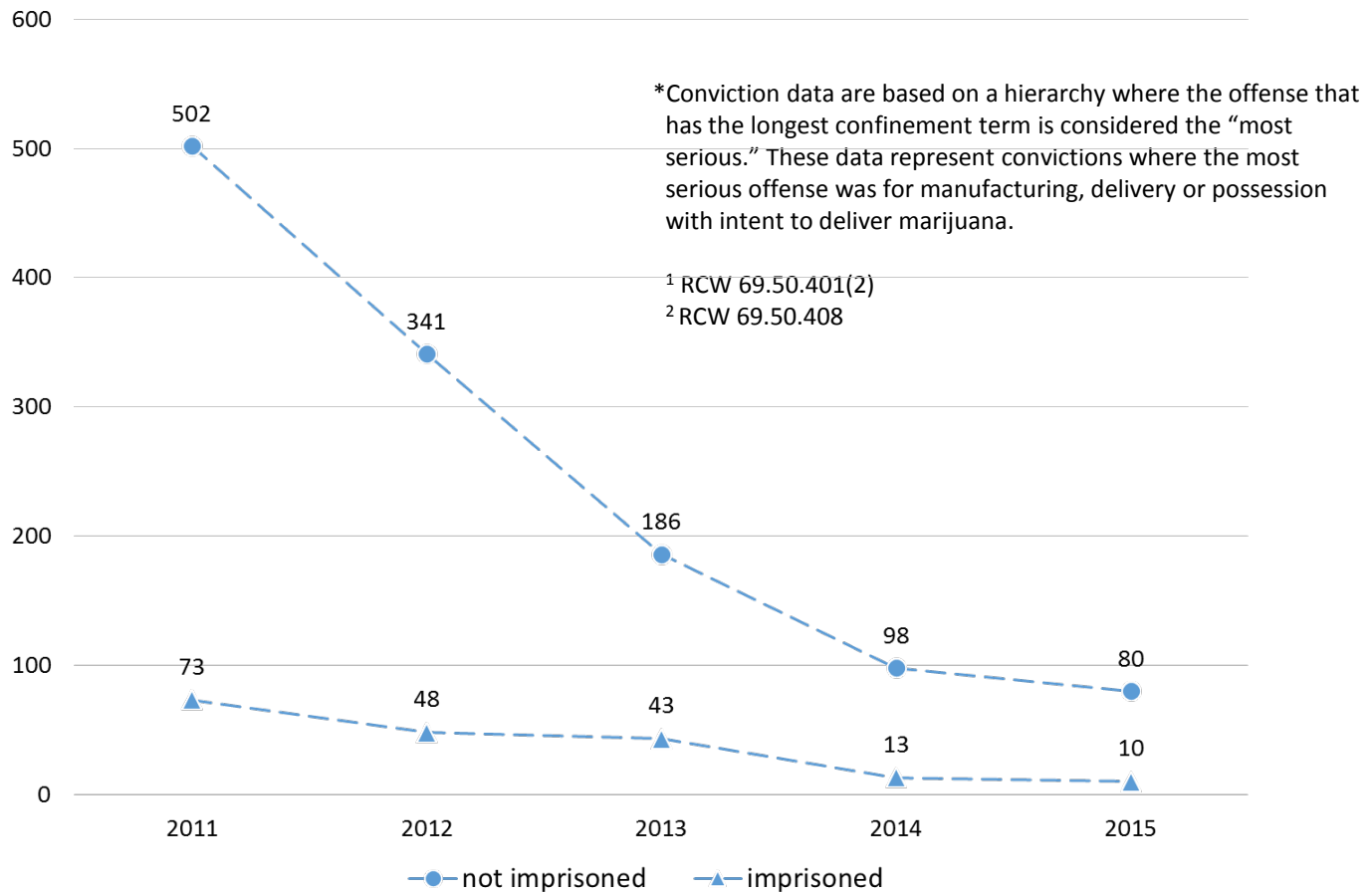
Source: Washington State Patrol



2.7 Marijuana-related Convictions

From 2011 to 2013, the only convictions for the manufacturing, delivery or possession with intent to deliver marijuana¹ were first-time convictions; in 2014, five of the 98 nonprison convictions were repeat convictions² and in 2015 two were repeat offenders. Overall, marked decreases are seen in both nonprison convictions, dropping by 84 percent from 2011 to 2015, and in-prison convictions, dropping by 86 percent during that same time period.

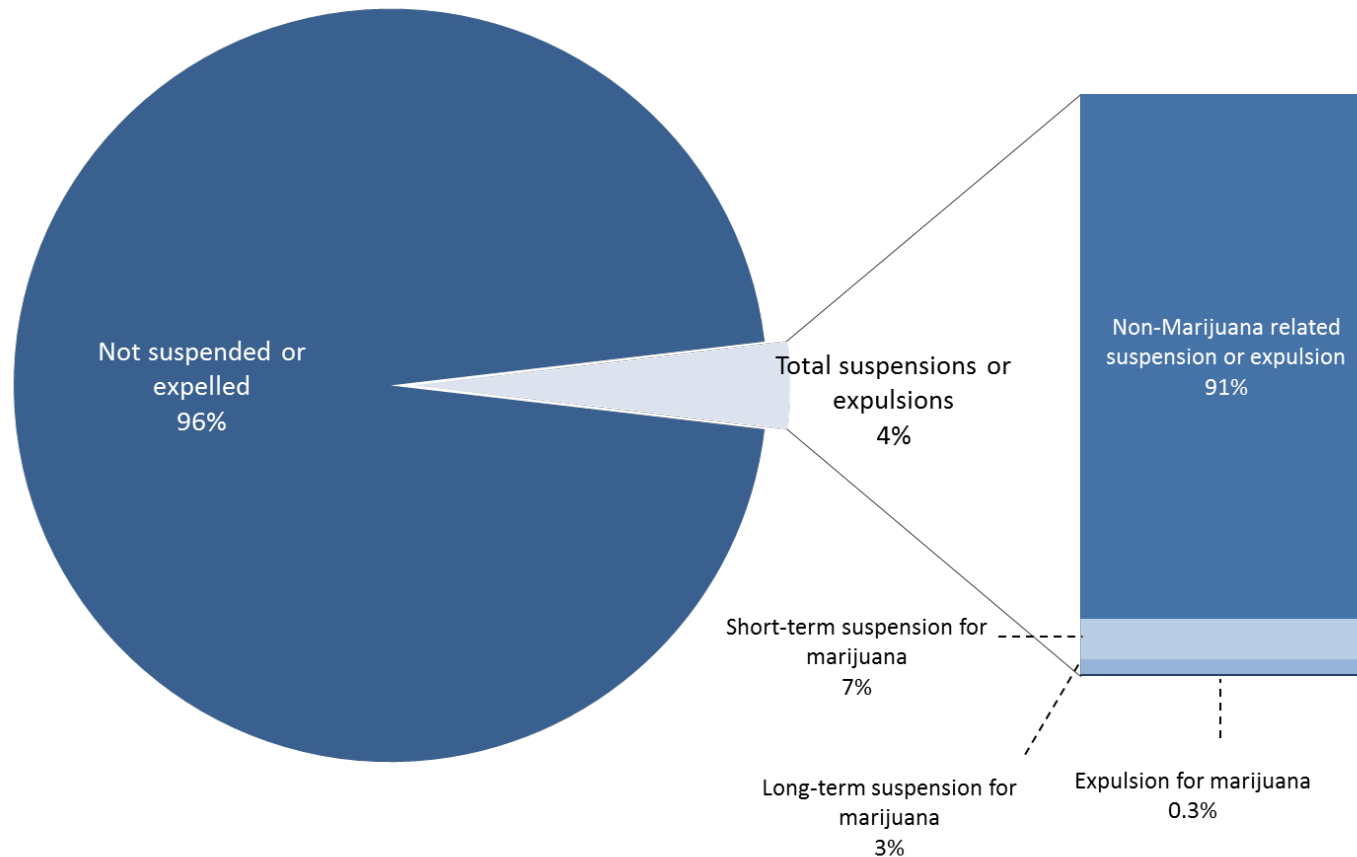
Source: Washington State Caseload Forecast Council, *Statistical Summary of Adult Felony Sentencing*



2.8 Suspensions or Expulsions from Schools – Students

For the 2015-16 school year, 4 percent of all students were suspended or expelled. Of those suspended or expelled, 9 percent (or 0.4 percent of all students) were suspended or expelled due to marijuana possession, with 7 percent of those suspended or expelled receiving a short-term suspension (10 or fewer consecutive days), 3 percent receiving a long-term suspension (more than 10 consecutive days) and 0.3 percent being expelled.

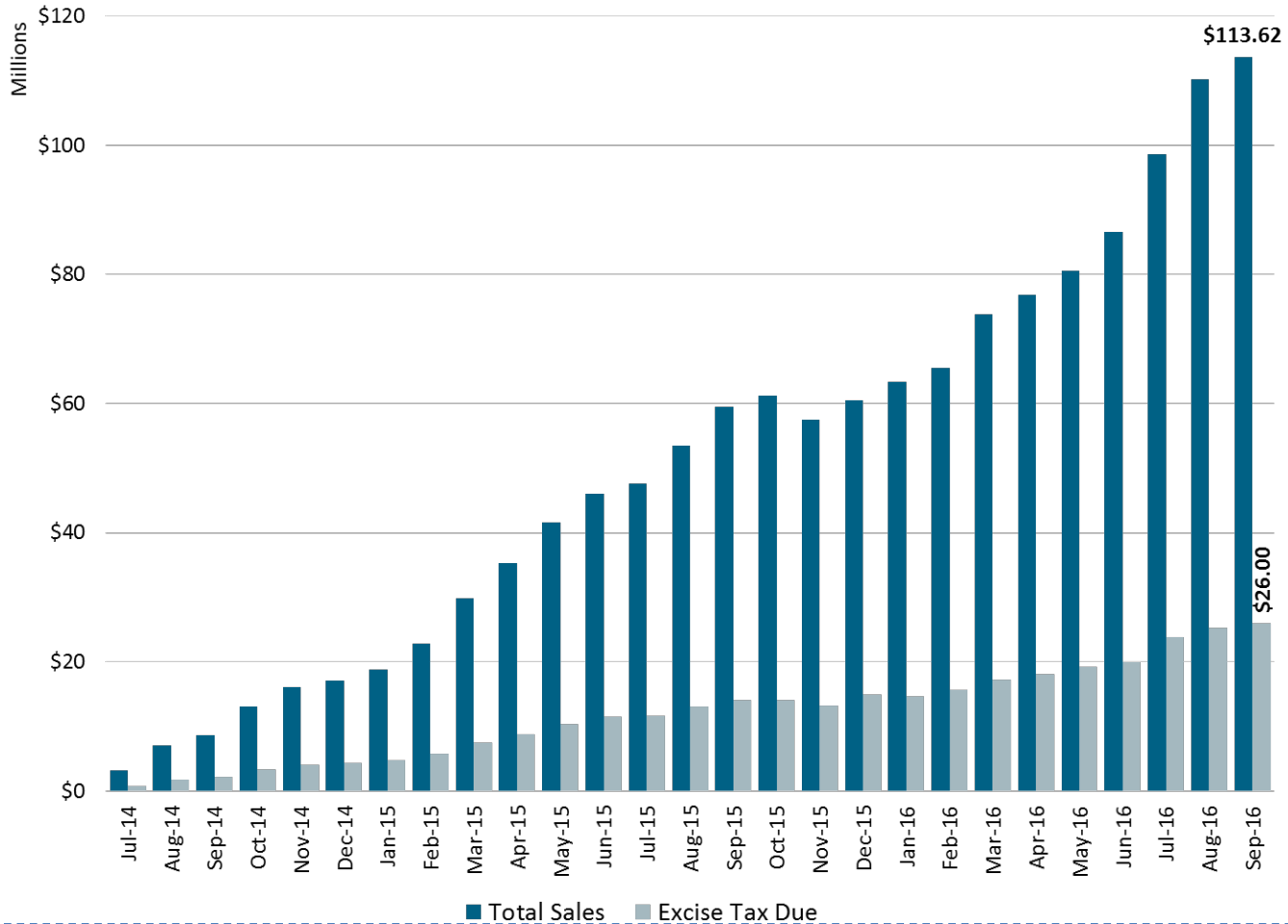
Source: Office of Superintendent of Public Instruction



3.1 Recreational Marijuana Revenues with 25 Percent Excise Tax

Sales increased by an average of 69 percent per month during the first three months of legalization. They then increased by 20 percent per month for the next eight months, October 2014 to May 2015. Since then, sales have been increasing by six percent per month. In September, 2016, sales had reached \$114 million with excise taxes reaching \$26 million.

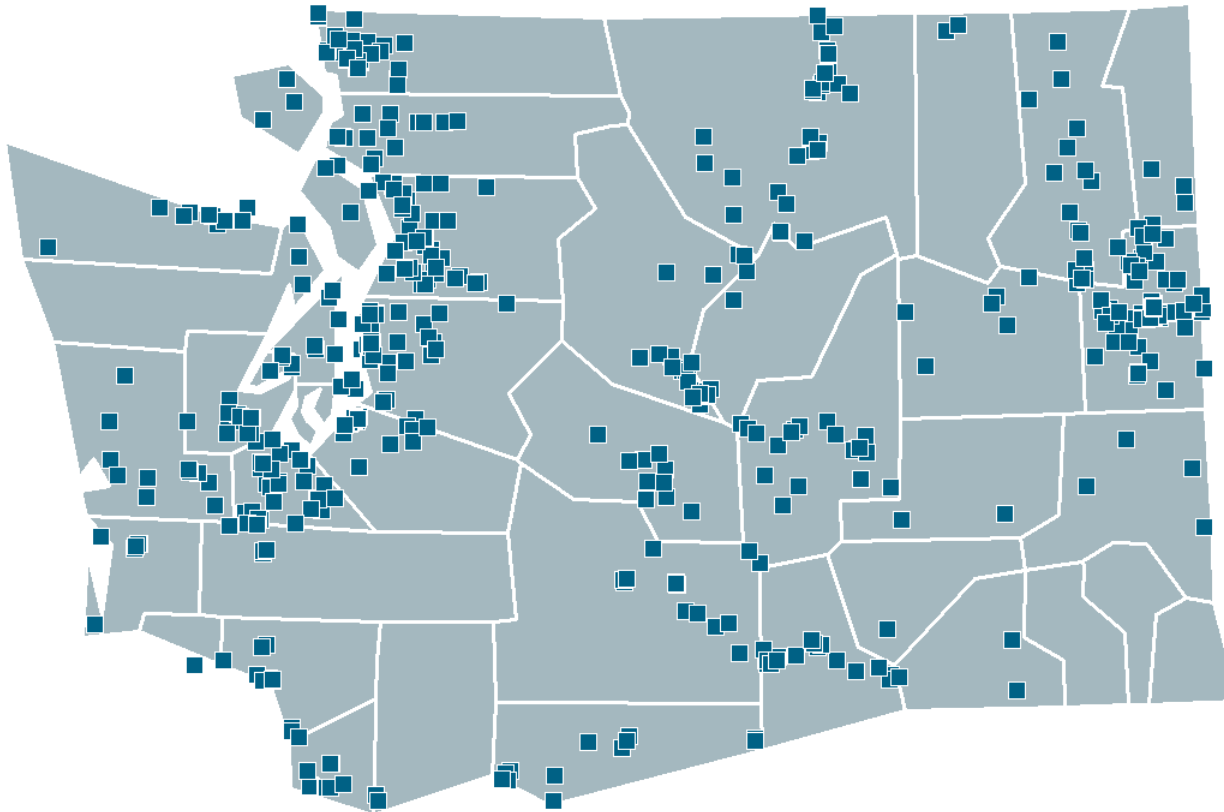
Source: Washington State Liquor and Cannabis Board



4.1a Producers/Processors – Locations

The 745 active licensed producers' (for January 2017) are spread throughout the state. Producers are active in all but three counties: Columbia, Garfield and Asotin. In general, producers also act as processors.

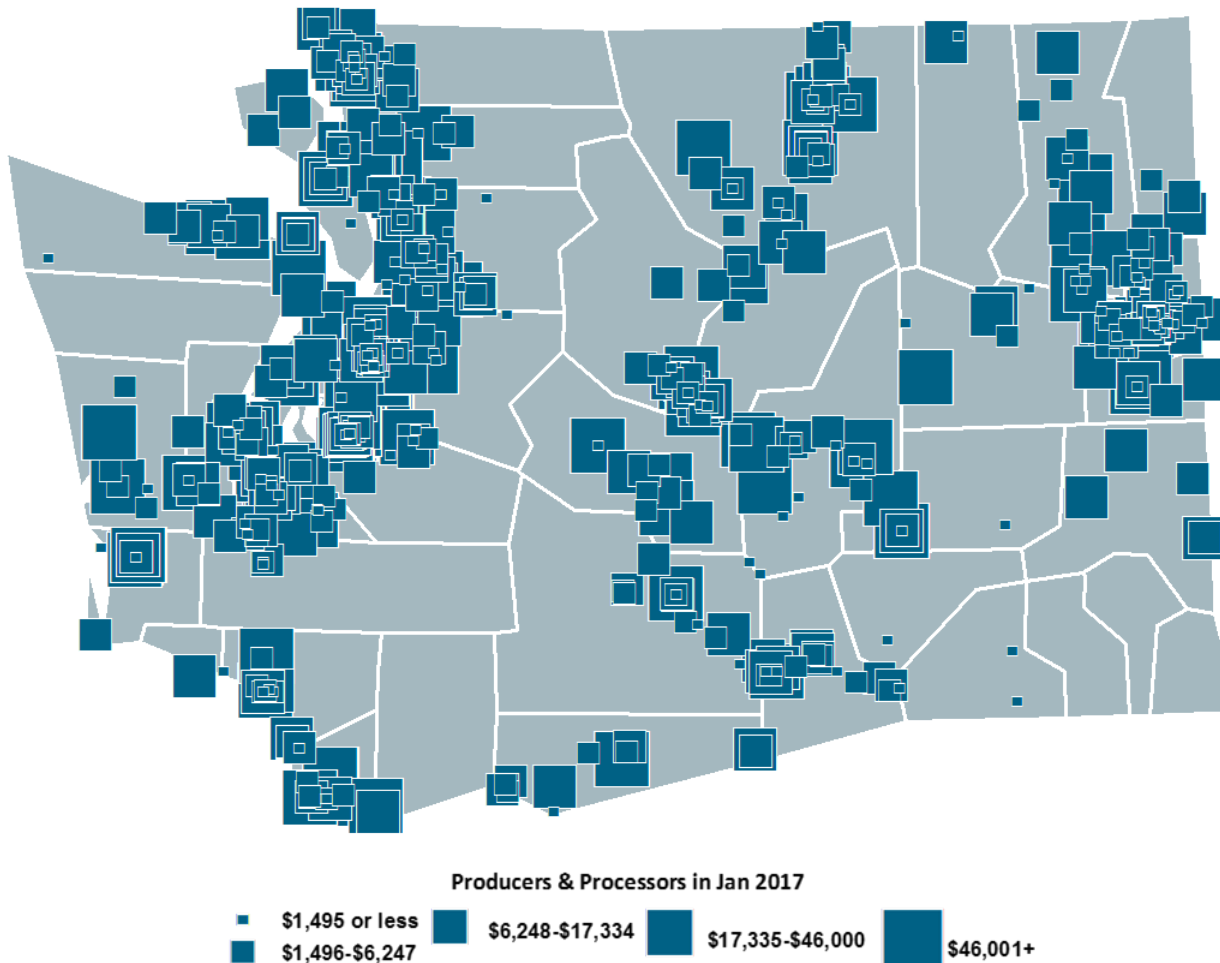
Source: Washington State Liquor and Cannabis Board



4.1b Producers/Processors – Volumes

Volumes of sales by producers/processors (for January 2017) suggest that large-volume producers are not limited to any specific geographic areas but instead are spread throughout the state.

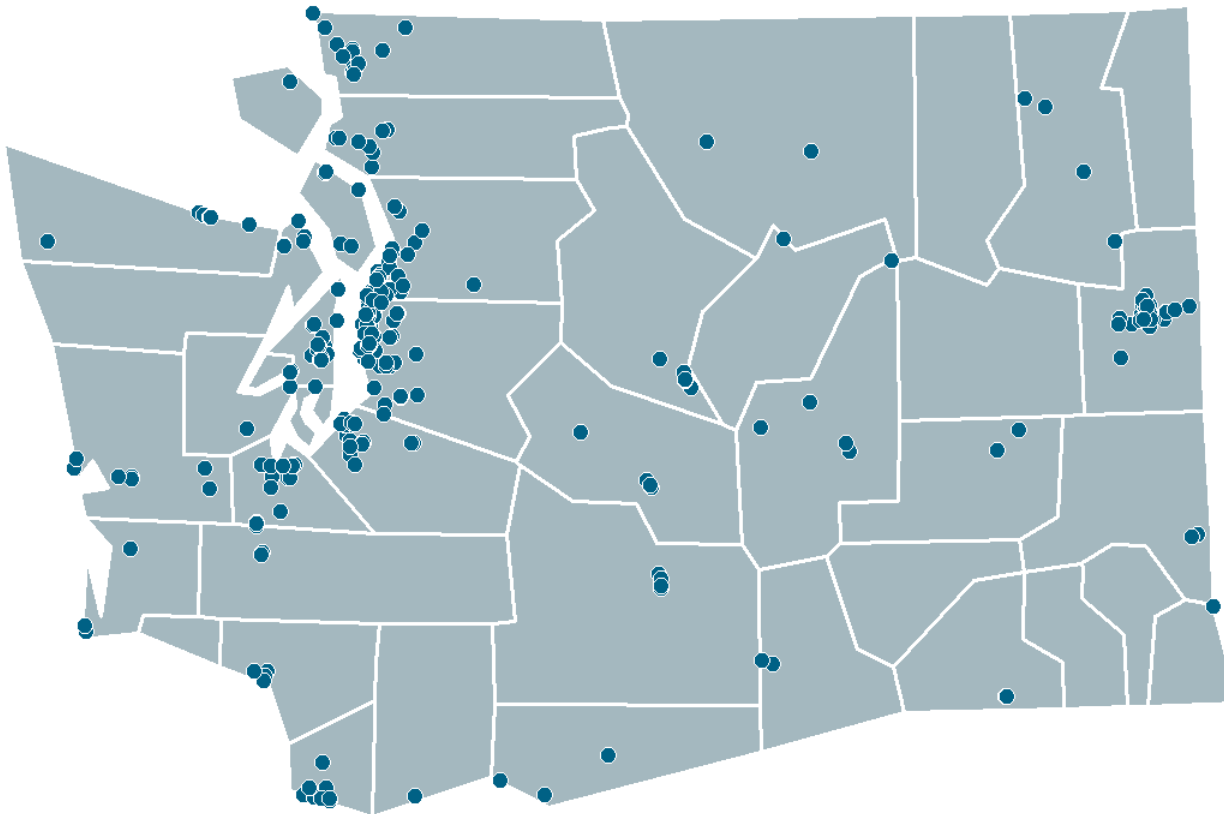
Source: Washington State Liquor and Cannabis Board



4.2a Retailers – Locations

The 310 active licensed recreational marijuana retailers' locations (in January 2017) suggest that most are located in urban and city environs. Active retailers are in all but six counties: Columbia, Franklin, Garfield, Lincoln, Pend Oreille and Wahkiakum.

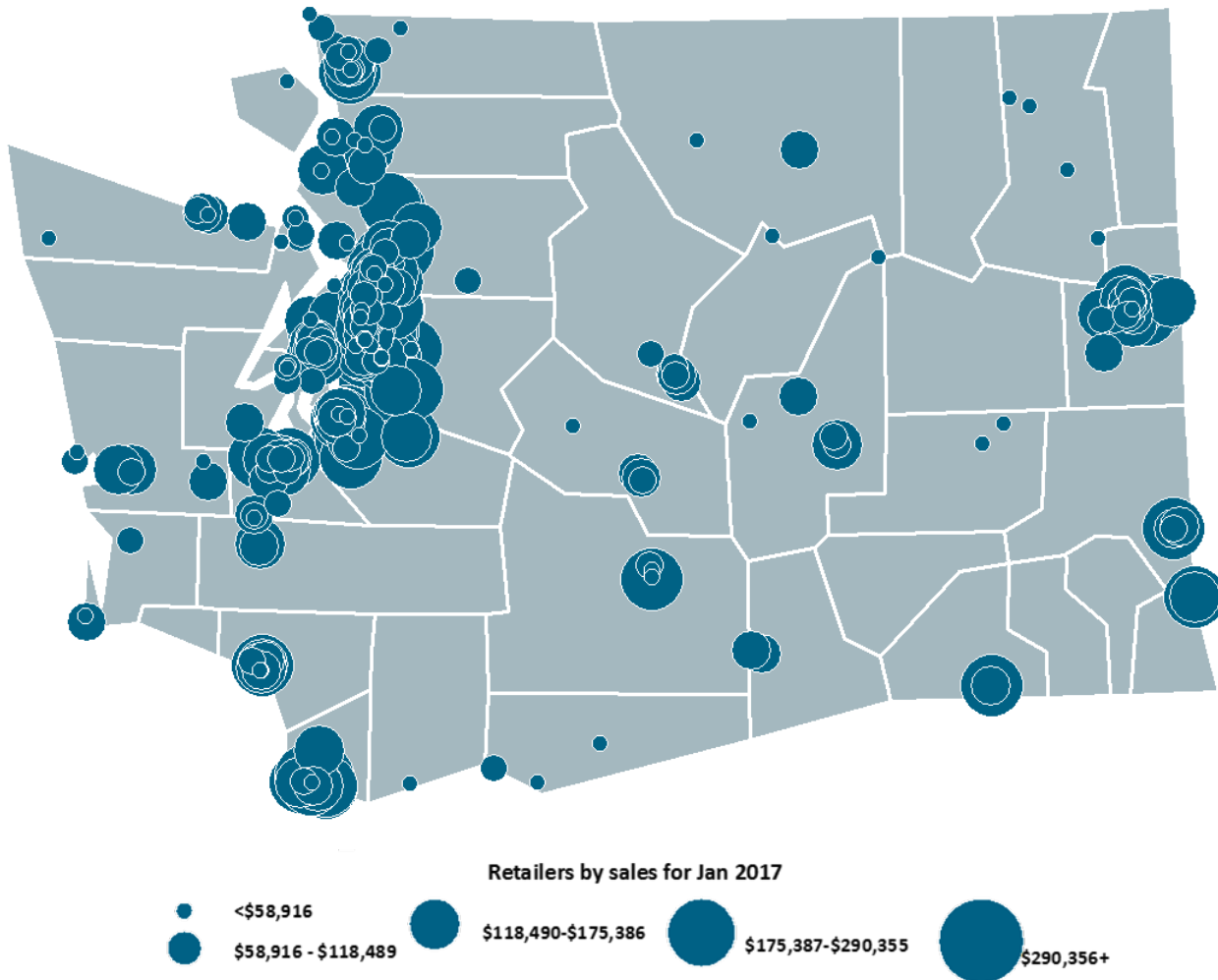
Source: Washington State Liquor and Cannabis Board



4.2b Retailers – Volumes

Retail sale volumes for recreational marijuana also generally suggest that large sales occur in more urban areas, with seemingly notable exceptions in Benton and Whitman counties.

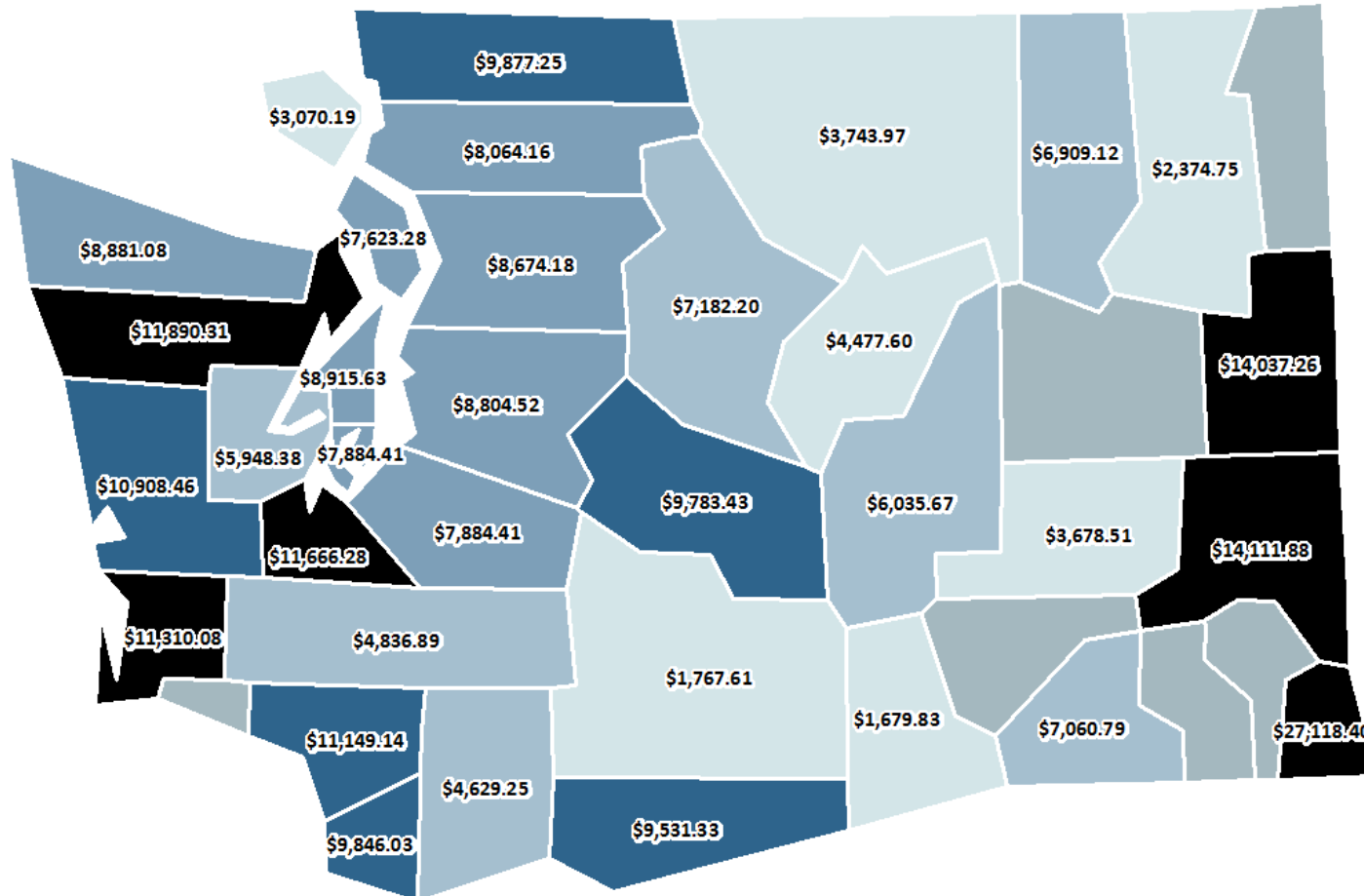
Source: Washington State Liquor and Cannabis Board



4.3 Per Capita Sales by County

Retail sales of recreational marijuana sold per 1,000 persons living within the county where the sales occurred (for January 2017) are mapped below. Of the six counties with the highest per capita sales, three (Spokane, Whitman and Asotin) are on the Idaho state border. No sales occurred in Columbia, Franklin, Garfield, Lincoln, Pend Oreille and Wahkiakum counties.

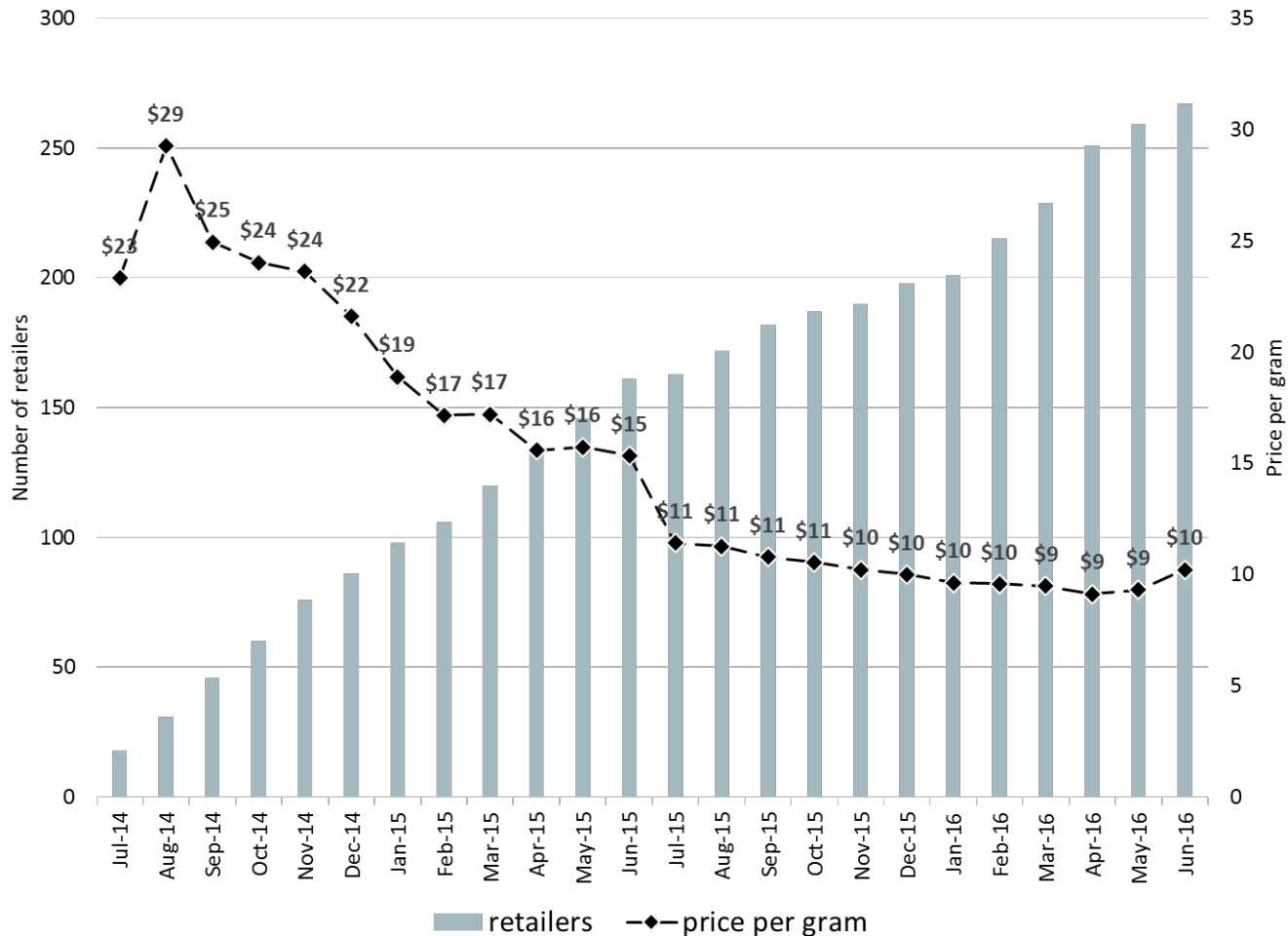
Source: Washington State Liquor and Cannabis Board and OFM population data



4.4 Retailers and Price per Gram

The average price per gram dropped from a high of \$29 in August 2014 to a low of \$9 in April 2016, and has risen slightly since to \$10 in June, 2016, when, concurrently, the number of retailers reached its all time high of 267.

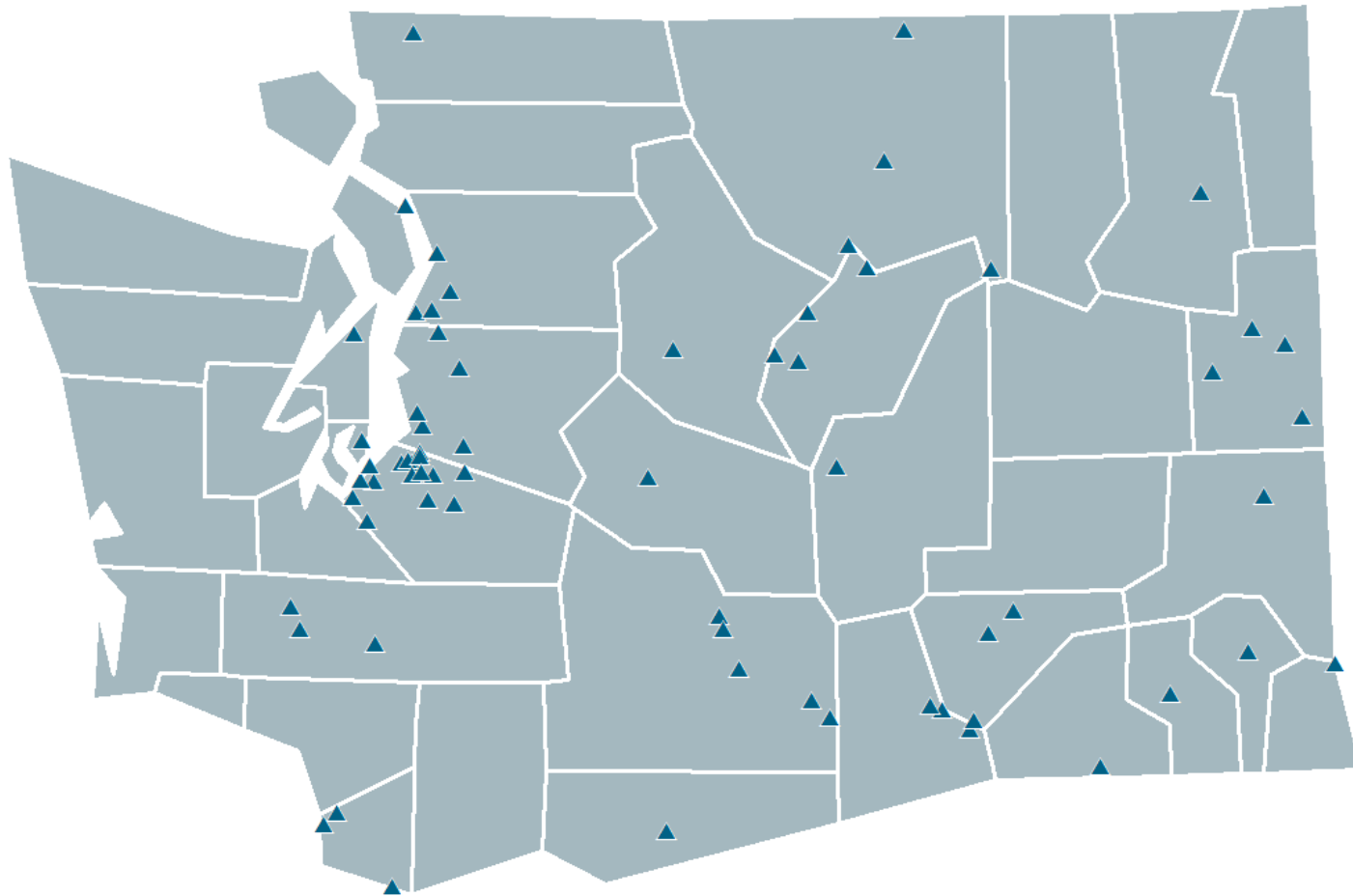
Source: Washington State Liquor and Cannabis Board



5.1 Cities with Prohibitions or Moratoria on Retail Sales

As of January 2017, 67 cities have prohibitions or moratoria on retail sales of recreational marijuana.

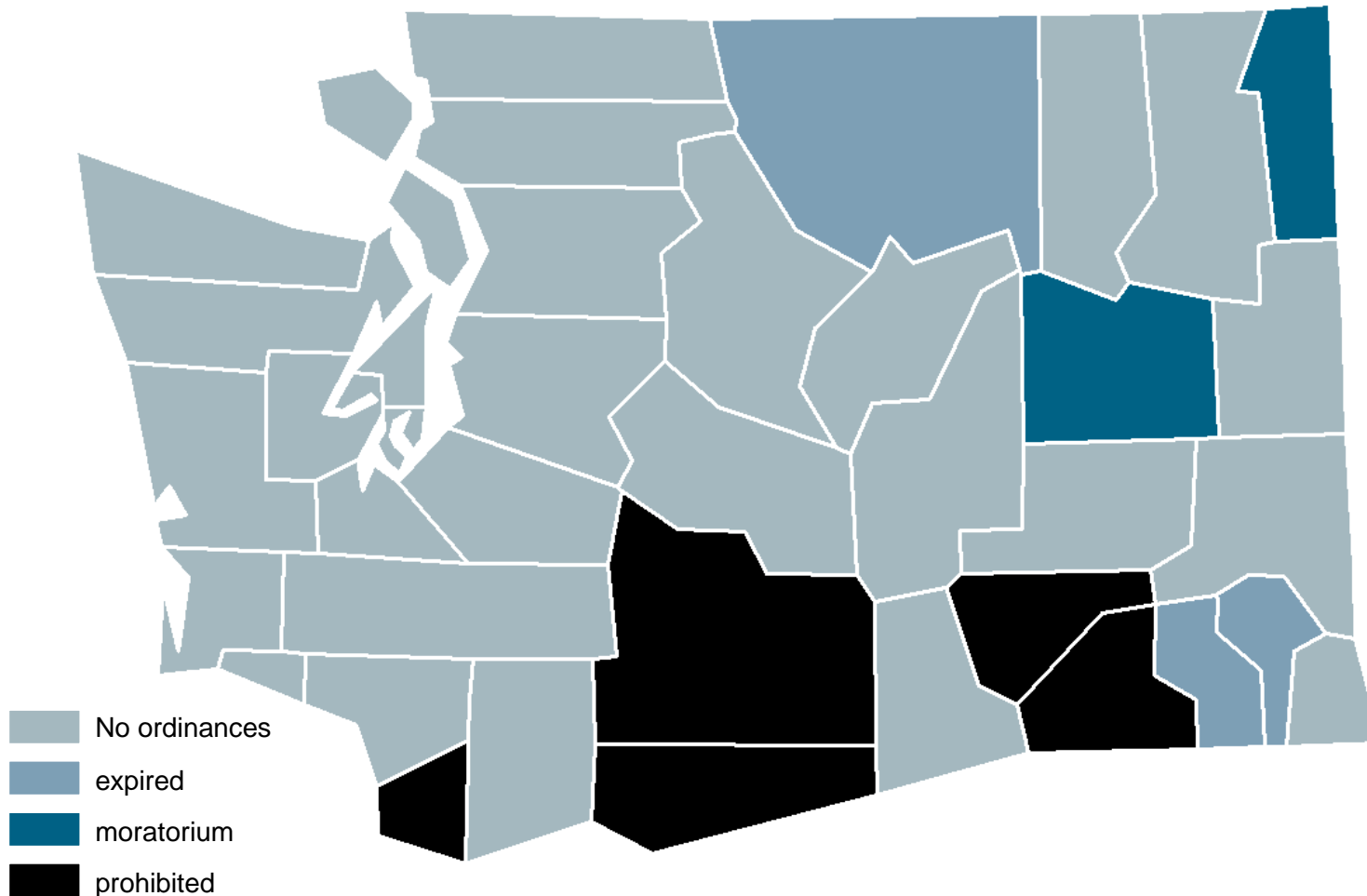
Source: Municipal Research and Services Center



5.2 Counties with Prohibitions or Moratoria on Retail Sales

As of January 2017, two counties have moratoria on the sale of recreational marijuana in their unincorporated regions and five have prohibitions; moratoria in three counties recently expired.

Source: Municipal Research and Services Center



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