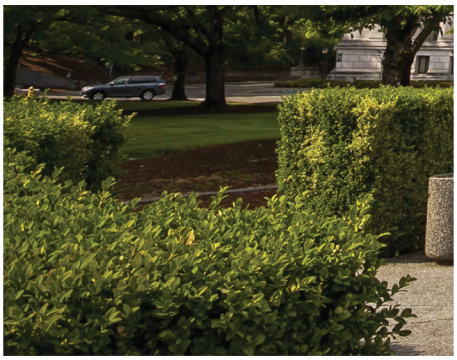
WASHINGTON STATE

Statistical Analysis Center

Informing a data-driven justice system

Monitoring Impacts of Recreational Marijuana Legalization

2019 Update Report



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Introduction

In 2012 Washington Initiative 502 (I-502), which legalized the sale, purchase and use of marijuana for people aged 21 and over, was on the November general ballot and passed. The initiative also created a system to regulate, tax and distribute marijuana throughout the state. The Washington State Liquor and Cannabis Board oversees the implementation and compliance for I-502.[1] Below is an overview of the requirements put forth in I-502.

- Age:
  - Must be 21 or older to purchase and/or possess marijuana.
- Purchase Limits:
  - Those 21 and older may purchase up to one ounce of "useable" marijuana;
  - Up to 16 ounces of marijuana-infused edibles in a solid form;
  - 72 ounces in liquid form; and
  - Seven grams of marijuana concentrates.
- Buying and Selling:
  - Marijuana can only be sold or purchased from a state-licensed retail store.
  - No one under the age of 21 is allowed on the premises.
- Public Use:
  - Marijuana may not be used in public.
- Driving:
  - It is illegal to drive while under the influence of marijuana (greater than five nanograms of active THC per milliliter of blood).
- Travel:
  - It is illegal to take marijuana outside of the state of Washington.

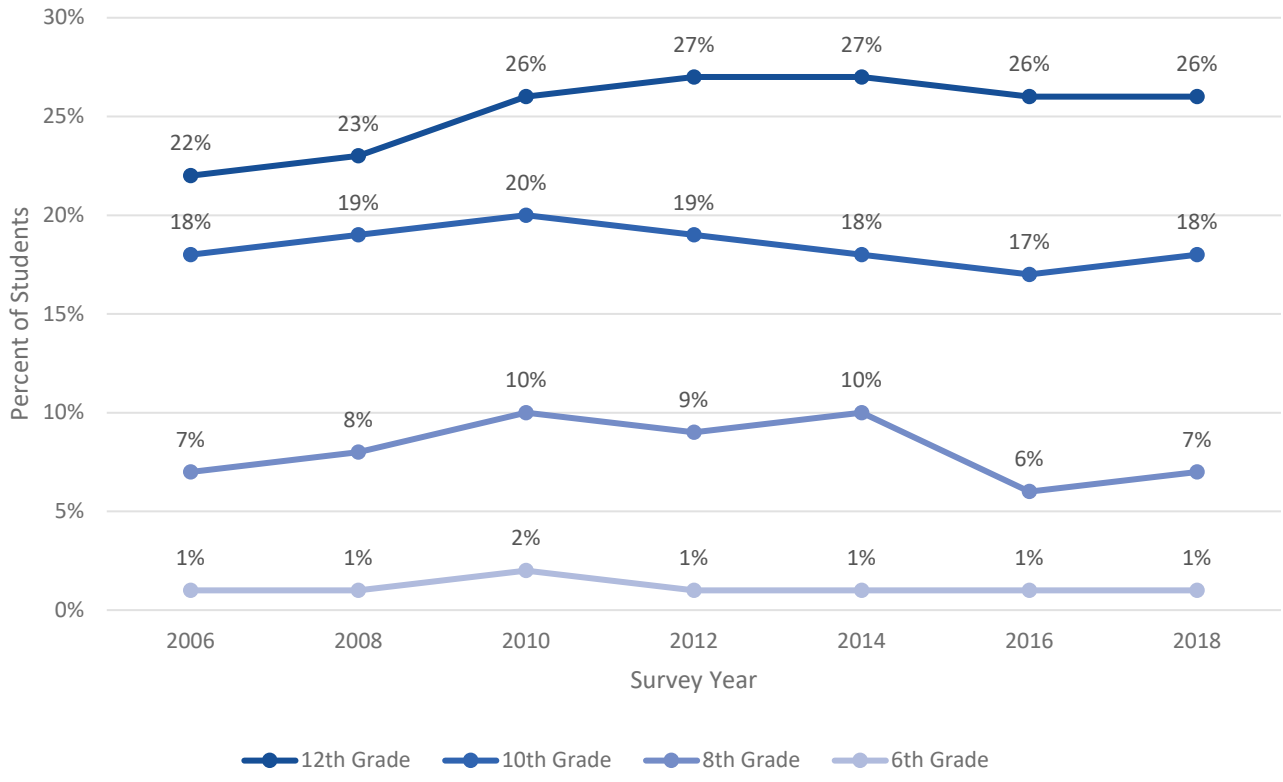
In February 2015, a baseline report on monitoring the impacts of recreational marijuana legalization was released by the Office of Financial Management. The report was updated in 2016, and again in 2017. This marks the fourth report in the series. This report includes updated and additional data, and in a few instances, modifies some of the previous measures. Certain measures previously included that are no longer available are noted at the end of the report.

[1] For more information, please visit https://lcb.wa.gov.

1.1 Current Use - Students

The Washington State Healthy Youth Survey is a bi-annual survey administered to adolescents in Washington state.[2] The survey covers safety and violence, risk and protective factors, health and health-related behaviors and alcohol/drug use.

Among 6th, 8th, 10th and 12th graders asked, "Have you used marijuana in the past 30 days?" There were no significant trends seen in the responses over time. Between grades, though, there are differences in use. About one-fourth of 12th graders are using marijuana, but only 1 percent of 8th graders have used marijuana in the last 30 days. This indicates that marijuana use steadily increases once students reach high school.



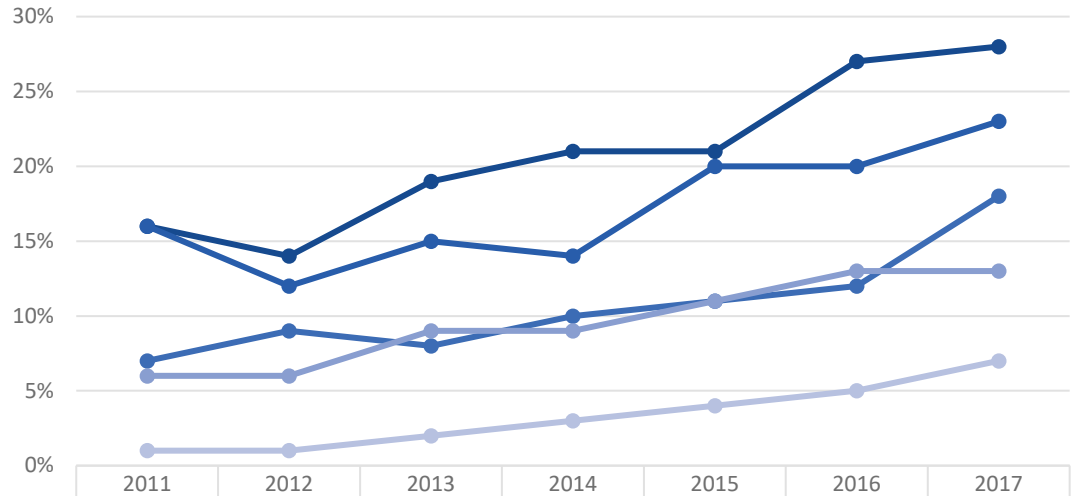
Source: Washington State Health Youth Survey

[2] For more information on the Healthy Youth Survey, please visit https://www.askhys.net/.

1.2 Current Use – Adults

The Behavioral Risk Factor Surveillance System is a health-related survey administered by the state and coordinated nationally by the Centers for Disease Control and Prevention. BRFSS data is collected through telephone interviews, and participants are asked questions regarding health-related risk behaviors, chronic health conditions, and the use of preventative services.[3]

Current marijuana use among adults has increased each year for all age categories. The most significant increase in use is among those ages 18 to 24. While only 16 percent of 18-24 year olds reported using marijuana in the last 30 days in 2011, this increased to 28 percent in 2017. In addition, those who reported being 65 or older are also reporting significantly higher marijuana use, though this may be related to the increase in population for those aged 65 and older.[4]



	2011	2012	2013	2014	2015	2016	2017
Ages 18-24	16%	14%	19%	21%	21%	27%	28%
Ages 25-34	16%	12%	15%	14%	20%	20%	23%
Ages 35-44	7%	9%	8%	10%	11%	12%	18%
Ages 45-64	6%	6%	9%	9%	11%	13%	13%
Ages 65+	1%	1%	2%	3%	4%	5%	7%

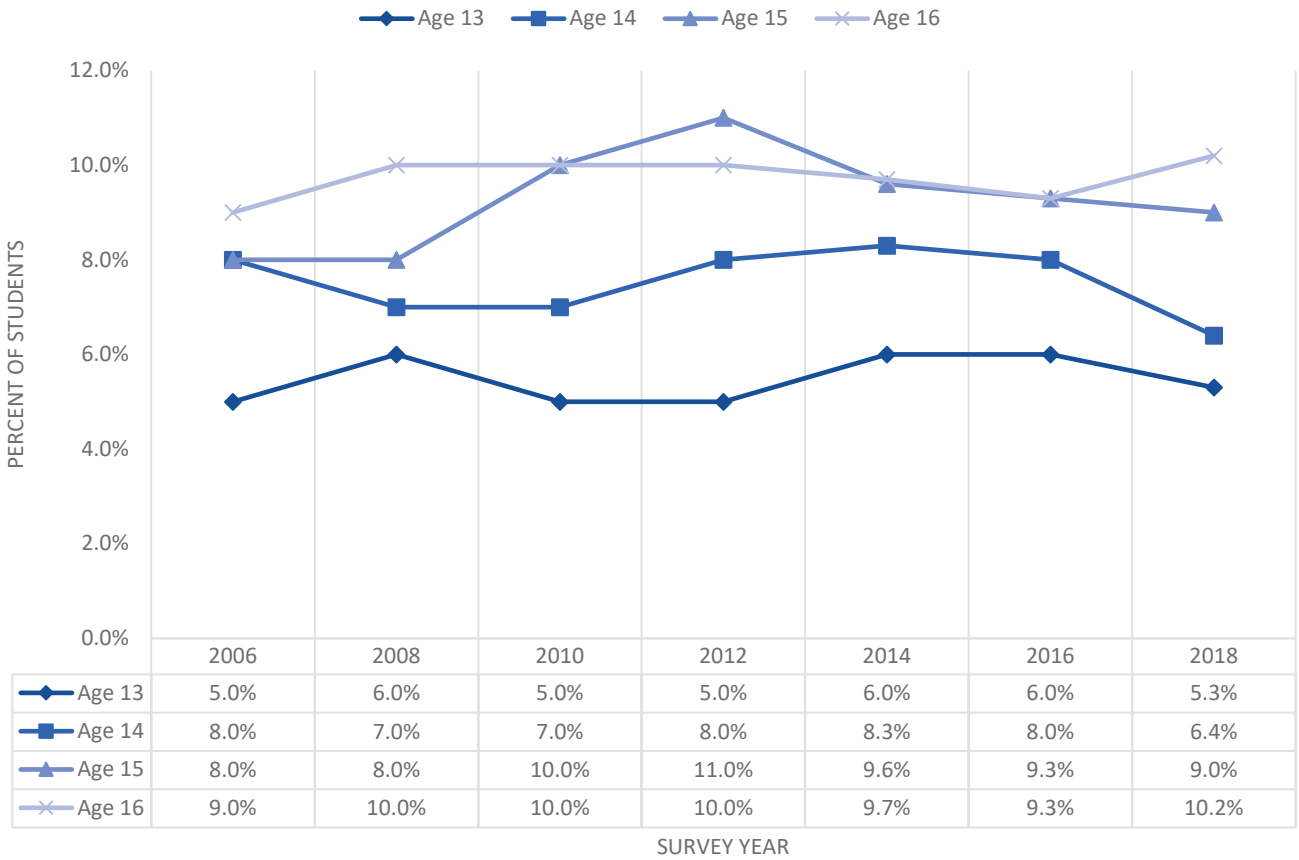
Ages 18-24 Ages 25-34 Ages 35-44 Ages 45-64 Ages 65+

Source: Washington State Behavioral Risk Factors Surveillance System

[3] For more information on BRFSS please visit https://www.cdc.gov/brfss/index.html.
[4] For more information on Washington's population please visit https://www.ofm.wa.gov/washington-data-research/population-demographics/population-estimates/estimates-april-1-population-age-sex-race-and-hispanic-origin

1.3 Age at First Use – Students

Among 12th graders asked, "How old were you the first time you smoked marijuana?" there was an increase among students who reported first using at age 16 between 2014 and 2016, while other age categories saw a small decline.

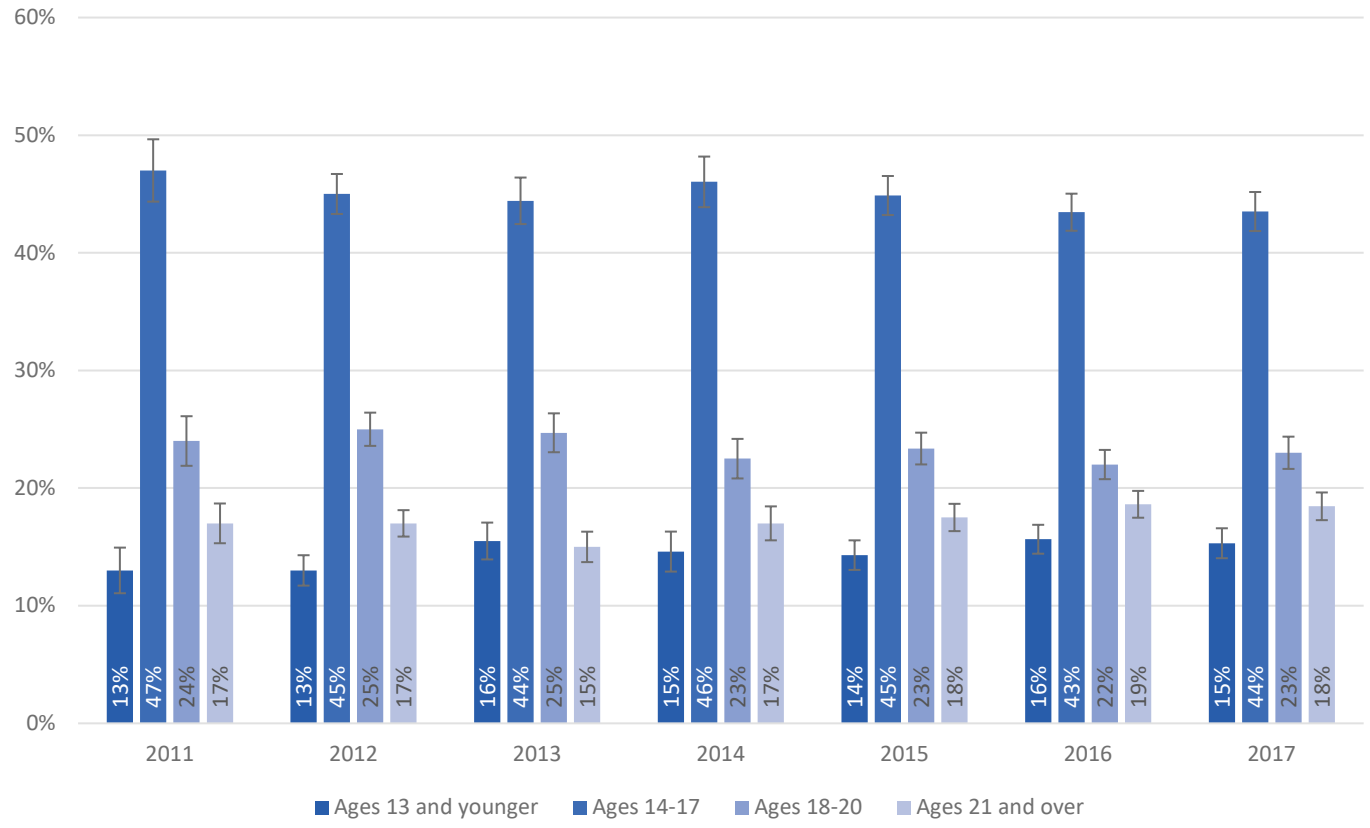


	2006	2008	2010	2012	2014	2016	2018
Age 13	5.0%	6.0%	5.0%	5.0%	6.0%	6.0%	5.3%
Age 14	8.0%	7.0%	7.0%	8.0%	8.3%	8.0%	6.4%
Age 15	8.0%	8.0%	10.0%	11.0%	9.6%	9.3%	9.0%
Age 16	9.0%	10.0%	10.0%	10.0%	9.7%	9.3%	10.2%

Source: Washington State Health Youth Survey

1.4 Age at First Use – Adults

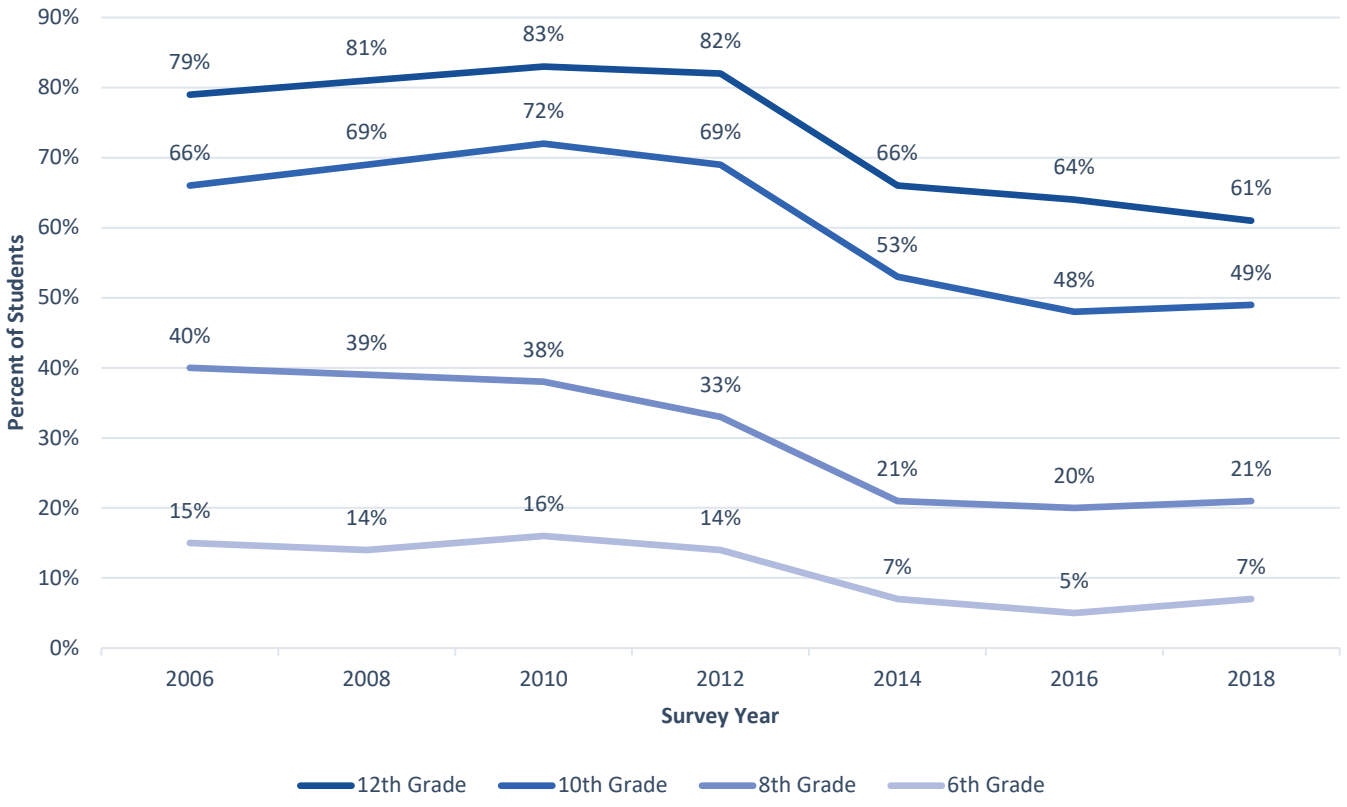
Among adults who had ever used marijuana, there have been no significant trends in age at first use for any of the age groups. The majority of adults who reported having ever used marijuana said their age at first use was between ages 14-17. This pattern was seen in each year between 2011 and 2017.



Source: Washington State Behavioral Risk Factors Surveillance System

1.5 Access – Students

This measure includes, by convention, those answering "sort of hard," "sort of easy" and "very easy" to the question "If you wanted to get some marijuana, how easy would it be to get some?" While access differs by grade level, each grade level saw a decline after 2012 in ease of access.

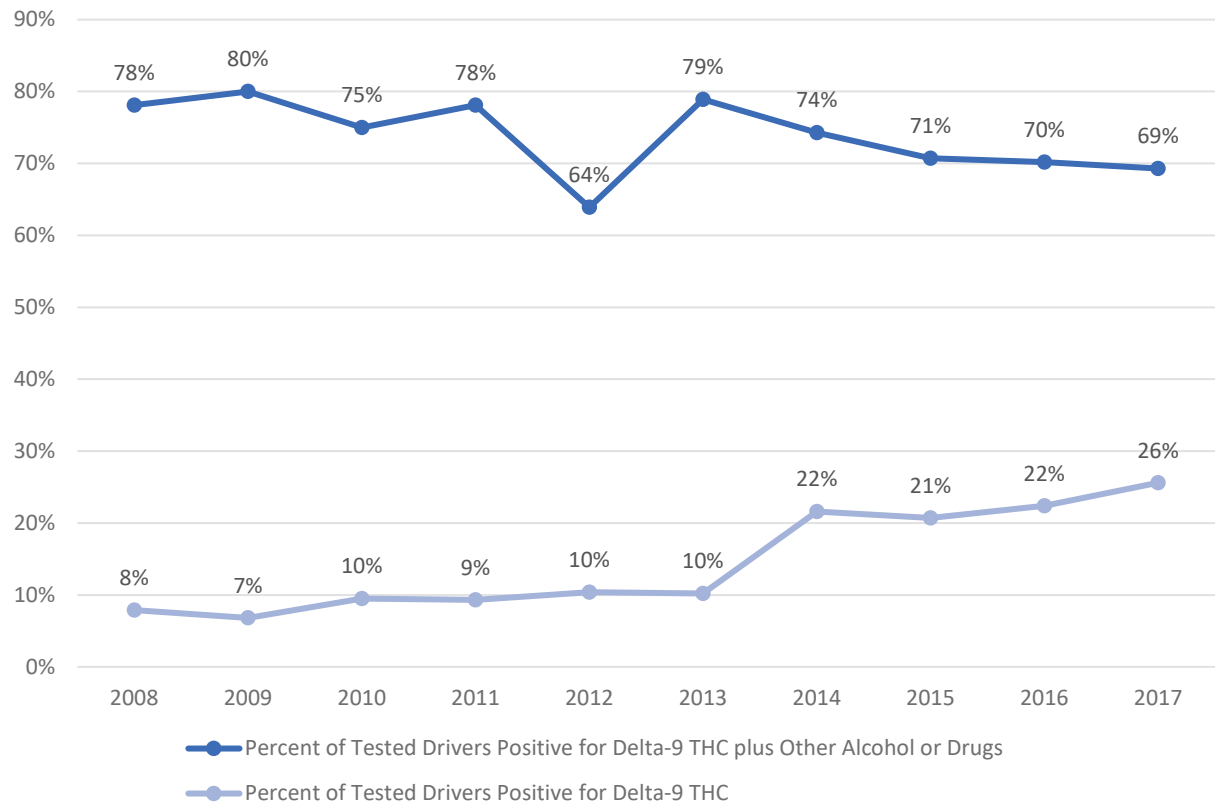


Source: Washington State Health Youth Survey

1.6 Traffic Fatalities

The Washington Traffic Safety Commission is Washington's designated highway safety office, and has a goal of reducing traffic fatalities and serious injuries. Chapter 46.52.065 of the Revised Code of Washington requires that "a blood sample be taken from all drivers and all pedestrians who are killed in any traffic [crash] where the death occurred within four hours." A similar law does not exist for surviving drivers involved in fatal crashes, though all drivers suspected of being under the influence can be tested.

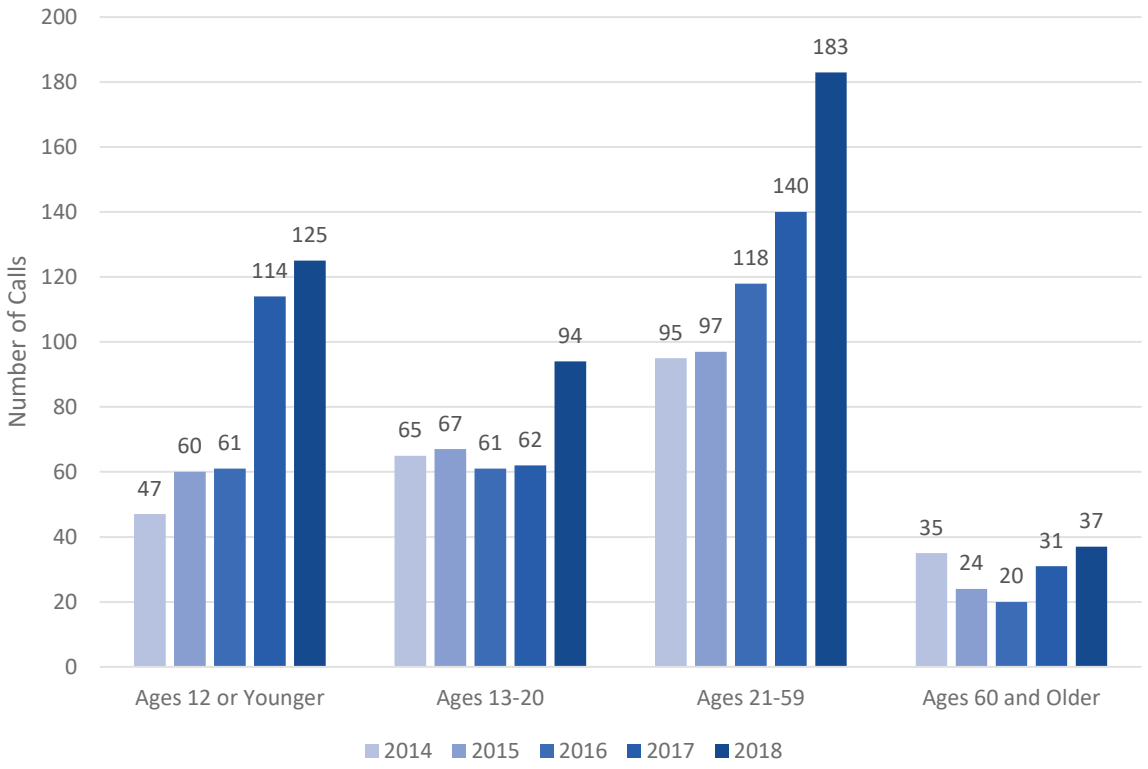
The chart below shows of those drivers involved in fatal crashes who were tested, the percentage that tested positive for Delta-9 THC in some form (whether Delta-9 THC alone, or with other drugs or alcohol). In addition, of those who tested positive for Delta-9 THC, the number of those who tested positive for Delta-9 THC and other drugs or alcohol. The percent of those tested and found positive for Delta-9 THC plus alcohol or other drugs seems to be slowly declining each year, though the number of people testing positive for Delta-9 THC in some form is increasing annually.



Source: Washington Traffic Safety Commission

1.7 Poisonings

Since 2014, the number of calls for all ages to the Washington Poison Center for marijuana-related incidents has increased. The most drastic increase though, is being seen for those aged 12 and under. Since 2014 there has been a 166% increase in calls for those aged 12 and under, and a large portion of these calls are for children 5 and under. The Washington Poison Center notes that 61 percent of these calls are for cannabis alone, and another 37 percent are for cannabis and another substance (includes alcohol).

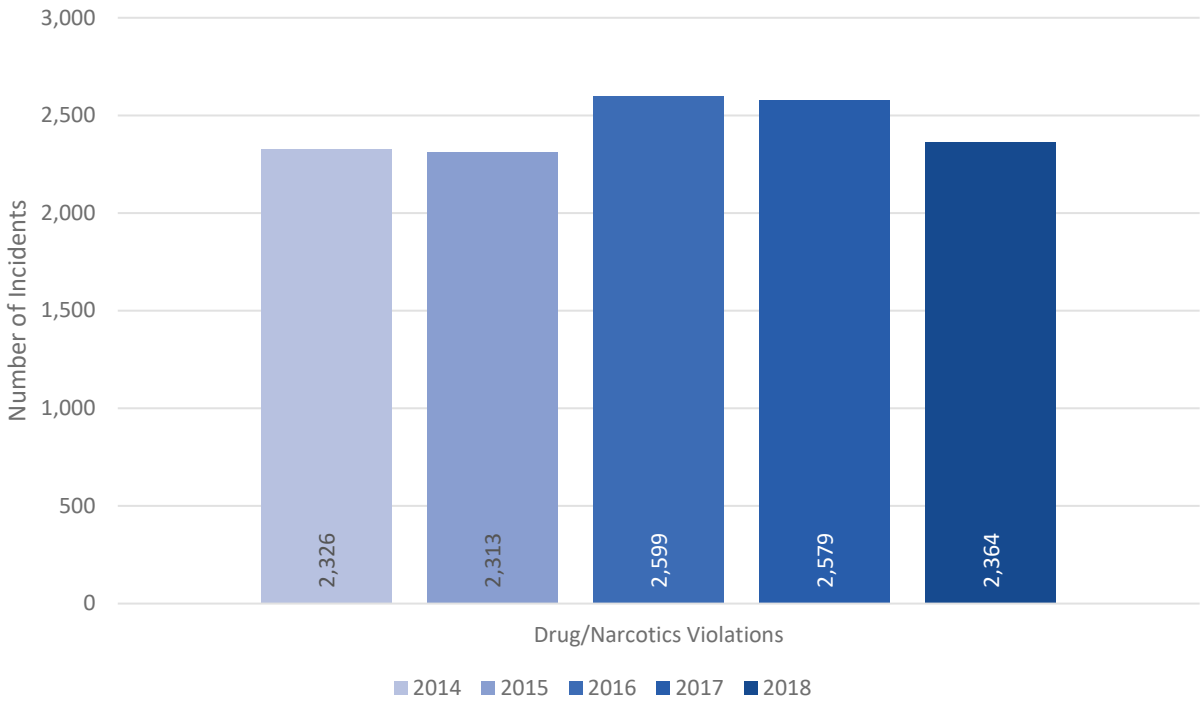


Source: Washington Poison Center

2.1 Marijuana-Related Drug or Narcotic Incidents

The National Incident Based Reporting System was created to improve the overall quality of crime data collected by local law enforcement. NIBRS collects more data than previous crime databases, as it collects information on the victims, known offenders, relationships, etc. Local law enforcement submits their information via NIBRS, and this information is then available in the national database, as well as at the state-level. The Washington Association of Sheriffs and Police Chiefs[5] houses Washington's NIBRS data.

2016 and 2017 saw slight increases in marijuana-related Drug/Narcotic Violations. In 2018, the number of marijuana-related drug or narcotic incidents returned to a lower level. The decline indicates that there is likely no significant trend in these violations, and that overtime the number of incidents is remaining relatively stable.

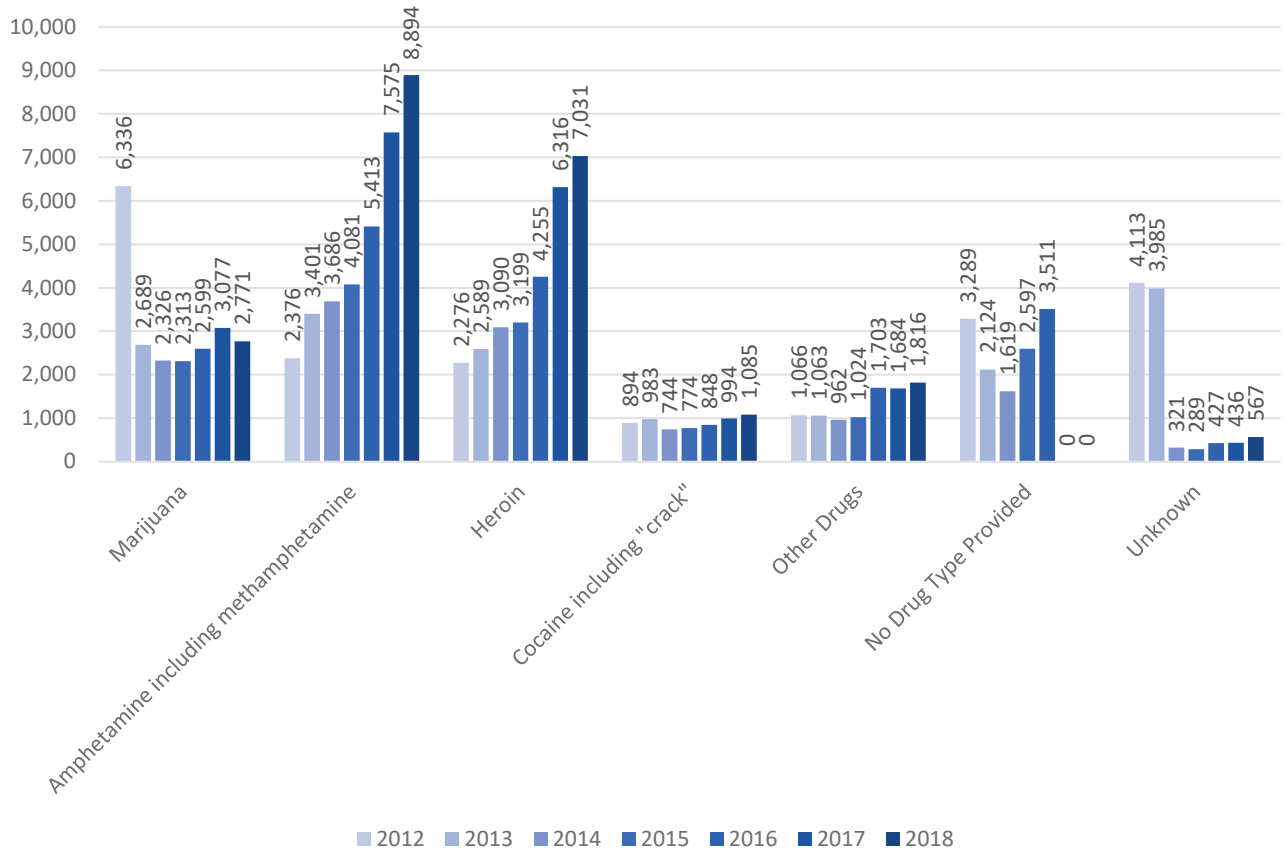


Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)

[5] https://www.waspc.org/crime-statistics-nibrs-

2.2 Drug or Narcotic Incidents

The number of incidents[6] 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. This trend has continued through 2018, with incidents involving amphetamines or methamphetamines, and those involving heroin both increasing by about 49 percent since 2016.

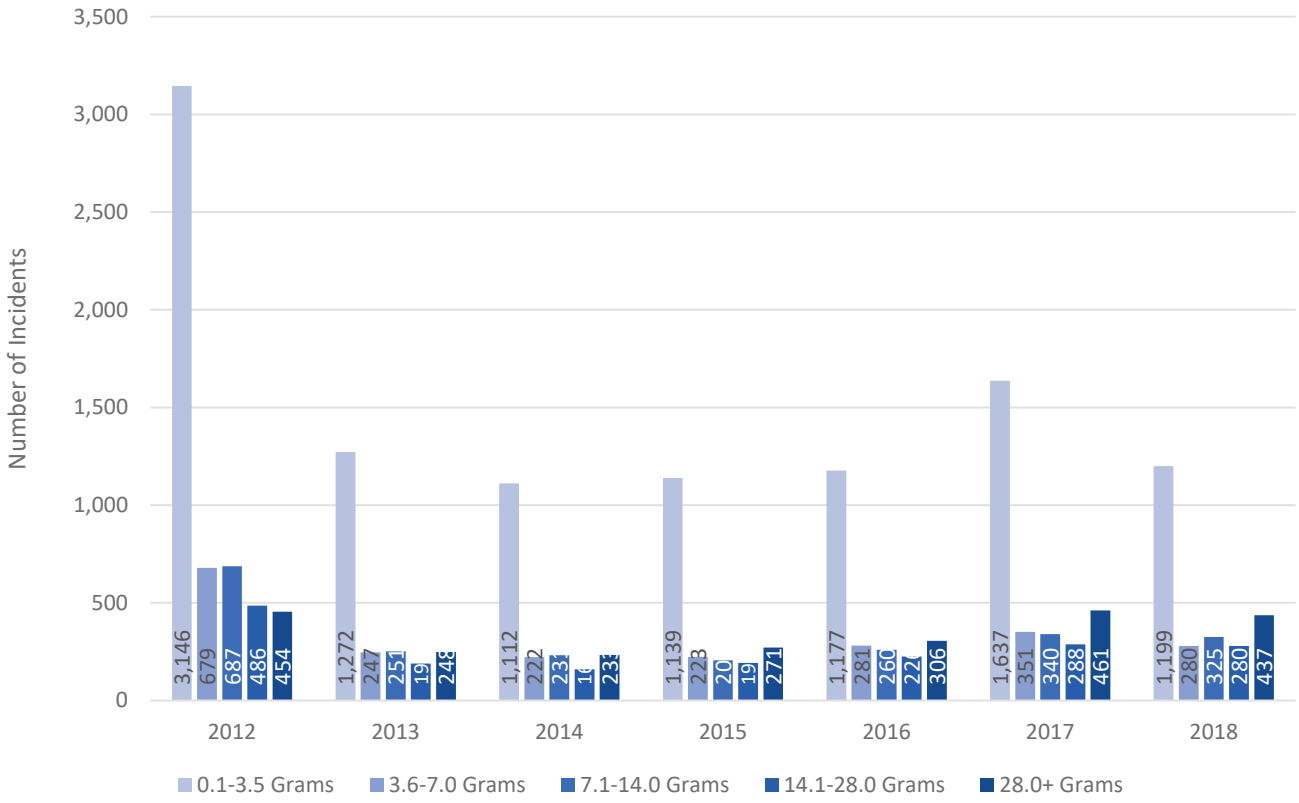


Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)

[6] *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 into grams) are shown below.[7] For 2012–18, the most frequent number of seizures continues to be for quantities of 3.5 grams (an eighth of an ounce) or less. Between 2012 and 2015, though, the number of seizures decreased. Seizures started to increase beginning in 2016.

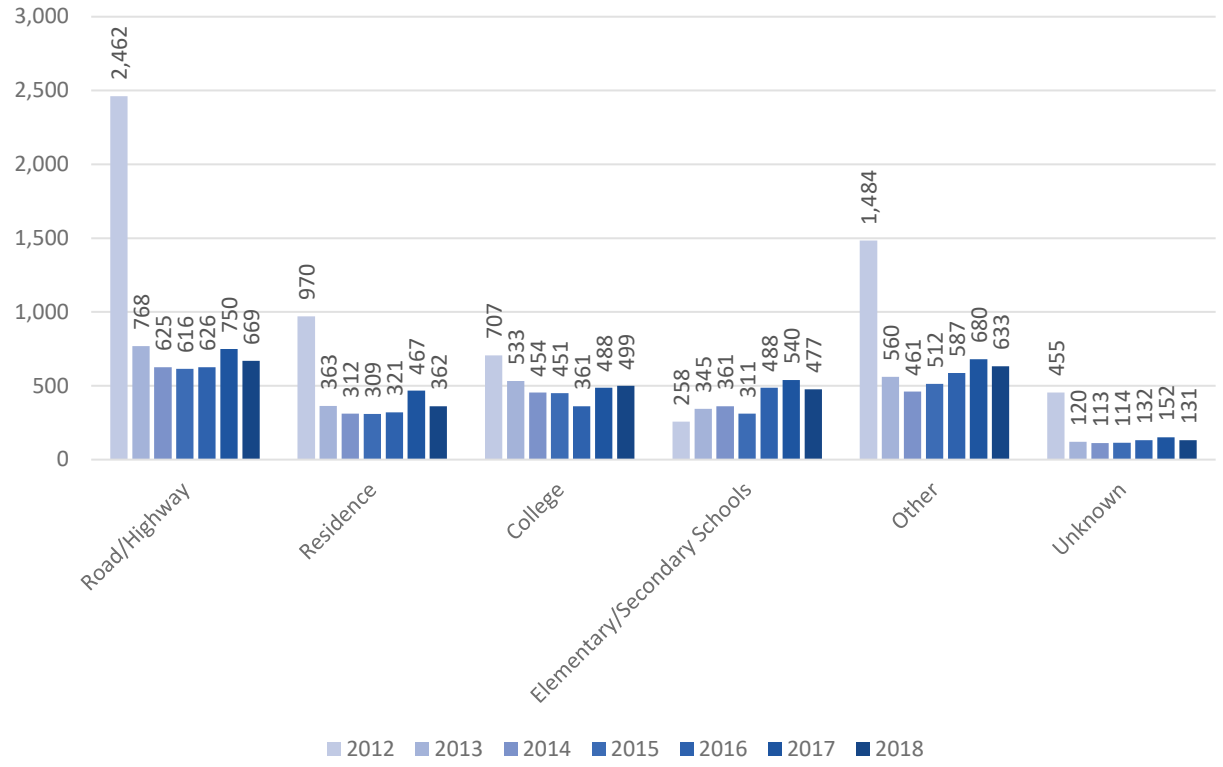


Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)

[7] *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. Since 2012, each location has experienced a downward trend in incidents, with a small spike seen in 2017 and 2018. The slight increase may be attributed to increased National Incident-Based Reporting System reporting among several counties.

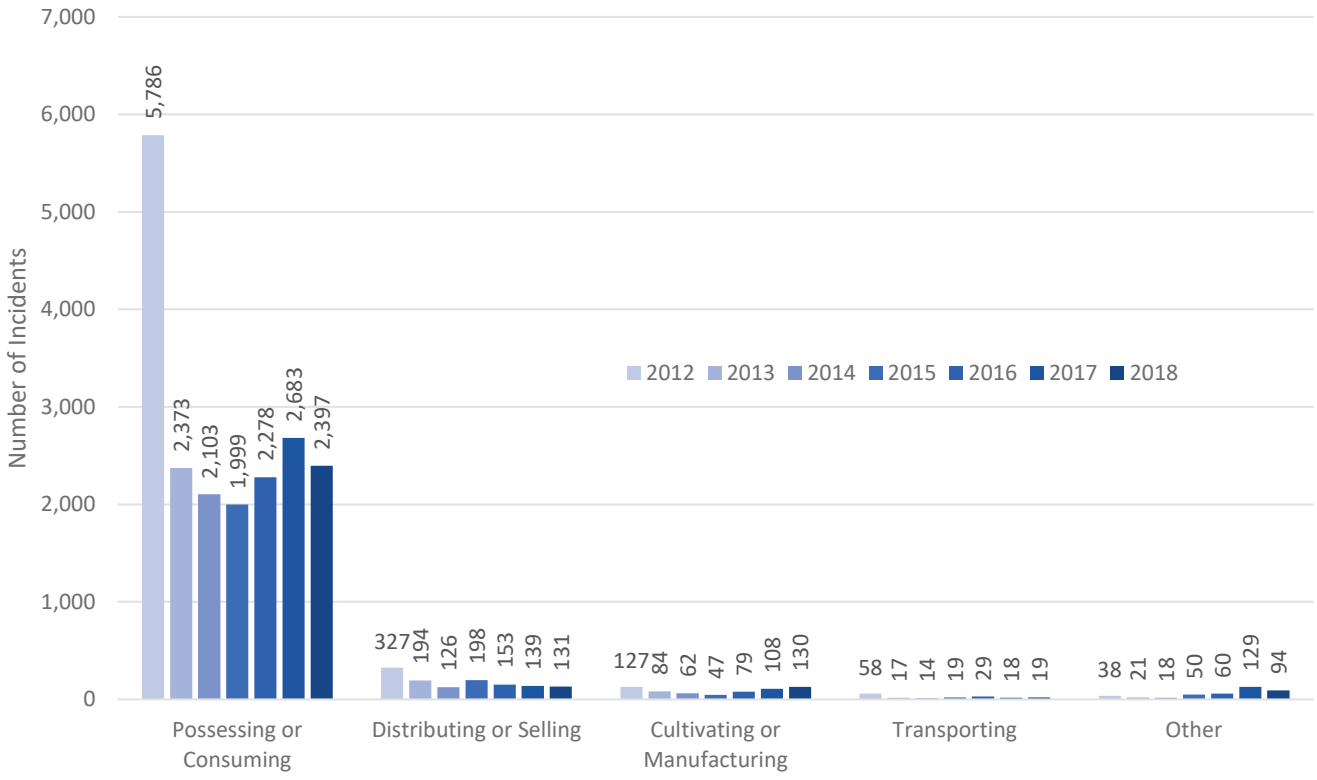


Source: Washington Association of Sheriffs and Police Chiefs (does not include Washington State Patrol data)

2.5 Criminal Activities Involving Marijuana

Between 2012 and 2015 the number of incidents including Possessing or Consuming Marijuana decreased by 65 percent. Since that time, the number of incidents involving marijuana has remained relatively stable.

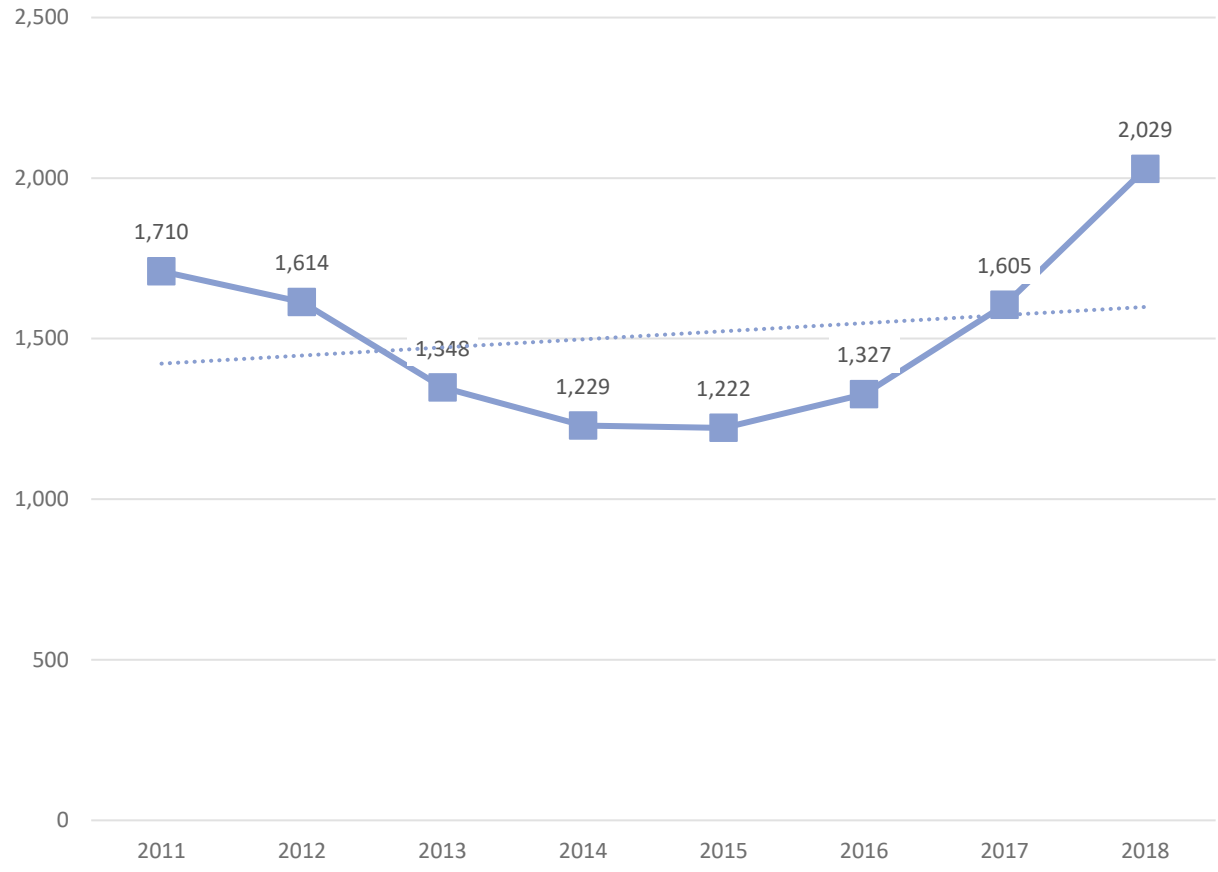
*Incidents involving multiple illicit drugs or other criminal activities are included only if marijuana is listed first by the local law enforcement agency. The order used by those agencies is not hierarchical.



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

2.6 Drug-only DUI Arrests

Drug-only driving under the influence (DUI) arrests do not differentiate marijuana from other drugs. After declining for several years, these arrests moved from a low of 1,222 in 2015 to a high of 2,029 in 2018, for an overall increase of about 40 percent during those four years.

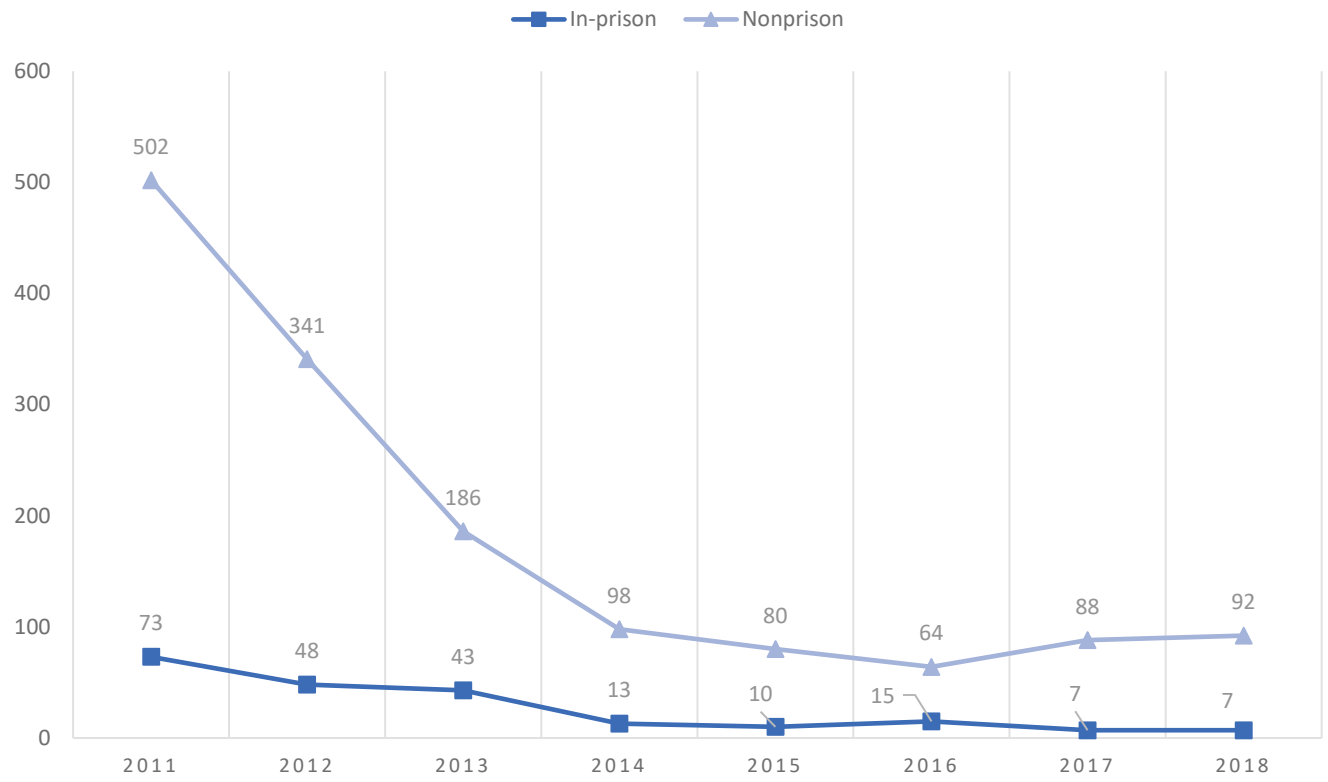


Source: Washington State Patrol TAS

2.7 Marijuana-related Convictions

Since hitting a low in 2014 convictions for the manufacturing, delivery or possession with intent to deliver marijuana,[8] both in-prison and nonprison, have remained relatively stable. From 2011 to 2013, the only convictions for the manufacturing, delivery or possession with intent to deliver marijuana[9] were first-time convictions.

*Conviction data are based on a hierarchy where the offense that has the longest confinement term is considered the "most serious." These data represent convictions where the most serious offense was for manufacturing, delivery or possession with intent to deliver marijuana.

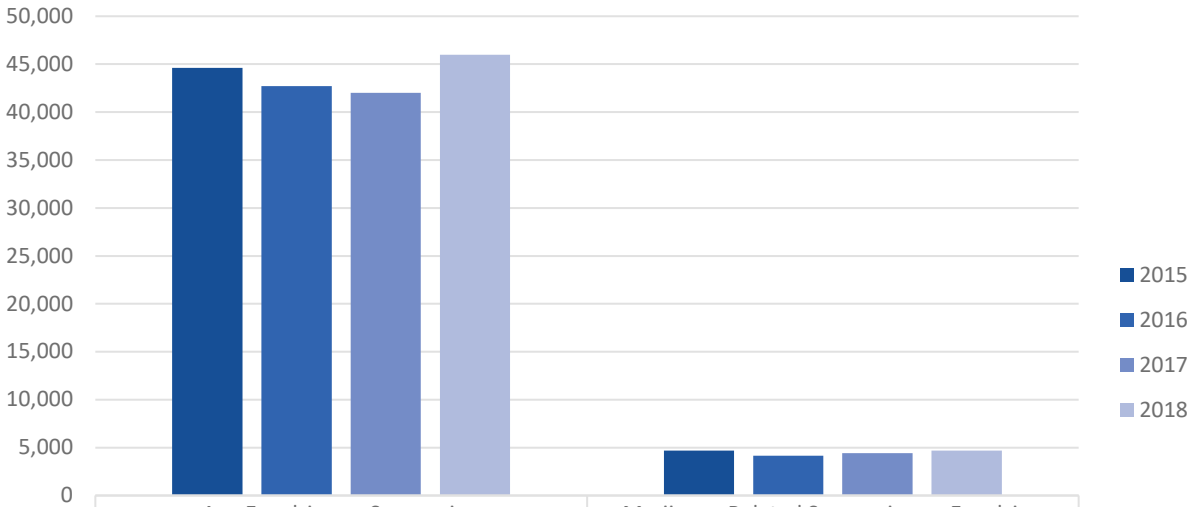


Source: Washington State Caseload Forecast Council, Statistical Summary of Adult Felony Sentencing

[8] RCW 69.50.401(2)
[9] RCW 69.50.408

2.8 Suspensions or Expulsions from Schools – Students

Since the 2015-2016 school year, the rate of enrolled students who experience some type of exclusionary event (either suspension or expulsion) has remained relatively stable. It is important to stress that the number of students facing any type of exclusionary event is fairly small, with less than 4 percent of the total student population being expelled or suspended each school year since 2015. Of those who are suspended or expelled, the number of events that occurred because of a marijuana-related incident has remained stable, at just above 10 percent of all exclusionary events. This includes both long- and short-term suspensions.

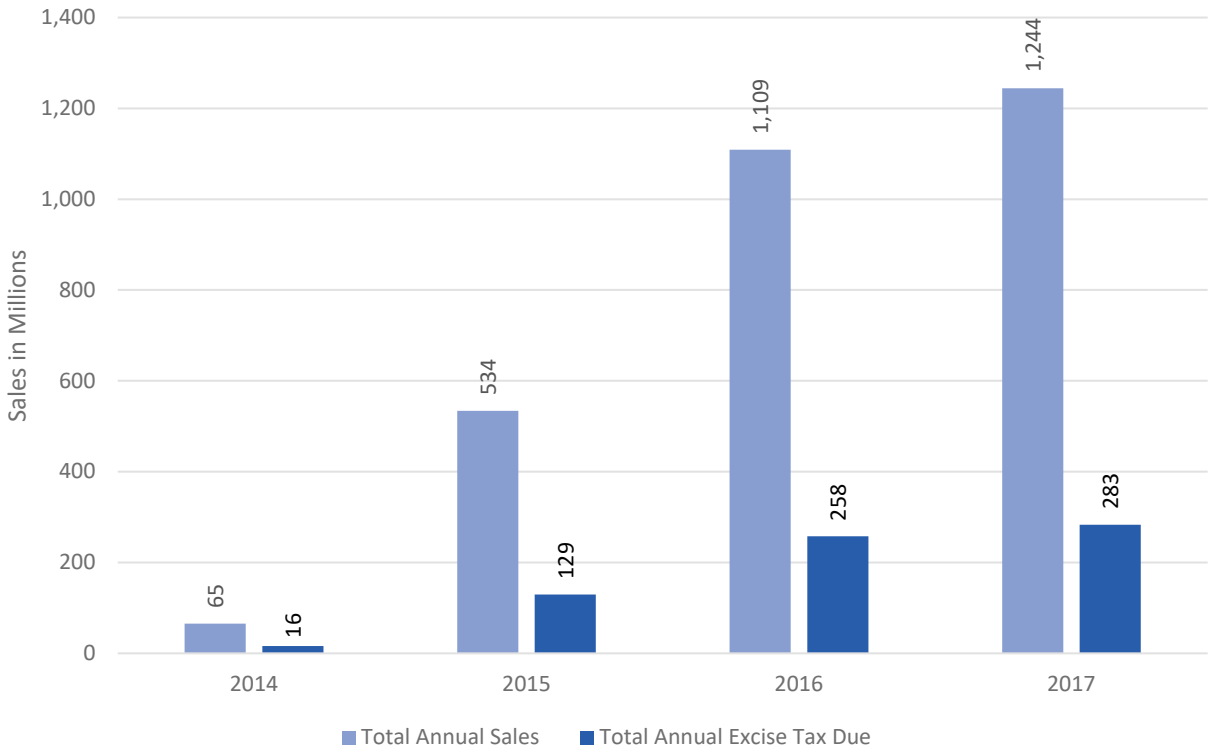


	Any Expulsion or Suspension	Marijuana Related Suspension or Expulsion
2015	44,620	4,683
2016	42,702	4,152
2017	42,022	4,426
2018	45,978	4,676

Source: Office of Superintendent of Public Instruction

3.1 Recreational Marijuana Revenues with 25-Percent Excise Tax

Reports from the Liquor and Cannabis Board show that sales and excise taxes rose dramatically during the first few months of legalization in 2014.[10] Between 2015 and 2016, total sales more than doubled. Since then, sales have increased at a lower rate.

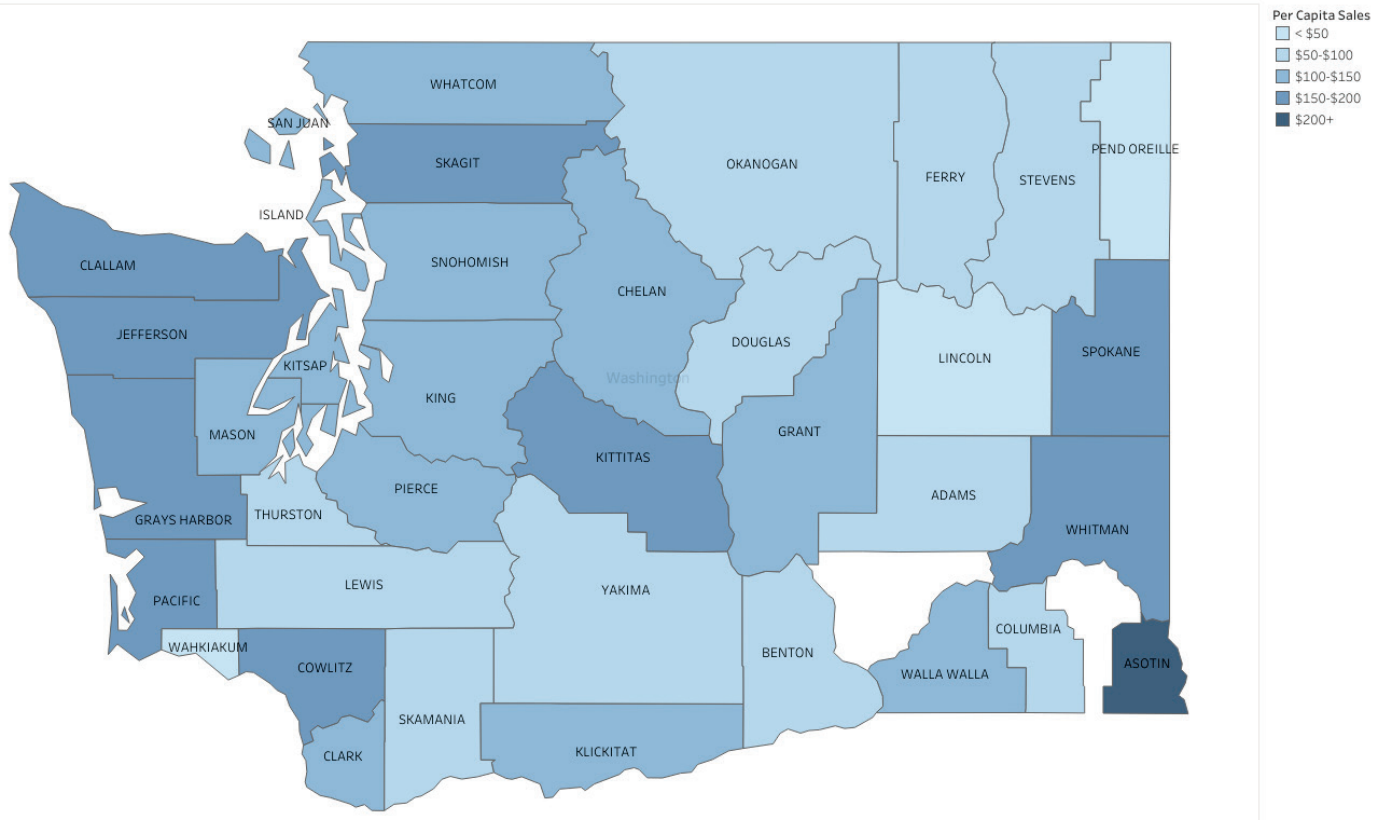


Source: Washington State Liquor and Cannabis Board

[10] In past reports, we have reported this measure by month, but will now show it annually due to the large amount of data.

4.1 Annual Per Capita Sales by County

Retail sales of recreational marijuana sold per 1,000 persons living within the county where the sales occurred between July 1, 2018 and June 30, 2019 are mapped below.[11] It is worth noting that counties that border Idaho, where marijuana remains illegal, are seeing higher sales per 1,000 people than other nearby counties.

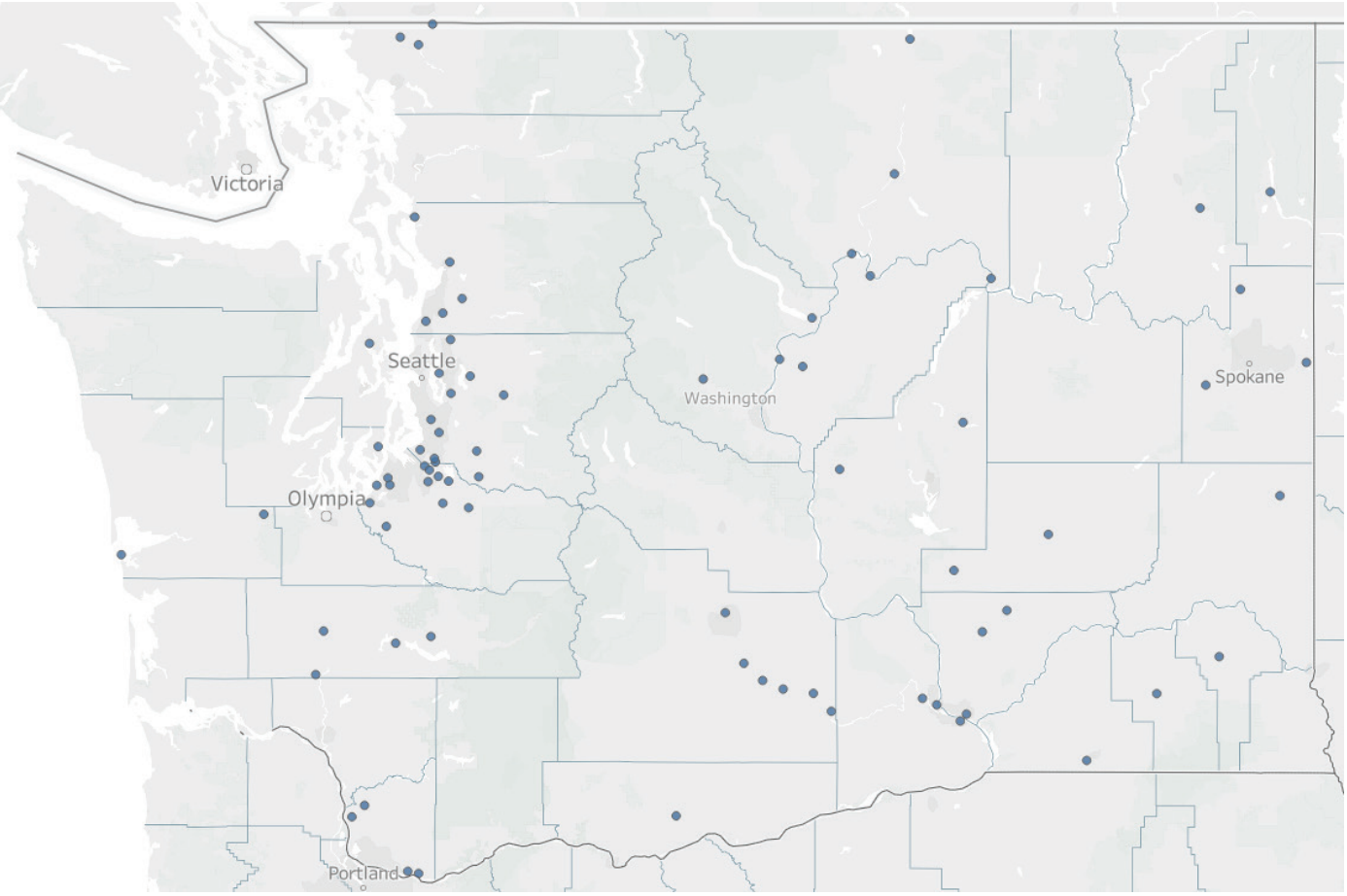


Source: Washington State Liquor and Cannabis Board and OFM Population Data

[11] Counties without color have not reported data

4.2 Cities with Prohibitions or Moratoria on Retail Sales

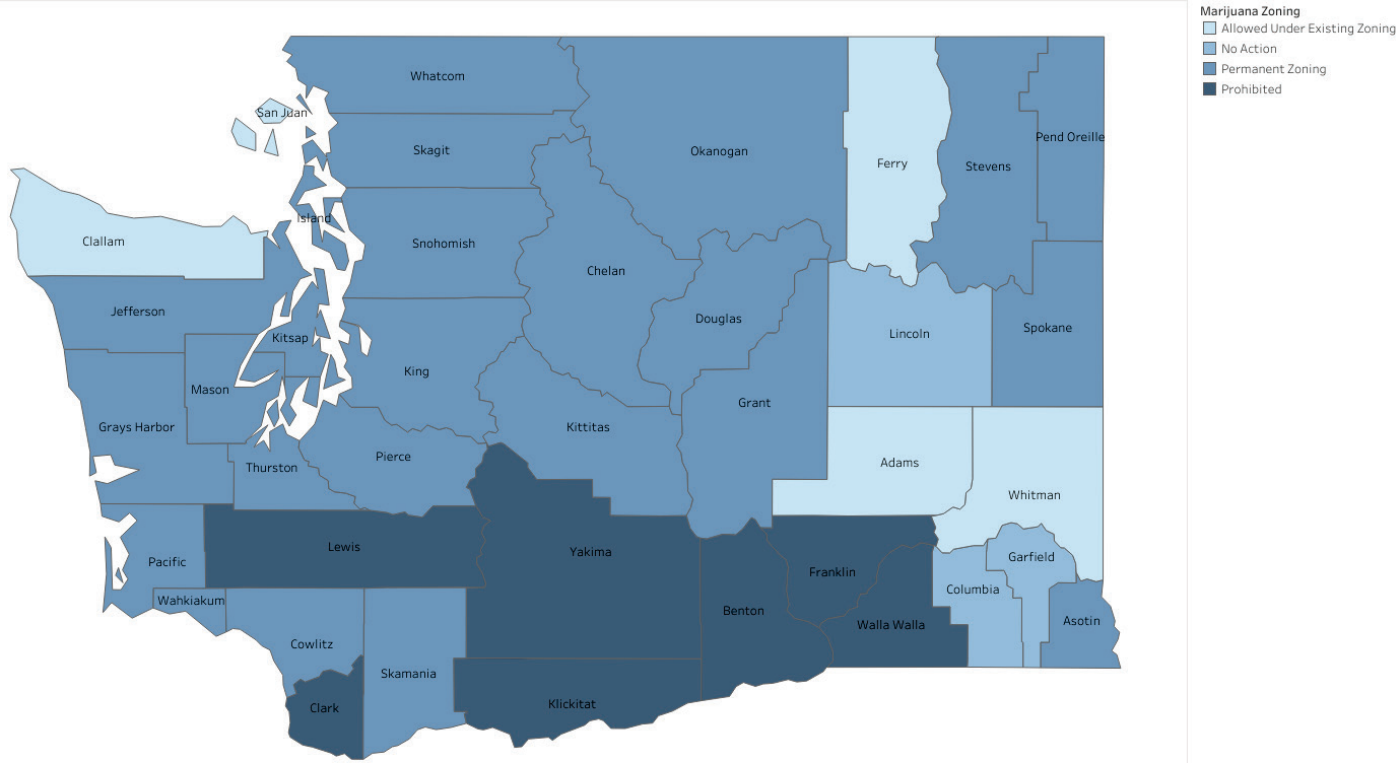
As of June 2019, 79 cities in Washington state have prohibited the sales of recreational marijuana. In addition, another 14 cities have temporary zoning in place that may expire. For more information on the cities that have prohibited retail sales, as well as for additional zoning ifnormation, please visit http://mrsc.org.



Source: Municipal Research Services Center

4.3 Counties with Prohibitions or Moratoria on Retail Sales

As of June 2019, there are seven counties that have prohibited the retail sales of recreational marijuana. In addition, another five have temporary zoning in place that may expire.



Source: Municipal Research and Services Center

Office of Financial Management
Forecasting and Research Division

Leah Landon, Forecast and Research Analyst/SOPB Coordinator
Statistical Analysis Center

Contributors:

Steve Cleverdon, Senior Forecast and Research Analyst
Economic, Revenue and Labor Forecasts

Keri-Anne Jetzer, Forecast and Research Analyst
Statistical Analysis Center

Dennis McDermott, Senior Forecast and Research Analyst
Healthcare Research Center

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

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