

Monitoring Impacts of Recreational Marijuana Legalization

2015 Baseline Report



Introduction

In 1998, Washington state voters approved Initiative 692, permitting the medical use of marijuana for certain terminal or debilitating conditions and allowing physicians to advise patients about the medical use of marijuana.

In 2011, the Washington State Legislature passed Engrossed Second Substitute Senate Bill 5073 (E2SSB 5073), amending and clarifying the law on medical marijuana. The bill created a patient registry, allowed for multiple-patient collective gardens and created a state licensing system for producers, processors and dispensers. Citing concerns about putting state employees at risk of federal prosecution, Gov. Chris Gregoire vetoed the portions of E2SSB 5073 that would have directed state employees of the state departments of Health and Agriculture to authorize and license commercial businesses that produce, process or dispense marijuana. The surviving provisions of the bill increased protection for qualifying patients and their designated providers to grow marijuana for a patient's use or to participate in collective gardens, without state regulation.

In 2012, Washington state voters approved Initiative 502, legalizing the recreational use of marijuana by individuals 21 or older. It charged the Washington State Liquor Control Board with licensing and regulating the production, processing and sale of marijuana.

Recreational marijuana sales began July 8, 2014, and as of March 1, 2015, there are 123 licensed marijuana retail stores in the state. In contrast, there are an estimated 1,100 medical marijuana dispensaries in Washington's still-unregulated medical marijuana market. Lawmakers are advancing legislation to regulate medical marijuana.

It is important to note that the data in this report, other than those specific to the implementation of I-502, reflect the current impact of marijuana in Washington, most of which is acquired outside the regulated market.



Highlights and key findings

1. HEALTH

- ▶ Among students surveyed, current marijuana use increased by grade, with the sixth graders having the lowest use at 1 percent in 2012, and 12th-graders the highest at 27 percent in 2012.
- ▶ Between 2006 and 2012, use among 12th-graders increased by an average of 4 percent per year. No trends were seen for grades 6, 8 or ten.
- ▶ Use among adults surveyed is highest for those ages 18 to 24, 15 percent in 2013.
- ▶ Use among adults ages 45 to 64 is increasing by 33 percent per year, from 4 percent in 2011 to 8 percent in 2013. No trends were seen within the other age groups.
- ▶ The percentage of 12th-graders who first used marijuana at age 15 is increasing by 6 percent per year, from a low of 8 percent in 2006 to a high of 11 percent in 2012.
- ▶ Among adults who had ever used marijuana, nearly half reported that they were between ages 14 and 17 the first time they tried it; this was true for each survey year. No trends in age at first use were identified for these adults.
- ▶ Among students, ease of access increased by grade, but no trends 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; in 2014, it markedly increased to 246.
- ▶ While the number of youths receiving state-funded substance use disorder (SUD) treatment has decreased, the proportion receiving such treatment for marijuana has increased from a low of 61 percent in 2007 to a high of 78 percent in 2013.

1. HEALTH (continued)

- ▶ Population-based rates of state-sponsored SUD treatment for marijuana use among youths has increased by 5 percent per year from 2006 to 2013. Concurrently, rates for state-sponsored SUD treatment for youths for other drugs decreased by 11 percent per year from 2009 to 2013
- ▶ Among drivers involved in a traffic fatality who are tested for drugs or alcohol, there is a 4 percent per year decrease in those testing positive for marijuana in combination with other drugs and/or alcohol, from a high of 27 percent in 2004 to a low of 15 percent in 2013. No trend was identified for those who tested positive for marijuana only, with percentages ranging from a high of 7 percent in 2004 to a low of 2 percent in 2013.*

2. ENFORCEMENT

- ▶ Arrests for any drug or narcotic decreased by 17 percent between 2012 and 2013.
- ▶ Incidents involving marijuana decreased by more than half between 2012 and 2013; concurrently, incidents involving amphetamines, heroin and crack cocaine increased.**
- ▶ Incidents where marijuana was seized decreased for all quantities involved.
- ▶ While highways and roads remained the most common location where marijuana incidents occurred, such incidents decreased from 2,462 in 2012 to 768 in 2013. However, incidents increased at secondary or primary schools, from 258 in 2012 to 345 in 2013.
- ▶ All criminal activities involving marijuana decreased between 2012 and 2013. Possession, which is the most common incident, decreased from 5,133 in 2012 to 2,091 in 2013.
- ▶ 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 1,229 in 2014, for an overall decrease of 28 percent.



Highlights and key findings (continued)

2. ENFORCEMENT (continued)

- ▶ Marked decreases are seen in marijuana-related non-prison convictions, dropping from a high of 502 in 2011 to a low of 98 in 2014, and in prison convictions, from 73 in 2011 to 13 in 2014.
- ▶ For the 2013-14 school year, 4 percent of public school students were suspended or expelled; of that 4 percent, 11 percent (or 0.4 percent of all students) were suspended or expelled for marijuana.

3. REVENUES AND TAXES

- ▶ As a new enterprise, sales and excise tax revenues markedly increased. However, the rate of increase appears to be leveling off: Sales for September to October rose by 49 percent; from October to November by 24 percent; and from November to December by 6 percent.
- ▶ Sales in December 2014 equaled more than \$17 million; excise taxes for that month were \$4.3 million.
- ▶ State revenues from retail and from business and occupation taxes also increased. In November 2014 (the most current data available), those taxes totaled \$1.5 million.

4. PRODUCTION AND SALES

- ▶ Licensed producers and processors appear to be equally located in urban and rural locales. Similarly, high-volume producers/processors are also somewhat evenly distributed.
- ▶ Retailers tend to be more commonly located in urban and suburban communities; however, some high-volume retailers are located in non-urban communities, particularly those that border other states.
- ▶ Of the six counties with the highest per capita sales, four are border counties: Whatcom, Clark, Klickitat and Spokane.

4. PRODUCTION AND SALES (continued)

- ▶ Average retail price decreased by 9 percent per month, from a high of \$25 in August 2014 to a low of \$14 in January 2015.
- ▶ The number of retailers increased more than five-fold, from 18 in July 2014 to 96 in January 2015.

5. CITY AND COUNTY ORDINANCES

- ▶ Forty-one cities currently have temporary moratoria on retail sales of recreational marijuana.
- ▶ Fifty cities have prohibitions on those sales.
- ▶ Five counties have temporary moratoria on recreational sales in unincorporated regions.
- ▶ An additional five counties have prohibitions on recreational sales in unincorporated regions.

* While traffic fatalities overall have been decreasing, the number of drivers involved in such crashes who are tested for alcohol and drugs has proportionately increased, from a low of 42 percent in 2004 to a high of 62 percent in 2013.

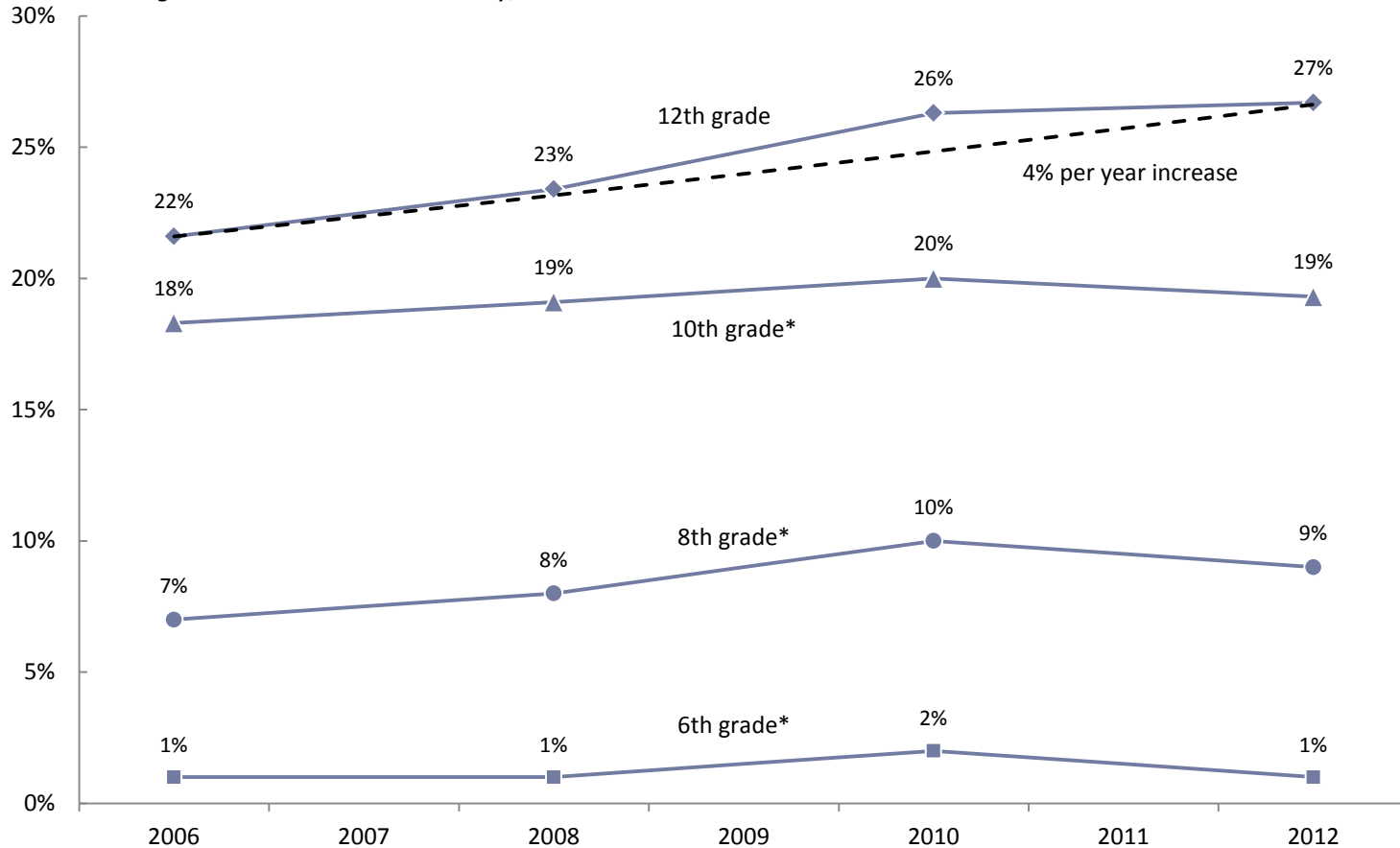
** As defined by the FBI, an "incident" occurs when any law enforcement officer investigates a scene or situation, whether that investigation results in an arrest or not. Incidents involving multiple illicit drugs or other criminal activities are counted only once, and are included in whichever category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



1.1 Current Use – Students

Taken from the Healthy Youth Survey, which is administered every two years to sixth-, eighth-, 10th- and 12th-graders, the question, “Have you used marijuana in the past 30 days?” gauges current marijuana use among students. As seen below, for 12th-graders, use is increasing by 4 percent per year, from 22 percent in 2006 to 27 percent in 2012. For all other grades there are no significant trends.

Source: Washington State Health Youth Survey, 2006-2012



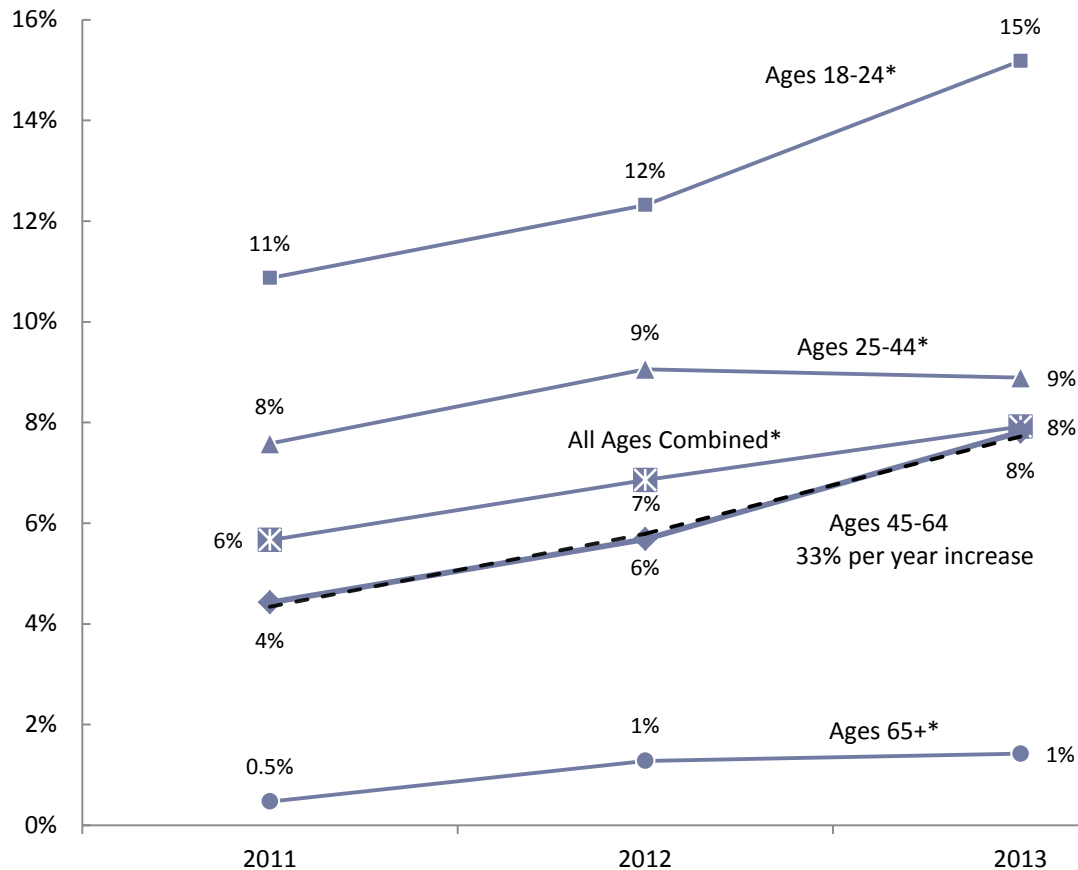
* No significant trend



1.2 Current Use – Adults

In the Behavioral Risk Factors Surveillance Survey, respondents ages 18 and older are asked, “Have you smoked marijuana in the past 30 days?” With 15 percent responding “Yes” in 2013, those ages 18 to 24 are the most likely current users. There is a significant trend in increased use among those ages 45 to 64, from 4 percent in 2011 to 8 percent in 2013, equaling a 33 percent per year increase. No other trends were identified.

Source: Washington State Behavioral Risk Factors Surveillance System



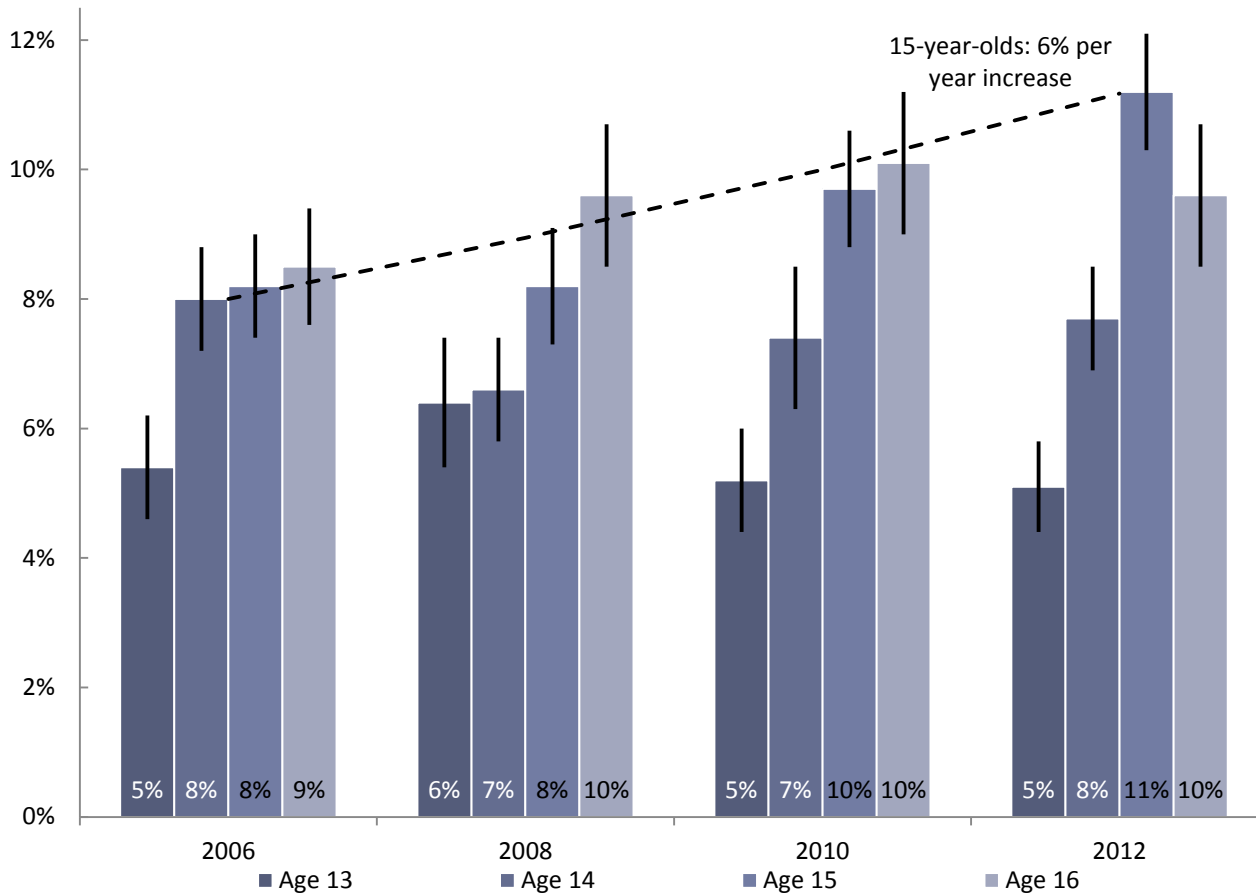
* No significant trend



1.3 Age at First Use – Students

When asked, “How old were you the first time you smoked marijuana?” 12th-graders who responded that they were age 15 grew from a low of 8 percent in 2006 to a high of 11 percent in 2012. This constituted a 6 percent per year increase. No trends were identified for the other reported ages of first use.

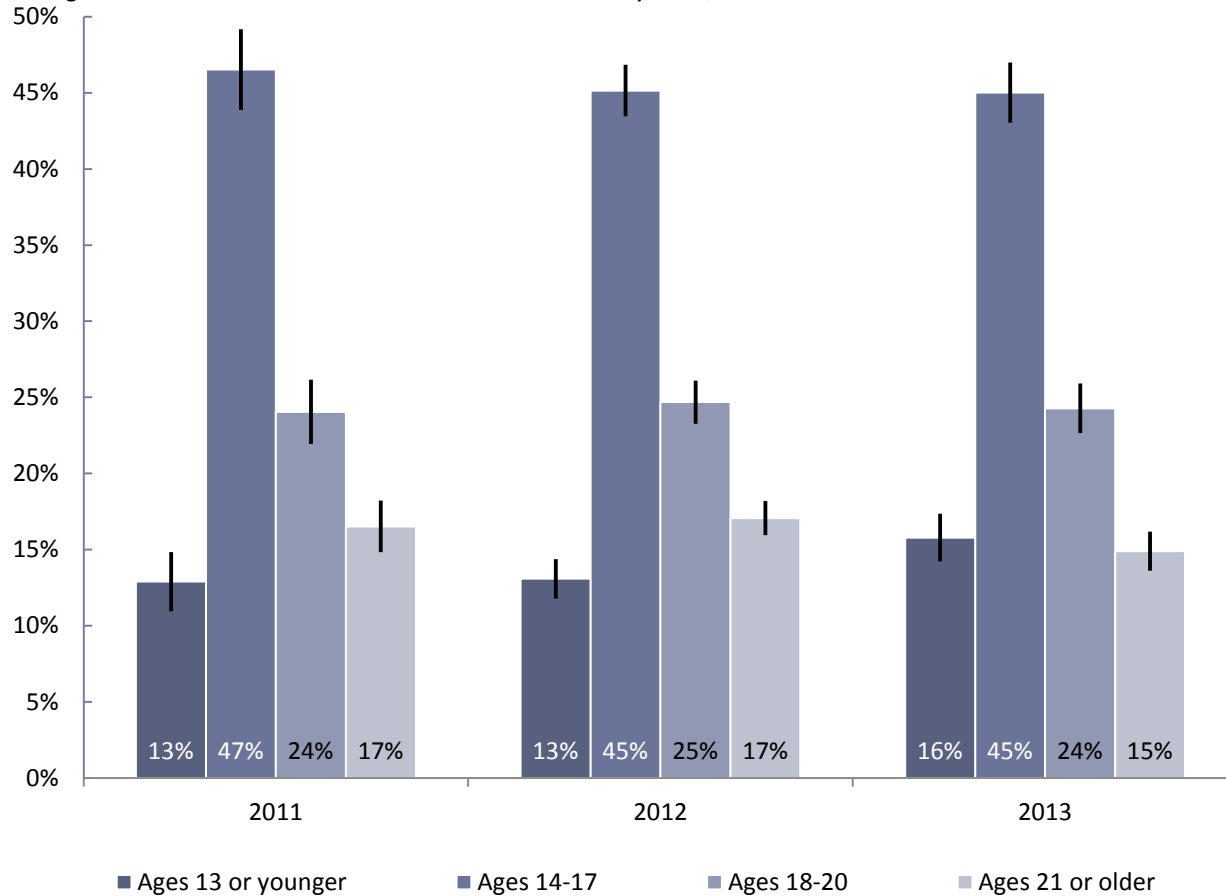
Source: Washington State Health Youth Survey, 2006-2012



1.4 Age at First Use – Adults

Among adult respondents who had ever smoked marijuana, the question was asked, “How old were you the first time you smoked marijuana?” In the age groups shown here, nearly half of those who had smoked marijuana first did so between the ages 14 and 17, regardless of the survey year. No trends were identified.

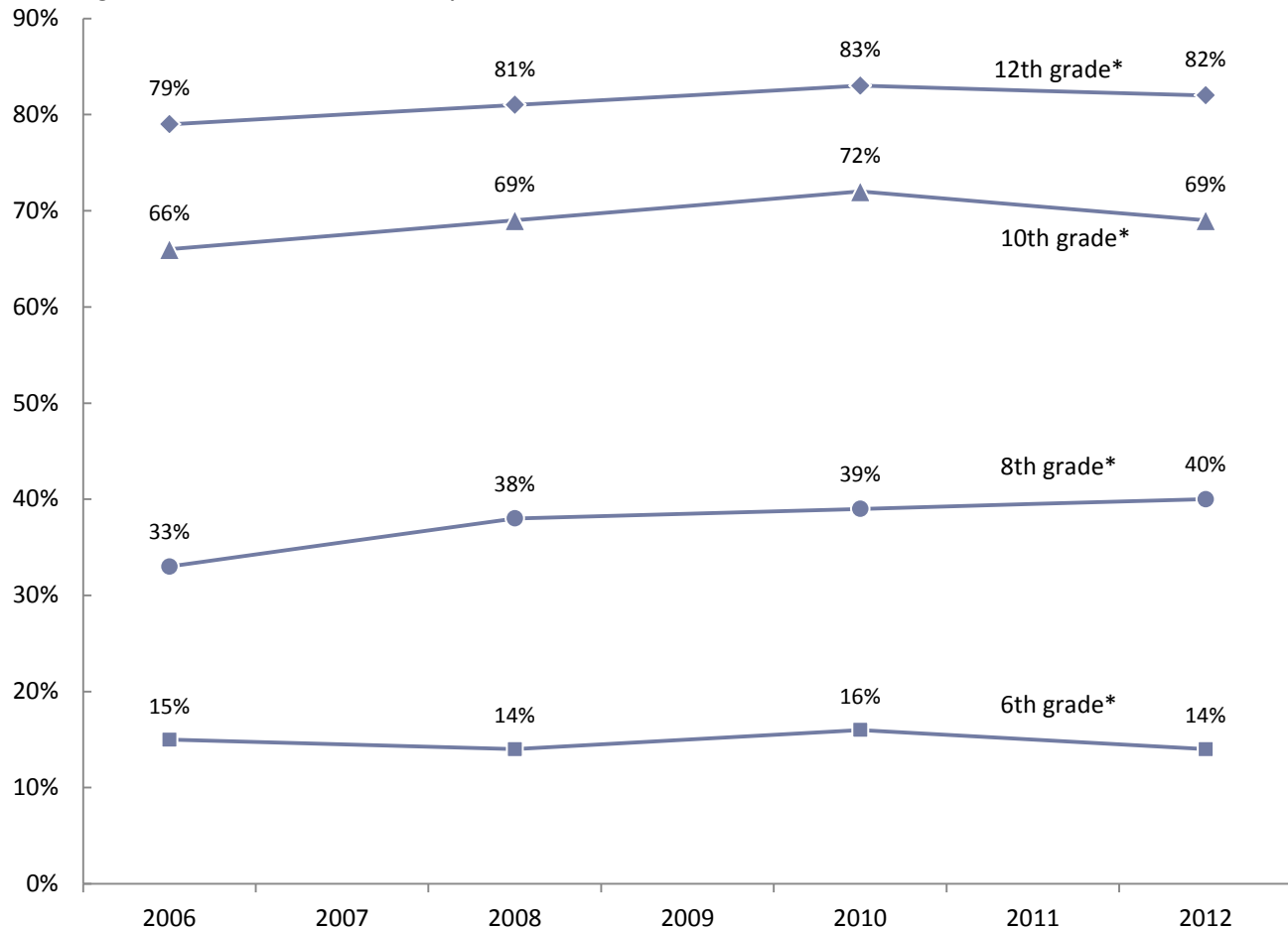
Source: Washington State Behavioral Risk Factors Surveillance System, 2011-2013



1.5 Access – Students

Asked, “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, 2006-2012



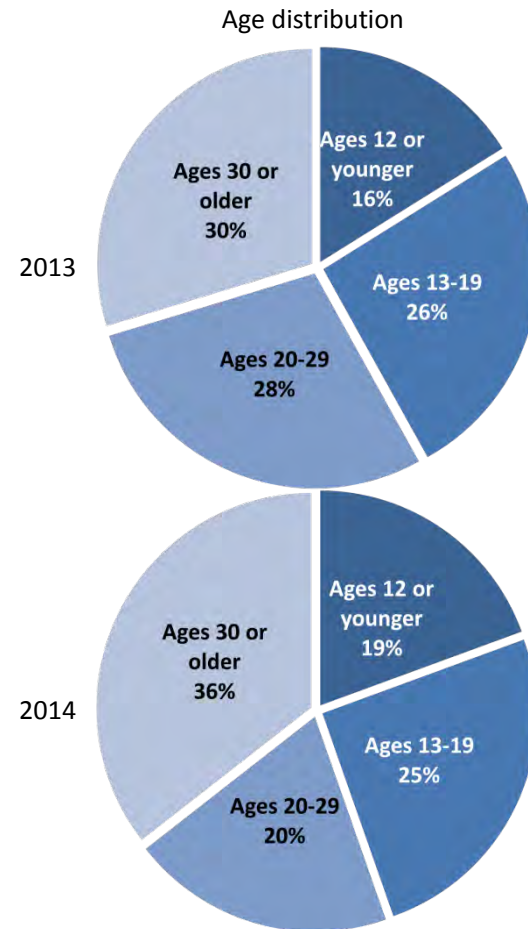
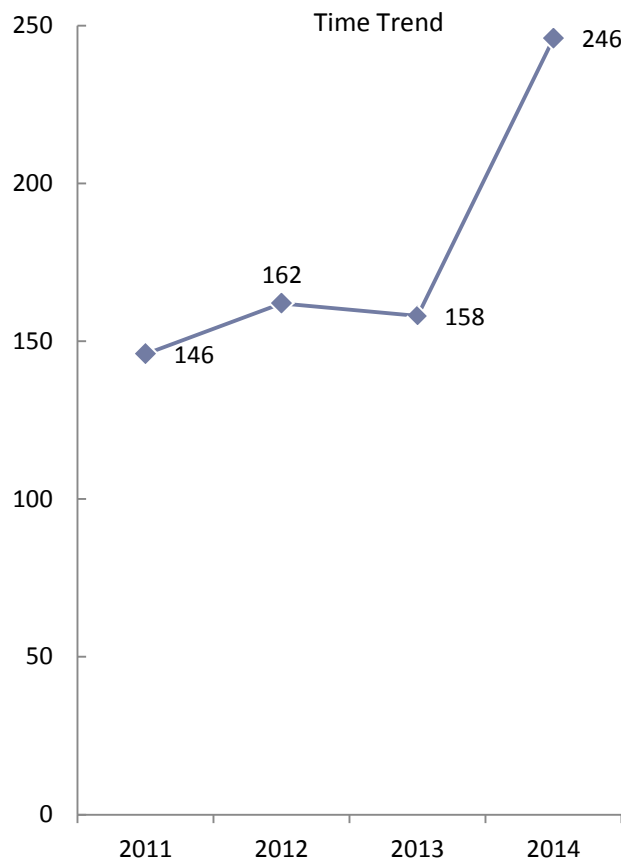
* No significant trend



1.6 Poisonings

Marijuana-related calls to the Washington Poison Center were relatively constant from 2011 to 2013, but those calls increased from 158 in 2013 to 246 in 2014. The percentages of calls by age group were, however, similar in 2013 and 2014, especially when taking into consideration the relatively small numbers involved in 2013, with those ages 30 or older constituting the largest percentage and those ages 12 or younger the smallest.

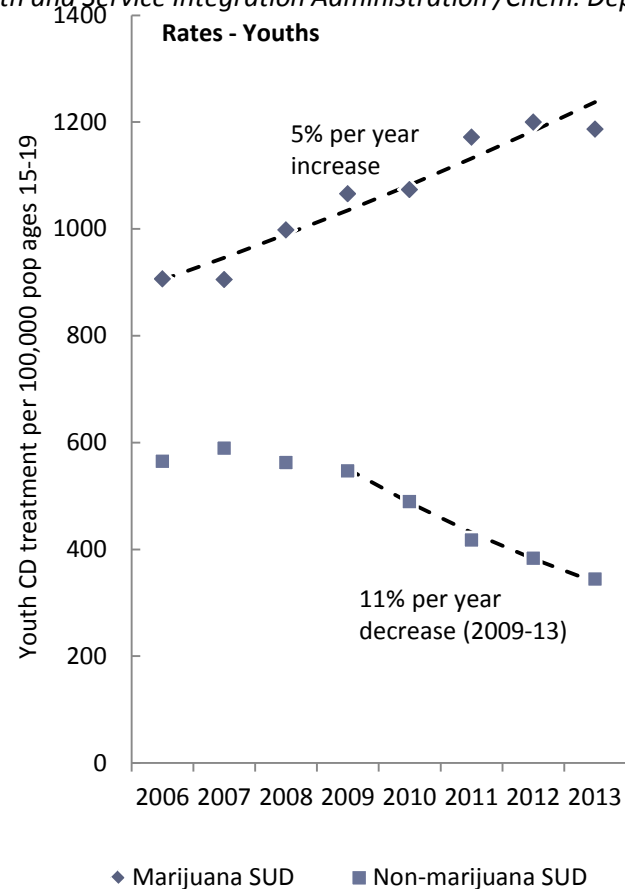
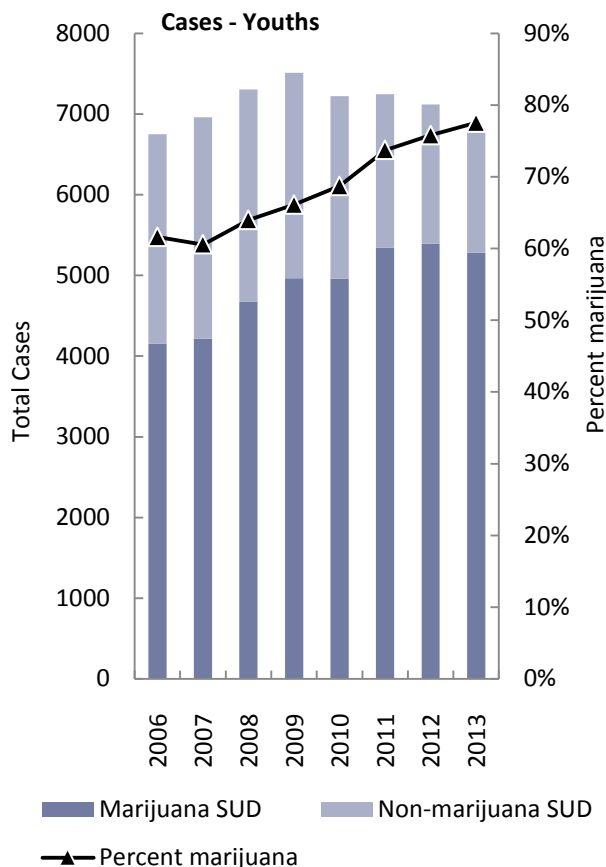
Source: Washington Poison and Drug Information Center



1.7 Substance Use Disorder Treatment

Substance use disorder (SUD) treatment for youth receiving publicly funded services decreased between 2009 and 2013. However, as a proportion of the total SUD cases, treatment for marijuana increased from 61 percent in 2007 to 78 percent in 2013. Age-specific rates for youth marijuana SUD treatment have also been increasing, on average, by 5 percent per year. Rates for non-marijuana related SUD treatment decreased by 11 percent per year from 2009 to 2013. SUD youth may be court ordered or referred to treatment in other ways.

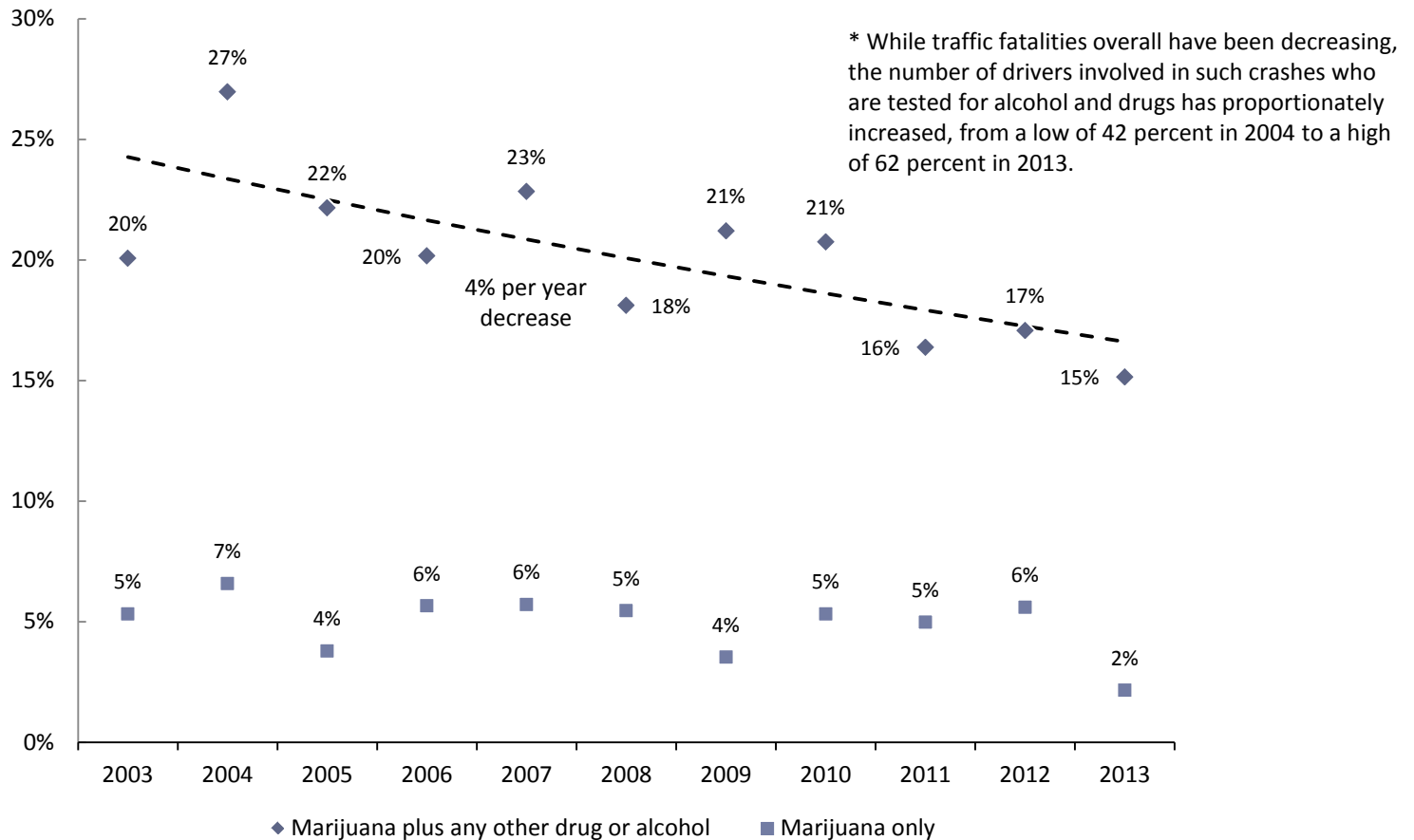
Source: Department of Social and Health Services (Behavioral Health and Service Integration Administration /Chem. Dependency)



1.8 Traffic Fatalities

As a percentage of drivers involved in traffic fatalities who are tested for alcohol and drugs*, there is a 4 percent per year decrease in proportion of drivers involved in fatal crashes who tested positive for marijuana in combination with other drugs or alcohol, from a high of 27 percent in 2004 to a low of 15 percent in 2013. No trend was identified among those who were tested and tested positive for marijuana only, ranging from a high of 7 percent in 2004 to a low of 2 percent in 2013.

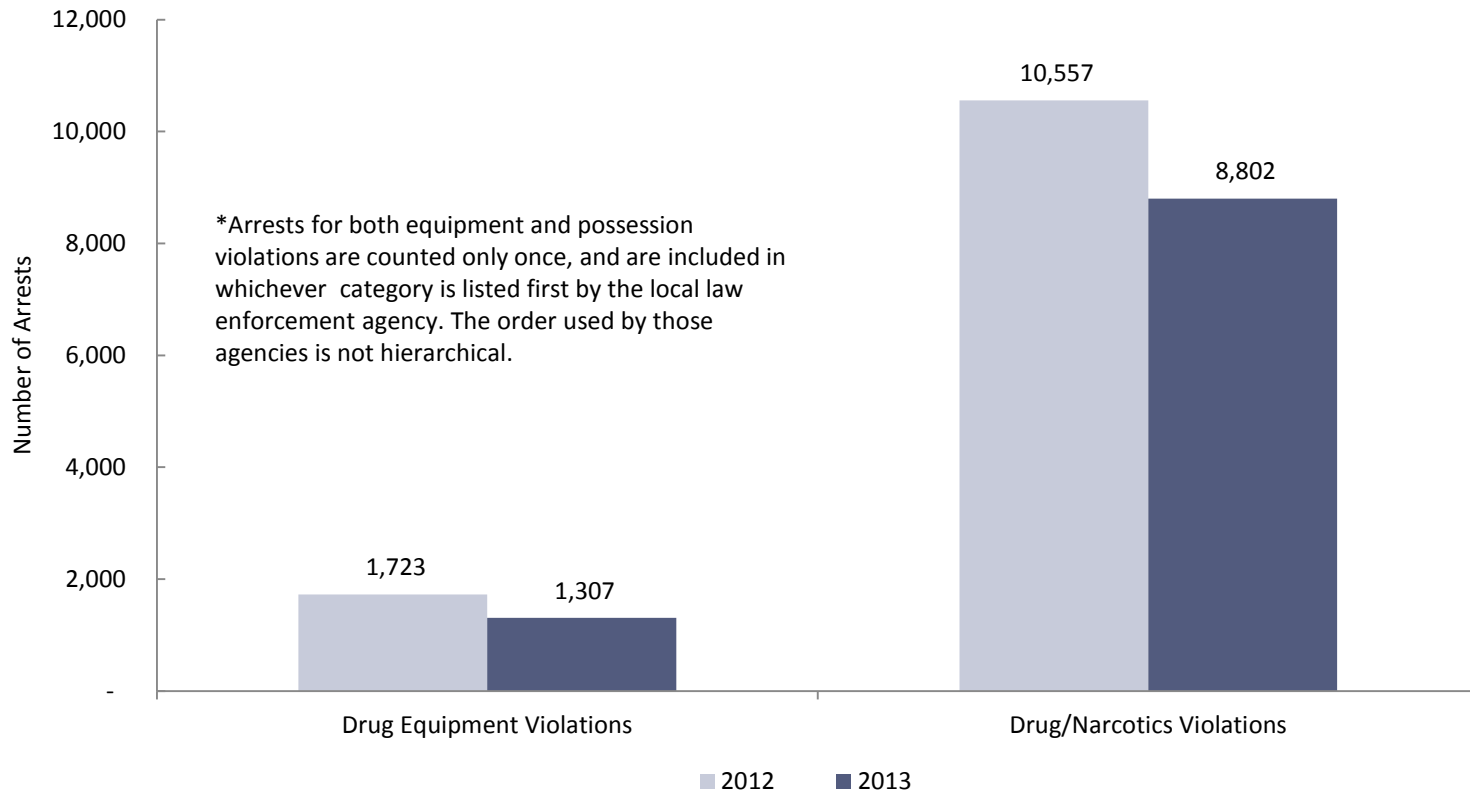
Source: Washington Traffic Safety Commission



2.1 Drug or Narcotic Arrests

Each of the arrests shown below may include multiple drug and/or narcotic offenses.* Between 2012 and 2013, there was a 24 percent decrease in arrests for drug equipment violations, and a 17 percent decrease in arrests for drug or narcotic violations. Drug equipment refers to equipment or devices used in preparing and/or using drugs or narcotics.

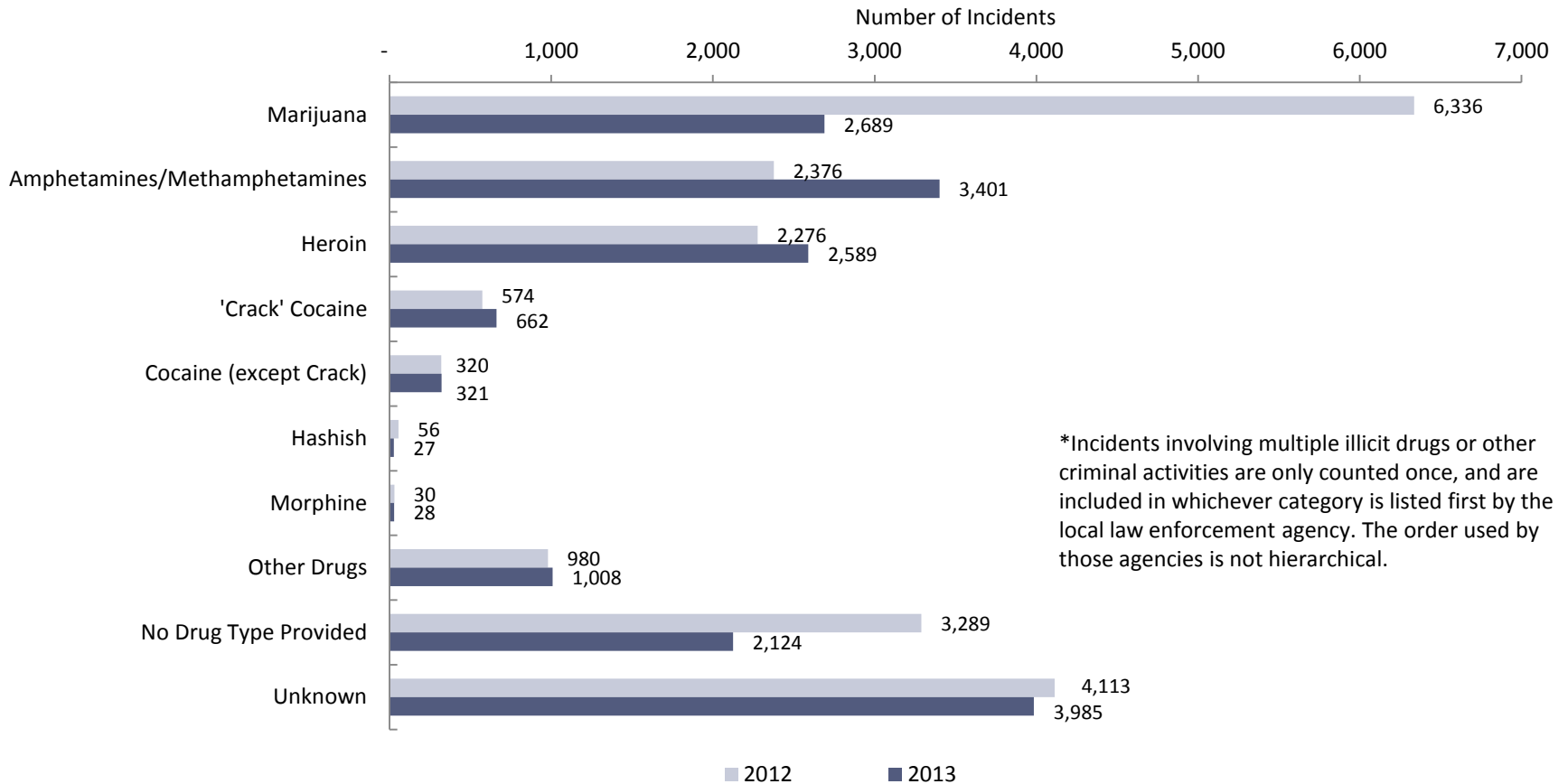
Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)



2.2 Drug or Narcotic Incidents

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. Each incident may involve multiple illicit drug or other criminal activities.* As seen below, between 2012 and 2013, the number of incidents involving marijuana decreased by more than half (58 percent). During that same time period, incidents involving amphetamines or methamphetamines increased by 43 percent, while those involving heroin increased by 13 percent.

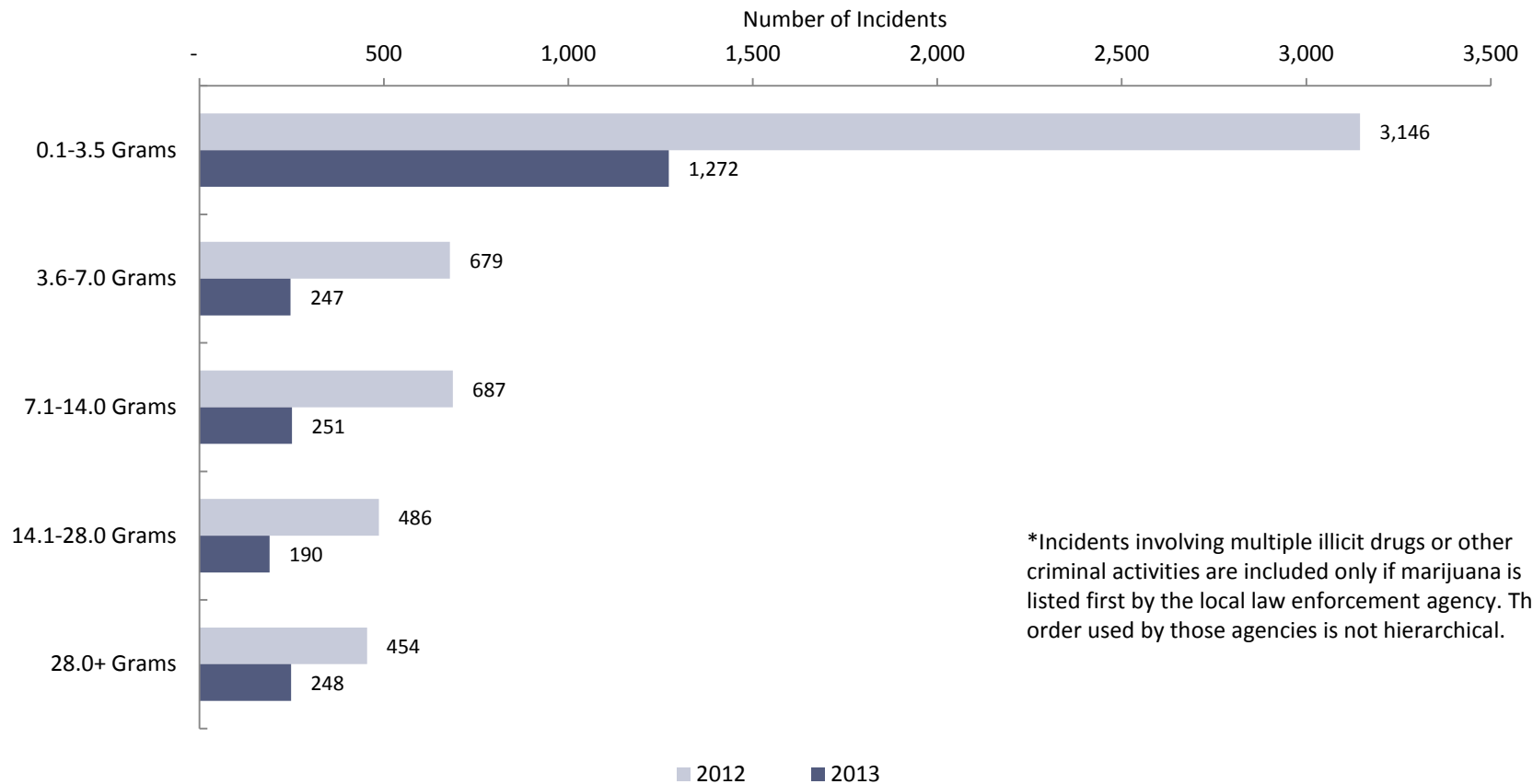
Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)



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 and 2013, the most frequent number of seizures occurred for quantities of 3.5 grams (an eighth of an ounce) or less. From 2012 to 2013, the number of such seizures dropped by 60 percent, from 3,146 in 2012 to 1,272 in 2013. Similar proportionate reductions were also seen for all other amounts seized.

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



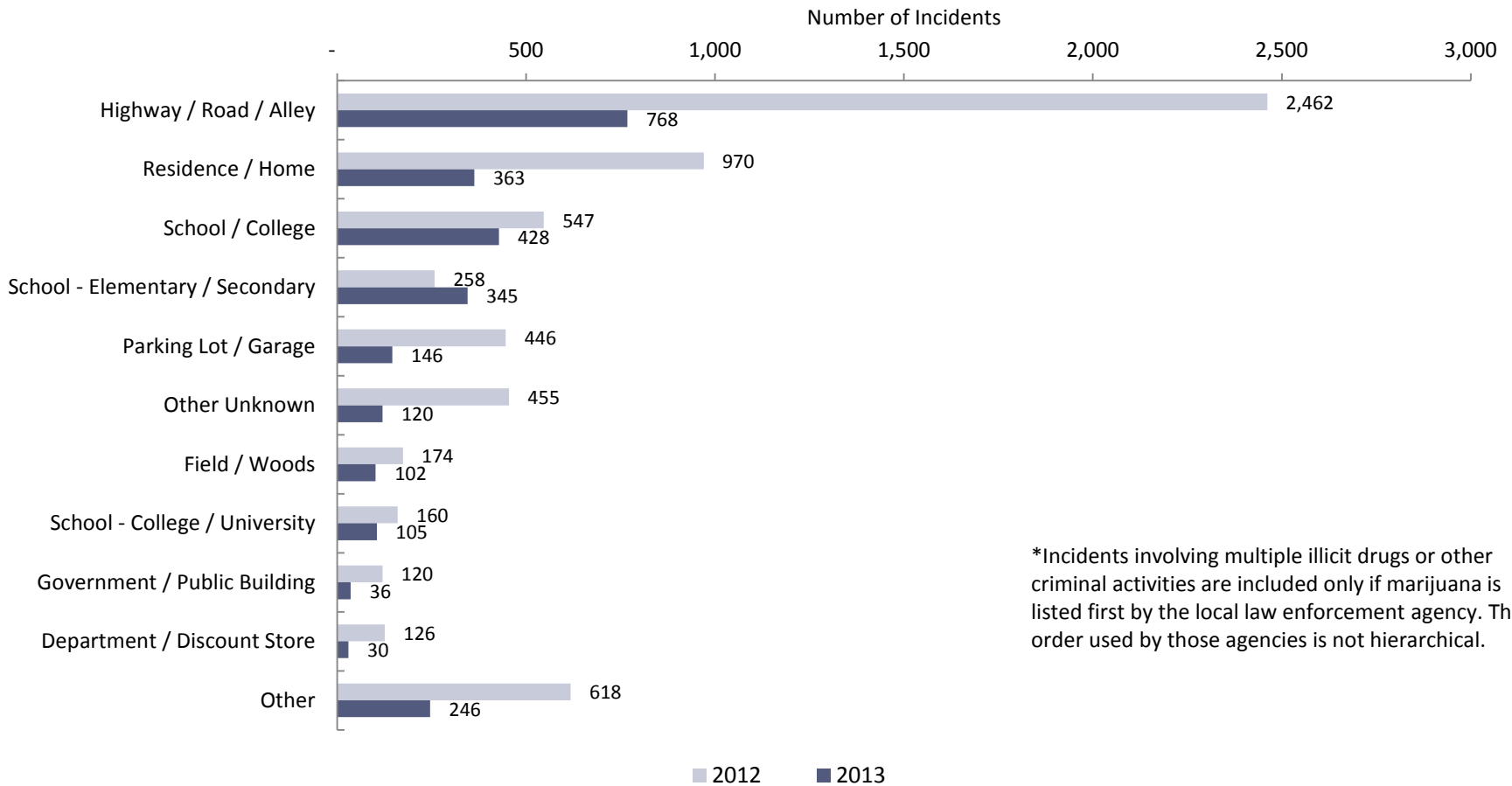
*Incidents involving multiple illicit drugs or other criminal activities are included only if marijuana is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.



2.4 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 nearly 70 percent, from 2,462 in 2012 to 768 in 2013. Of these locations, an increase was seen only in elementary or secondary schools, where there was a 34 percent increase from 2012 to 2013.

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



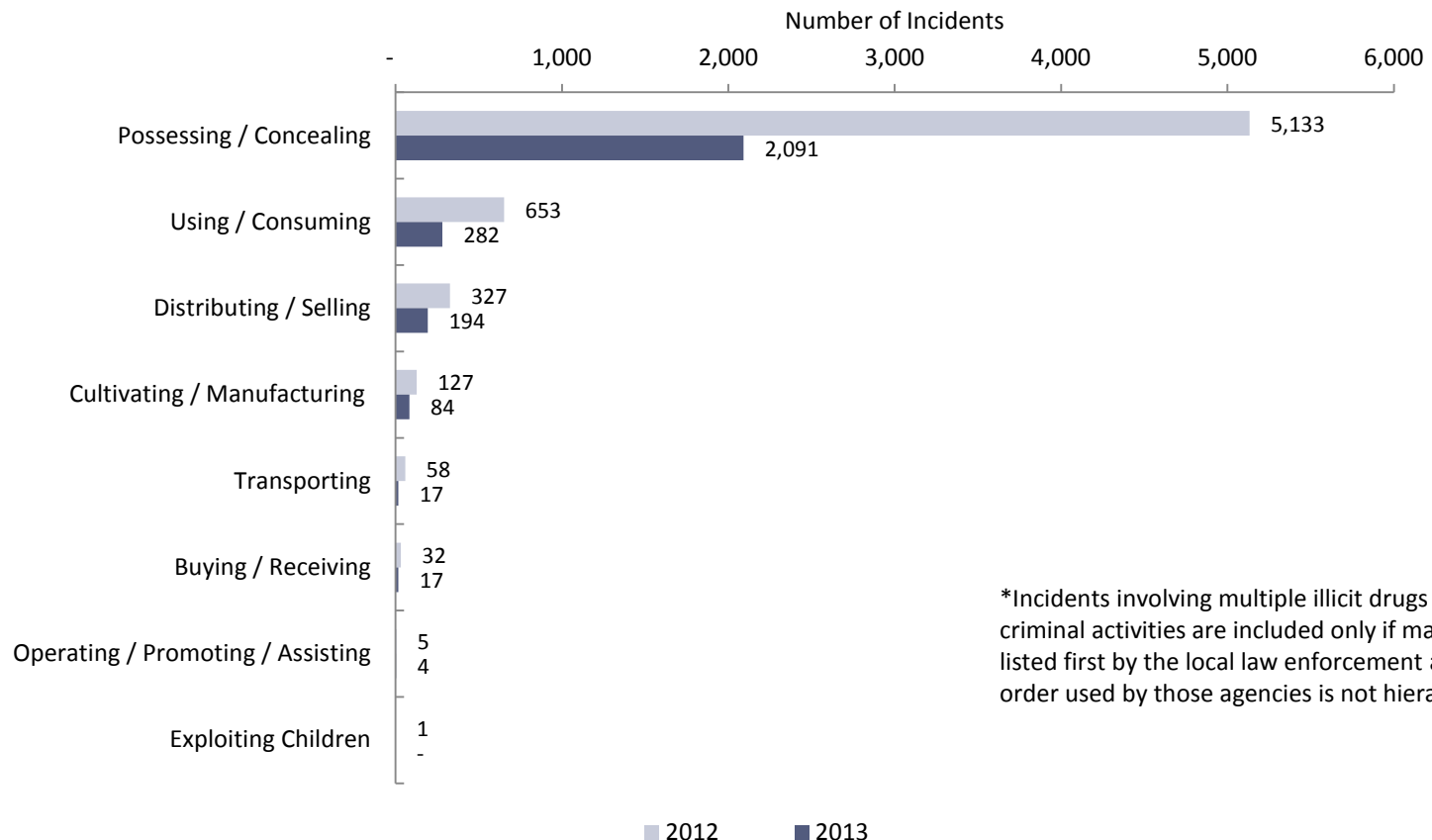
*Incidents involving multiple illicit drugs or other criminal activities are included only if marijuana is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.



2.5 Criminal Activities Involving Marijuana

For 2012 and 2013, possession was the most common criminal activity involving marijuana; however, the number of such incidents decreased by nearly 60 percent between those two years.* Decreases were also seen across all other activities.

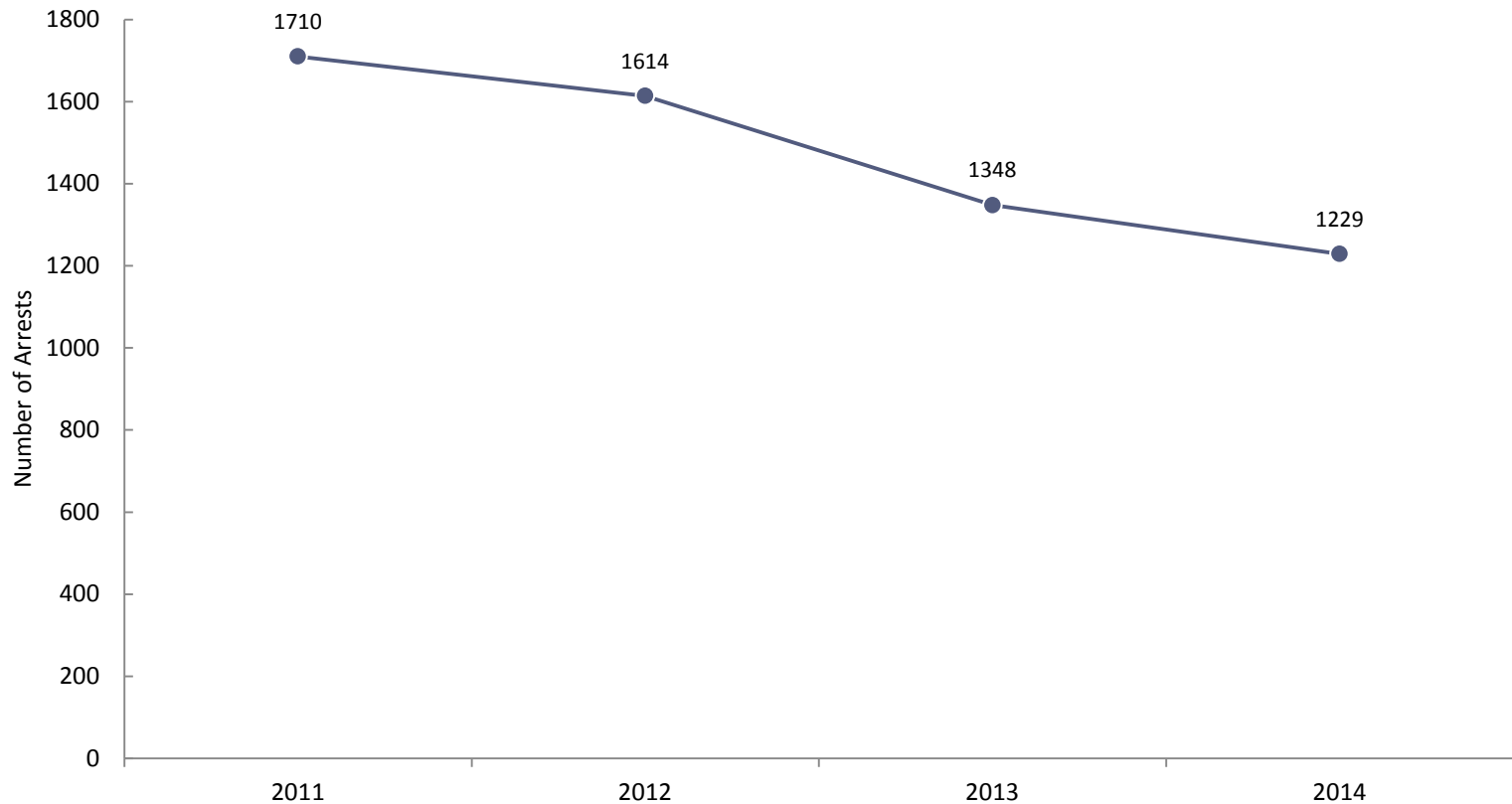
Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)



2.6 Drug-only DUI Arrests

Drug-only DUI arrests do not differentiate marijuana from other drugs. These arrests moved from an annual high of 1,710 in 2011 to a low of 1,229 in 2014, for an overall decrease of 28 percent during those four years.

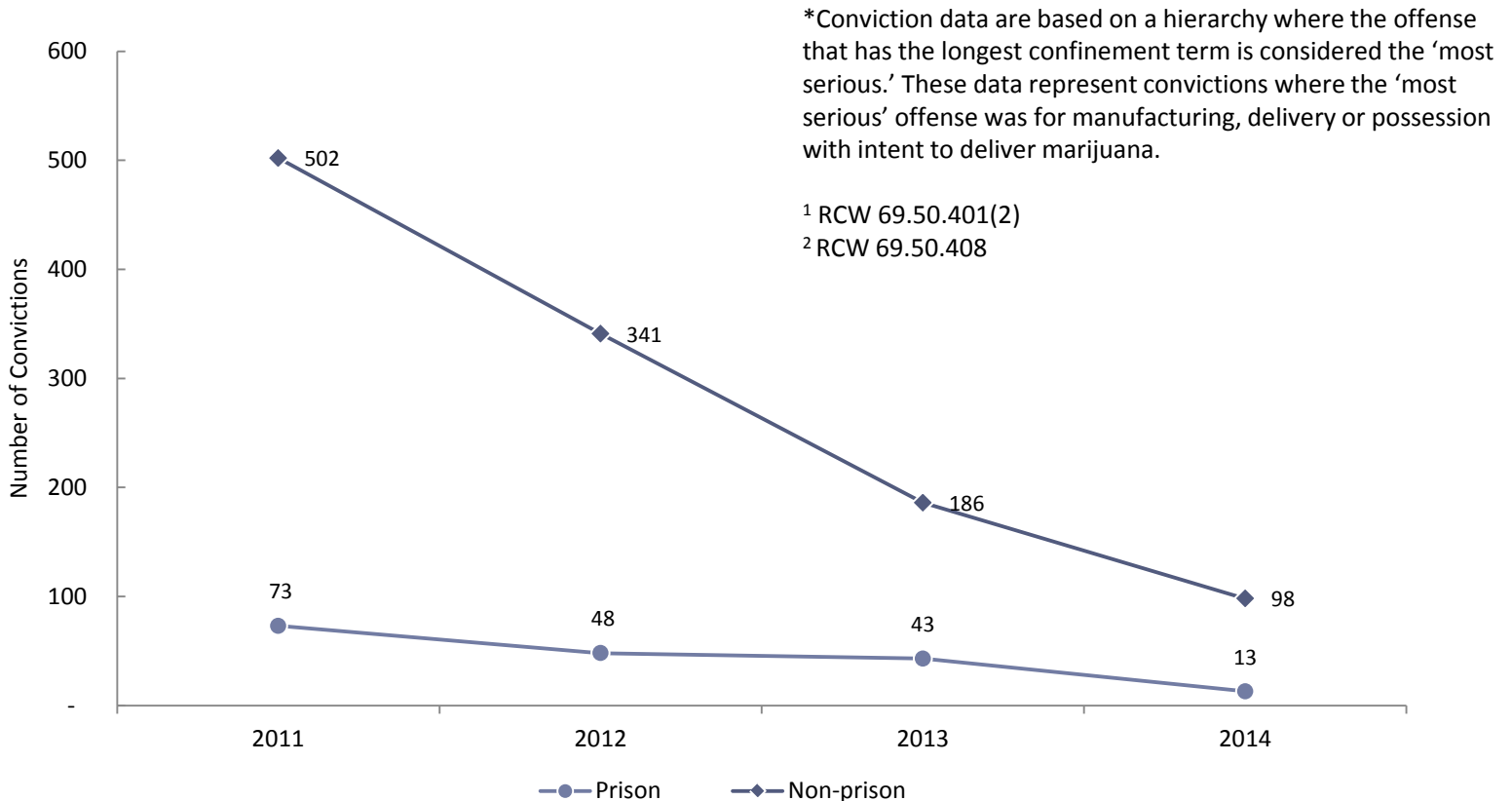
Source: Washington State Patrol



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 non-prison convictions were repeat convictions.² Overall, marked decreases are seen in both non-prison convictions, dropping by 80 percent from 2011 to 2014, and in-prison convictions, dropping by 82 percent during that same time period.

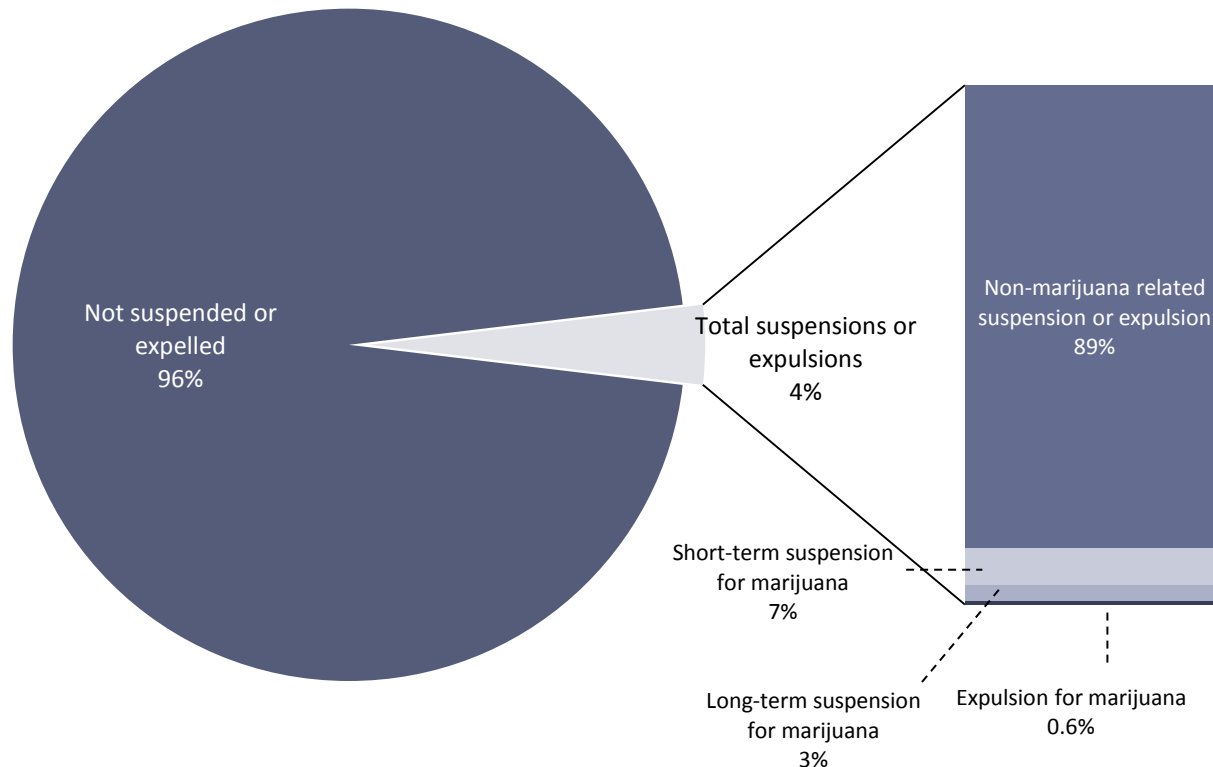
Source: Washington State Caseload Forecast Council, *Statistical Summary of Adult Felony Sentencing*



2.8 Suspensions or Expulsions from Schools – Students

Currently, data are available only for public schools for the 2013-14 school year. As shown below, 4 percent of all students were suspended or expelled during that school year, and of those suspended or expelled, 11 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 0.6 percent being expelled.

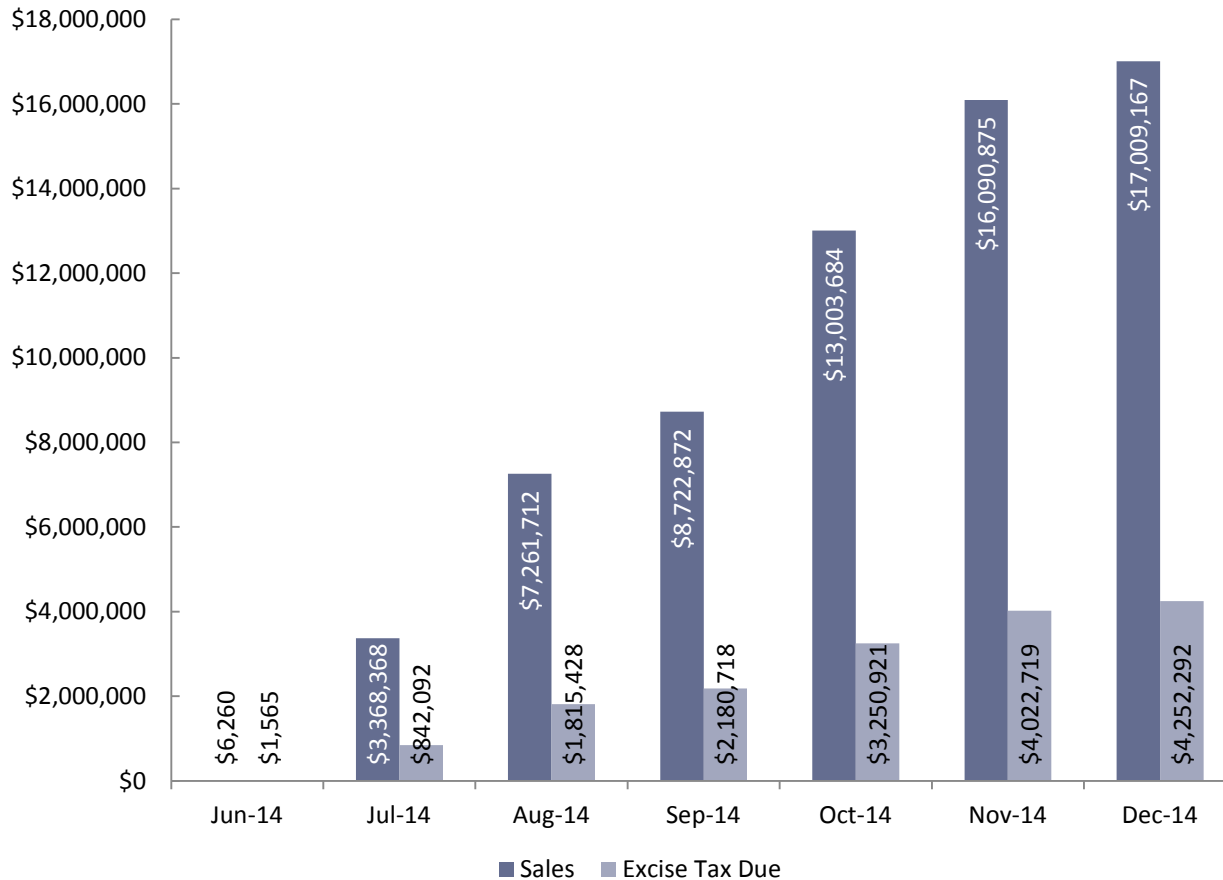
Source: *Office of Superintendent of Public Instruction*



3.1 Recreational Marijuana Revenues with 25 Percent Excise Tax

Per reports from the Liquor Control Board, sales and excise taxes dramatically rose during the first few months of legalization. However, while sales from September to October increased by 49 percent, those from October to November grew by 24 percent and those from November to December by 6 percent. For each month, excise taxes equaled 25 percent of the total sales.

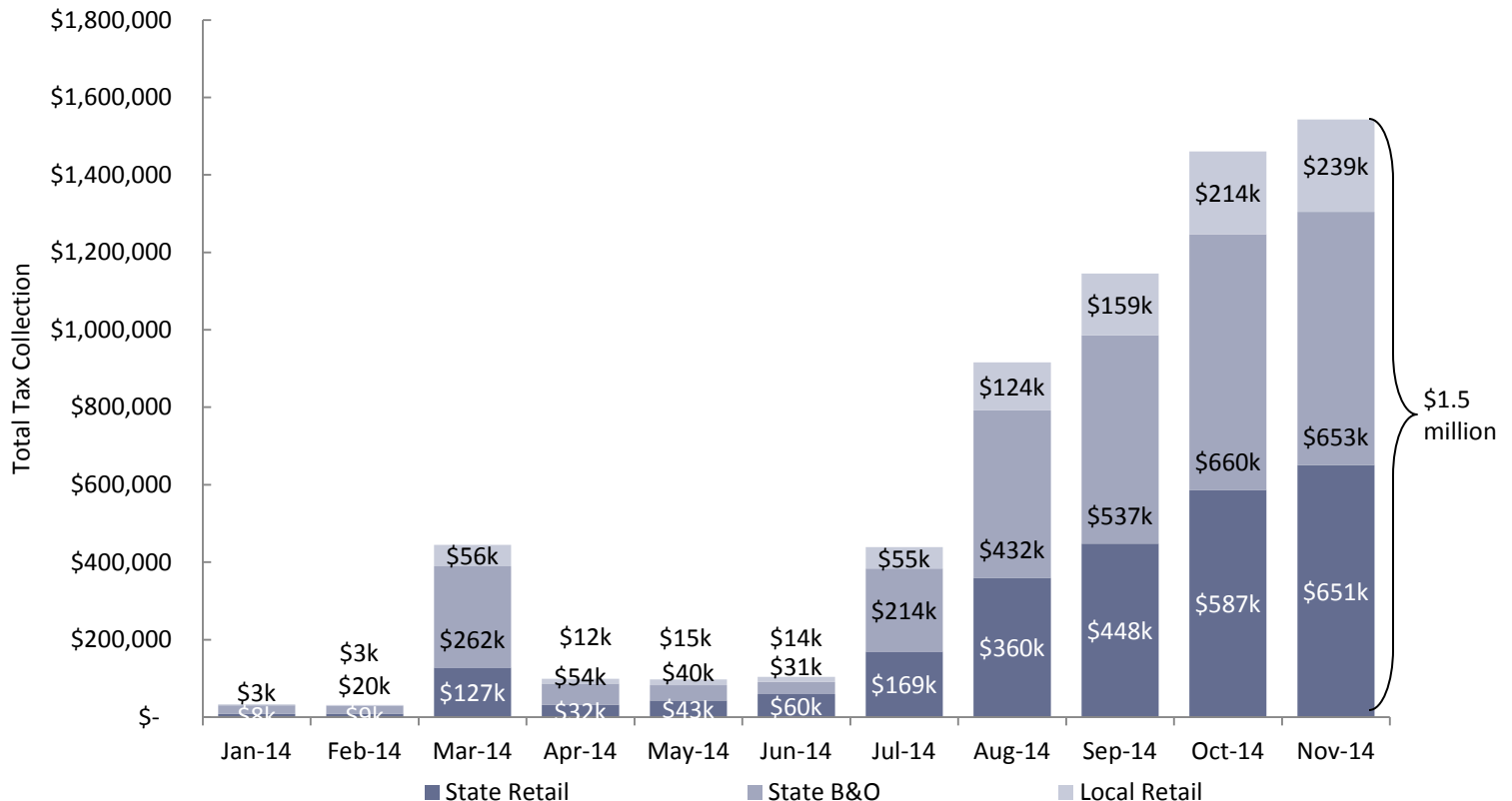
Source: Washington State Liquor Control Board



3.2 Recreational Marijuana Reported Revenues with Retail and Business and Occupation Taxes

Department of Revenue reported sales of recreational marijuana differ from those reported by the Liquor Control Board (likely due to reporting lags). However, the patterns of sales over time are similar. The taxes shown below include state and other retail taxes as well as business and occupation (B&O) taxes, but do not show total sales. In November 2014, tax revenues equaled \$239,000 in local retail sales taxes, \$653,000 in state B&O taxes and \$651,000 in state retail taxes, for a total of \$1.5 million in taxes that month. These taxes are in addition to the excise taxes collected.

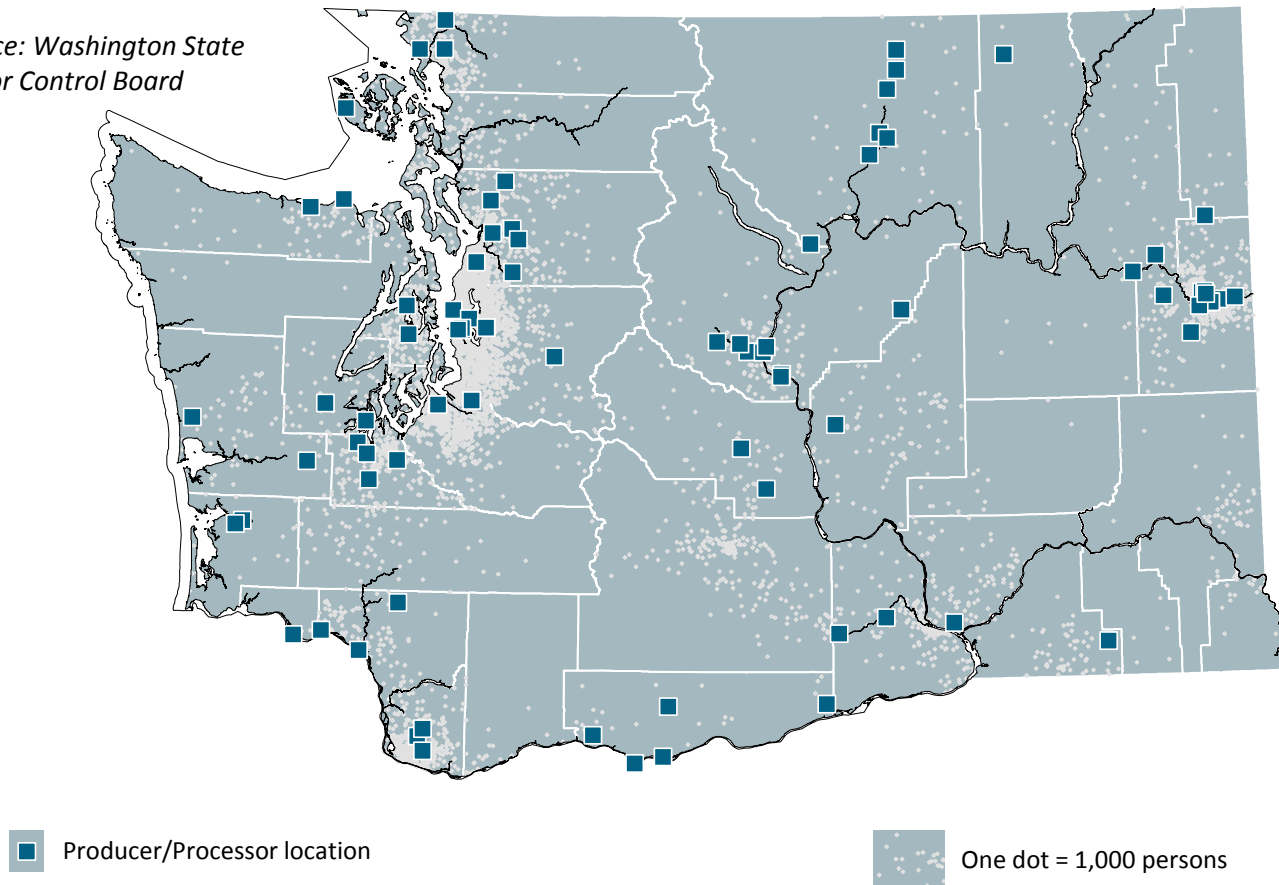
Source: Washington State Department of Revenue



4.1a Producers/Processors – Locations

The licensed producers locations (as of September 2014) shown within a population density map suggest that production is somewhat equally divided between high- and low-population regions. With only a few exceptions, producers also act as processors.

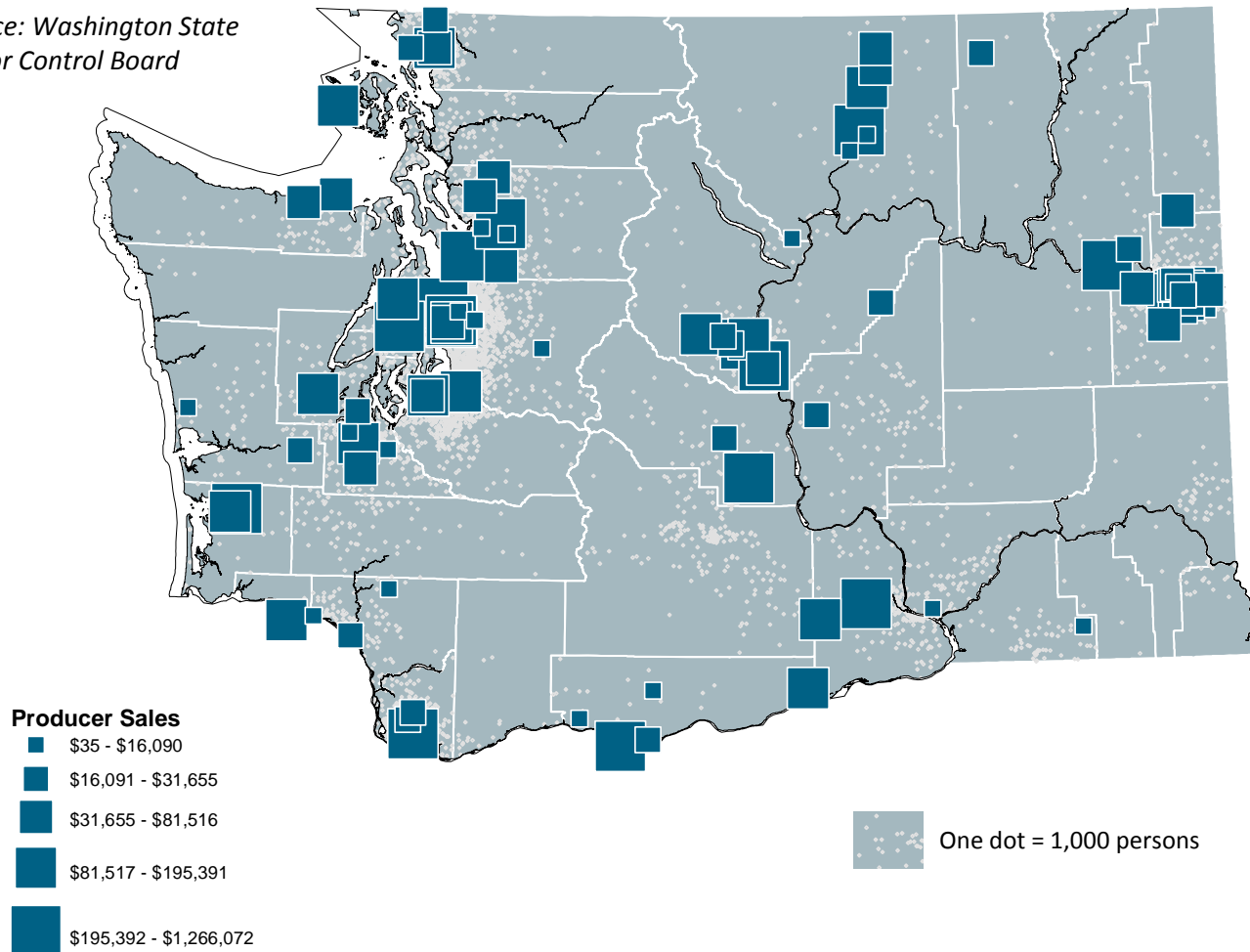
Source: Washington State Liquor Control Board



4.1b Producers/Processors – Volumes

Volumes of sales by producers (as of September 2014) suggest that large-volume producers are also somewhat equally distributed between high- and low-population regions.

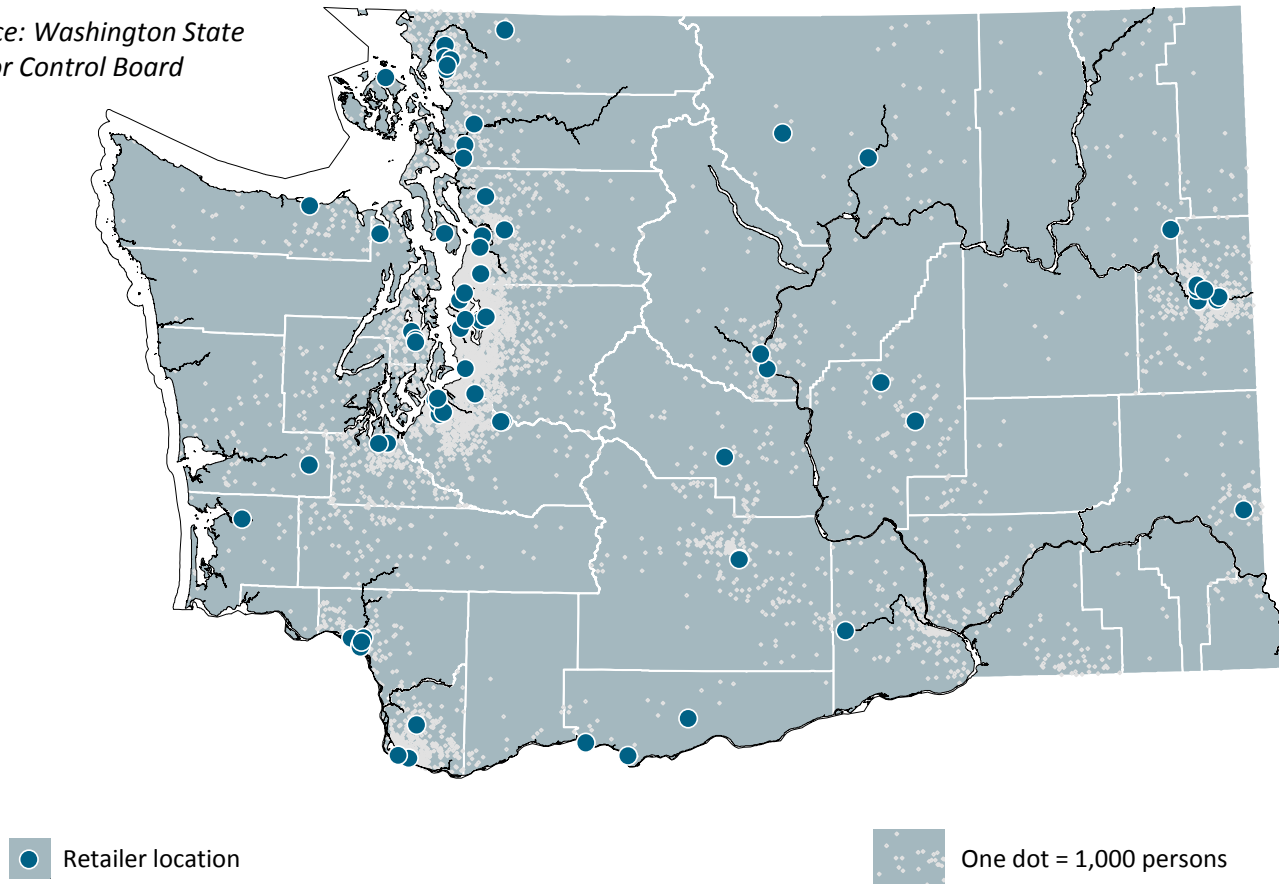
Source: Washington State Liquor Control Board



4.2a Retailers – Locations

Recreational marijuana retailers locations (as of September 2014) suggest that most are generally concentrated in more urban environs, such as the Puget Sound region and larger cities elsewhere.

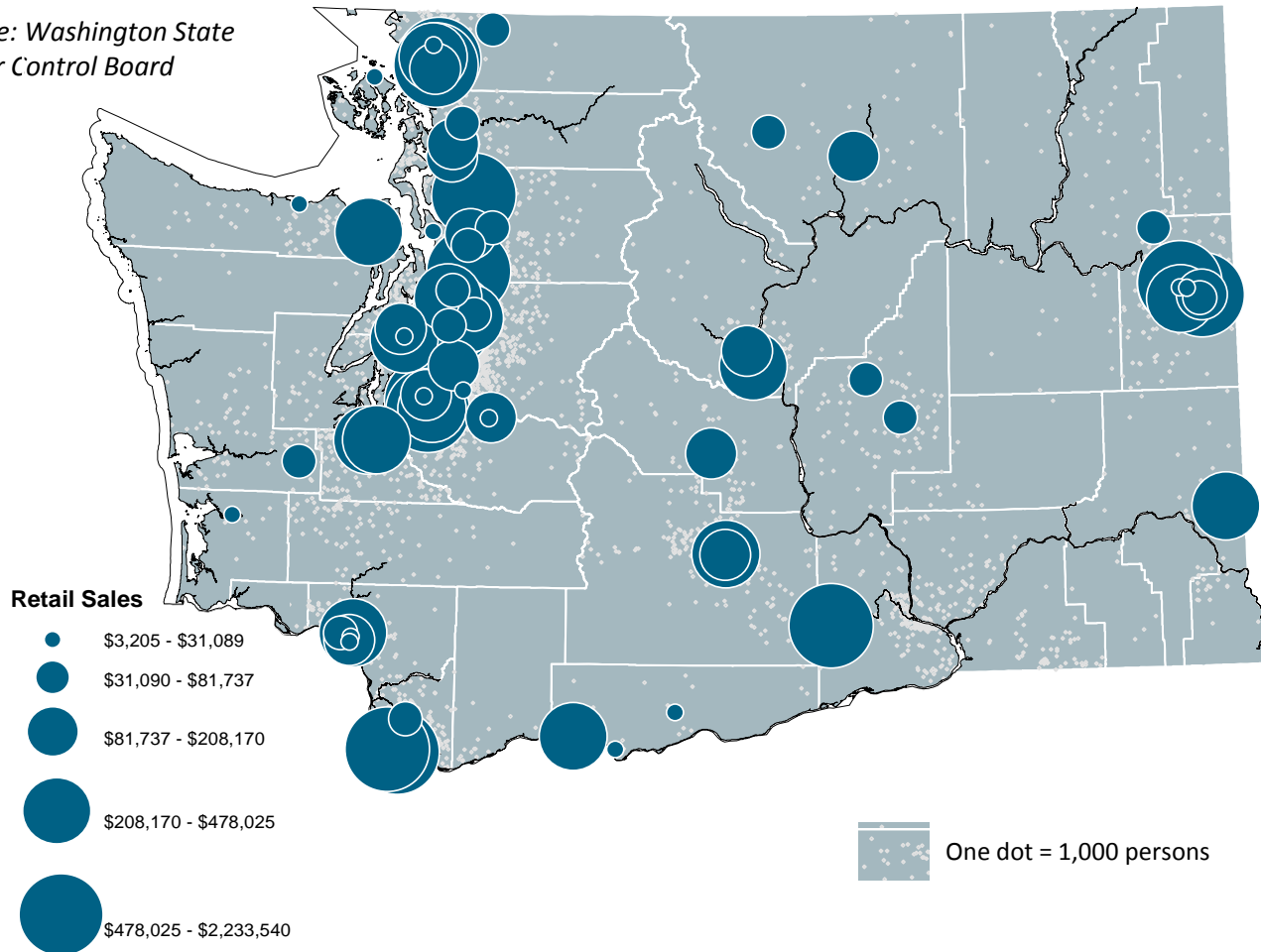
Source: Washington State Liquor Control Board



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 Klickitat, Benton and Whitman counties.

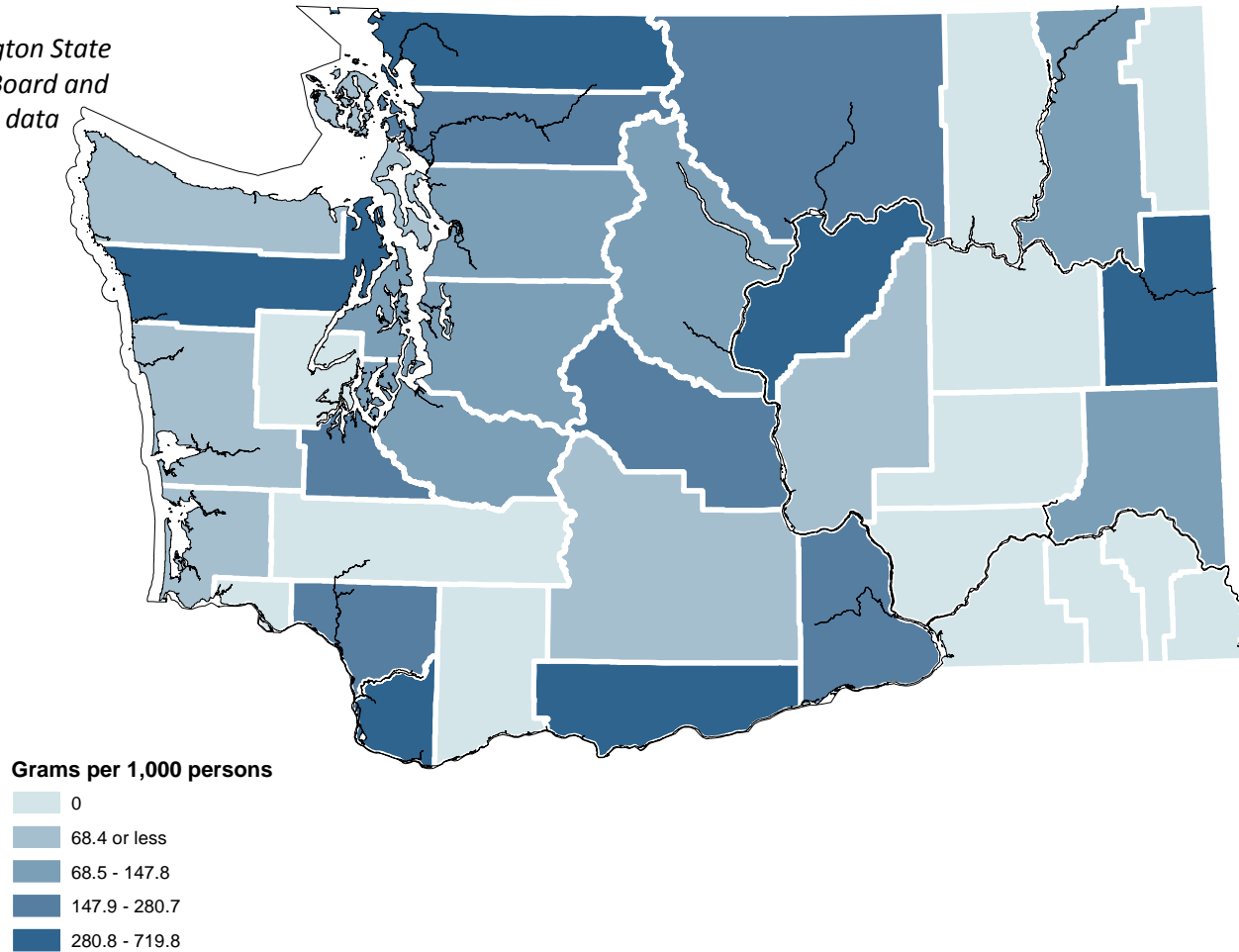
Source: Washington State Liquor Control Board



4.3 Per Capita Sales by County

Grams of recreational marijuana sold per 1,000 persons living within the county where the sales occurred (as of September 2014) are mapped below. Of the six counties with the highest per capita sales, four (Whatcom, Clark, Klickitat and Spokane) are on the state's borders.

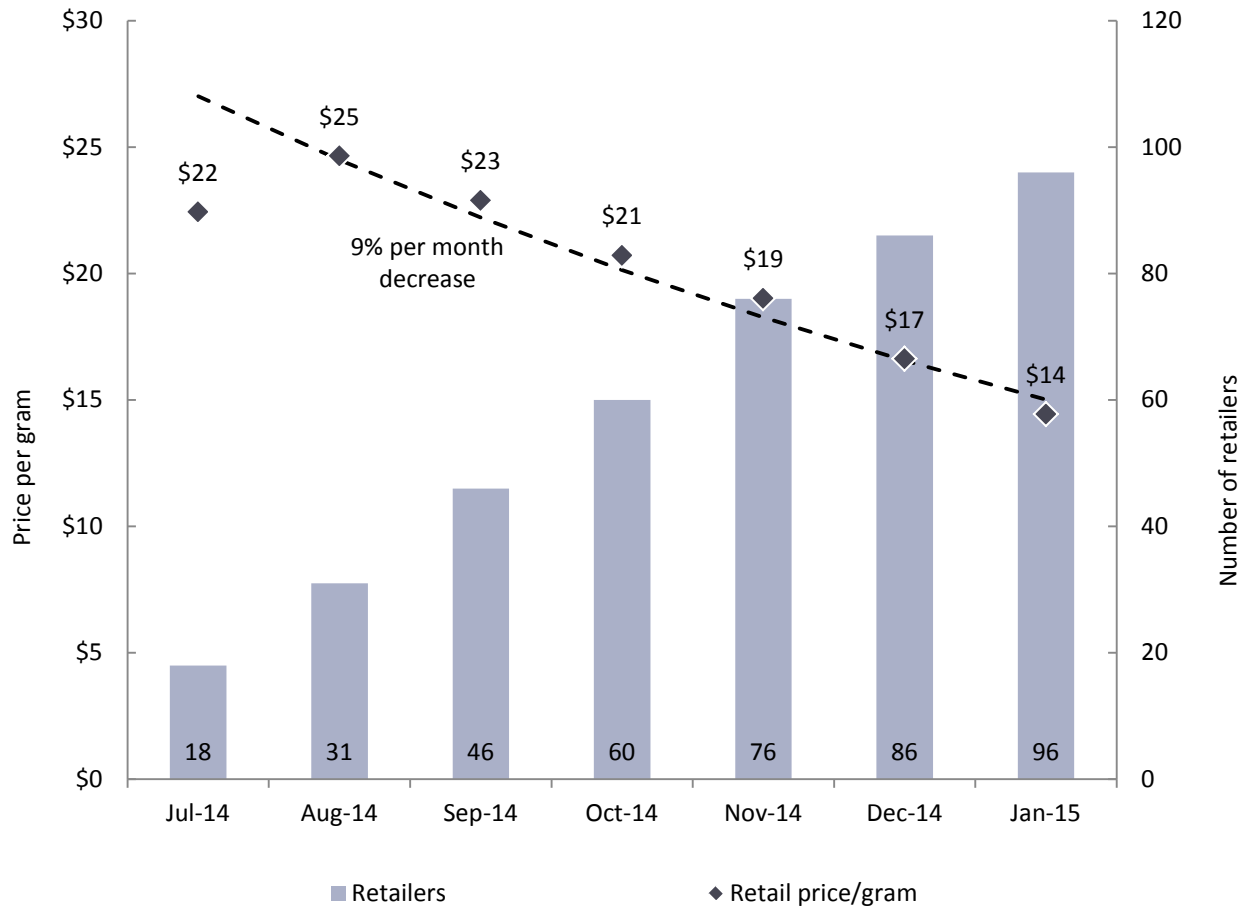
Source: Washington State Liquor Control Board and OFM population data



4.4 Retailers and Price per Gram

The weighted average price per gram dropped from a high of \$25 in August 2014 to a low of \$14 in January 2015, averaging a 9 percent per month decrease. Meanwhile, the number of retailers has increased more than five-fold, from 18 in July 2014 to 96 in January 2015.

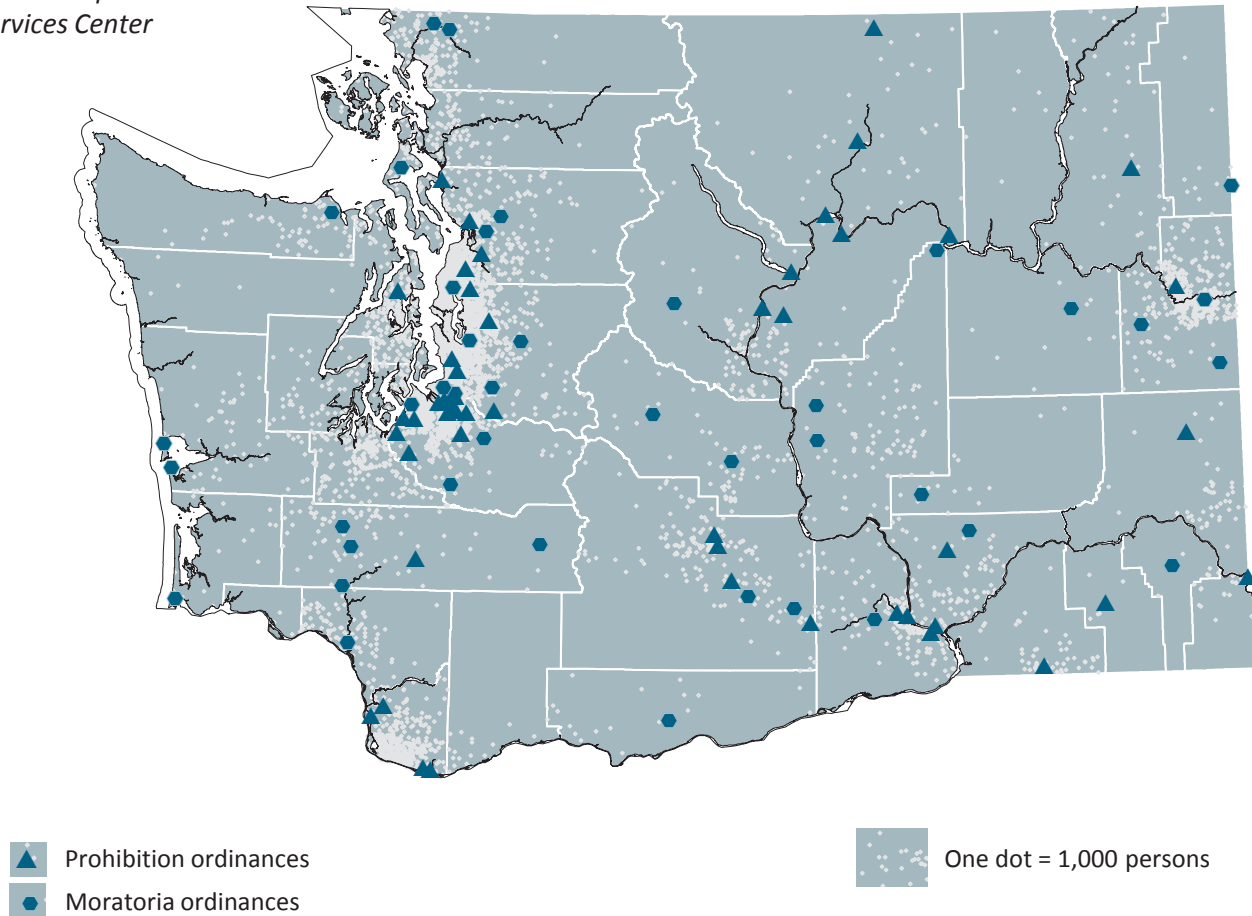
Source: Washington State Liquor Control Board



5.1 Cities with Prohibitions or Moratoria on Retail Sales

Cities with moratoria and prohibitions for retail sales of recreational marijuana are shown below. These data are current as of February 2015.

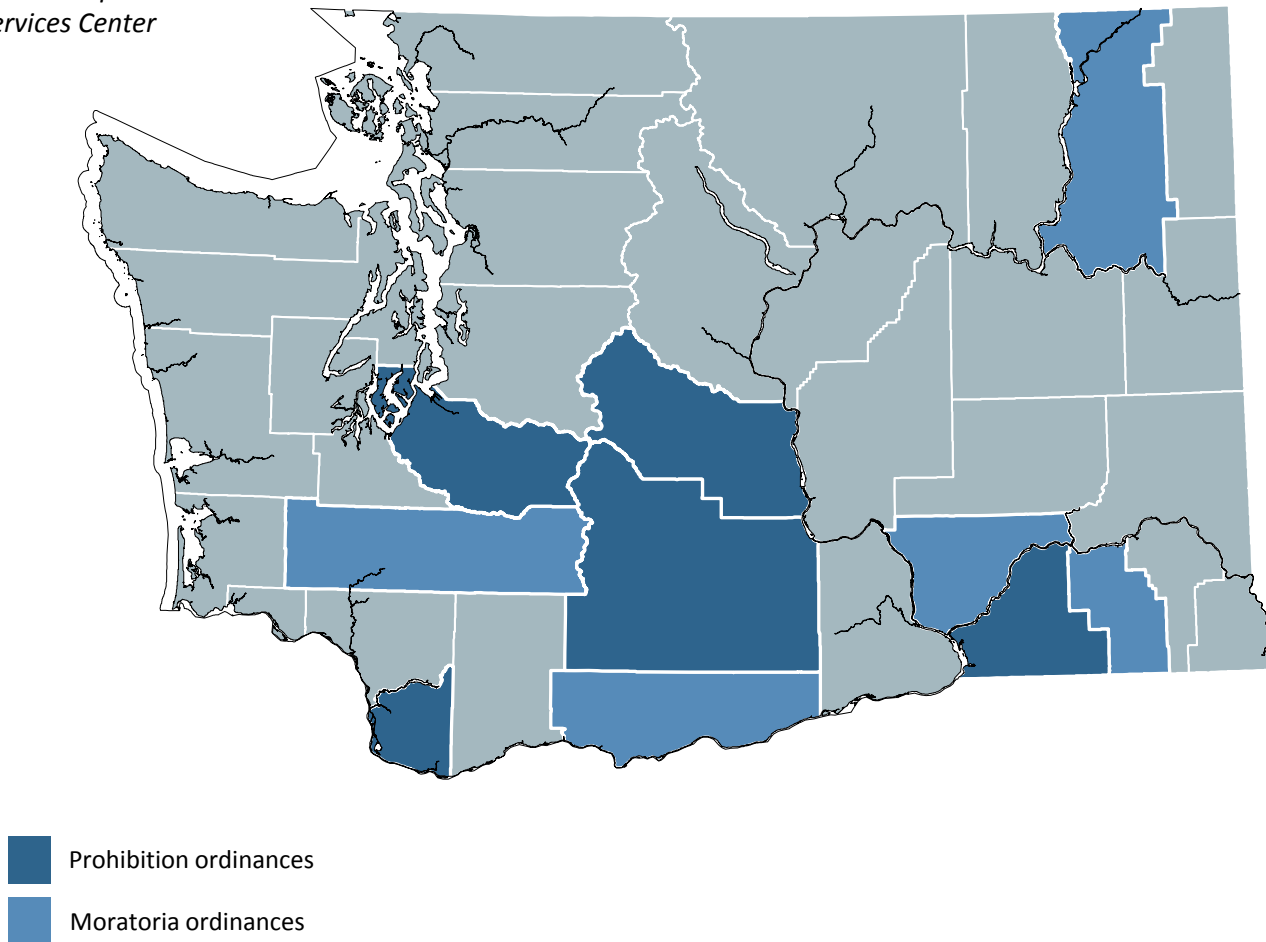
Source: Municipal Research and Services Center



5.2 Counties with Prohibitions or Moratoria on Retail Sales

Counties where unincorporated regions have moratoria or prohibitions on the sale of recreational marijuana are shown below. These data are current as of February 2015.

Source: Municipal Research and Services Center



**Office of Financial Management
Forecasting and Research Division**

Joe Campo, Senior Forecasting and Research Analyst
Health Care Research Center

Thea Mounts, Senior Forecasting and Research Manager
Human Services, Social Services, Criminal Justice and Health

Keri-Anne Jetzer, Senior Forecasting and Research Analyst
Sentencing Guidelines Commission

Jim Schmidt, Senior Forecasting and Research Manager
Economic, Revenue and Labor Forecasts, and Higher Education

Toby Paterson, Senior Forecasting and Research Analyst
Economic, Revenue and Labor Forecasts

