Cannabis Regulation Impacts on Road Fatalities and Crime Rates: Quick Facts
When considering regulatory cannabis access, whether for medical or adult-use, increasing crime rates and road fatalities are often cited as a reason to keep prohibitive laws intact. Sensationalized stories are all over the internet claiming road fatalities significantly increase, along with crime rates. The question can be answered when looking at data kept by the states involved, and checking for trends.

The following data sets were checked for correlation to cannabis access:

- US Census data for population growth rates
- American Health Rankings for violent crime
- Economic trend data over a 10 year period
- National and State databases for impaired driving trends
- National and state data regarding road fatalities

**Summary**

- Nine total states have had regulation for both medical and adult-use long enough to collect preliminary data.
- Only one out of the nine states showed rises in road fatalities and impaired driving that could potentially be correlated to cannabis regulation. More data on environmental factors is needed for the assessment to be considered conclusive.
- Eight states showed NO identifiable correlation between cannabis regulation and road fatalities. Trends were often in a pattern prior to regulation, and most fluctuations happened with no direct relation to cannabis access.
- Changes in crime rate appeared to have no massive increases, except in Alaska. Alaska’s economy went in to a steep decline the same year voters officially regulated adult-use as an industry. Adult-use cannabis has been quasi-legal in Alaska since 1975.
- **Most crime rates have declined since the late 1990’s until present**, with increases still falling well below peak years around the turn of the century.
- Several states reported lower DUI fatalities/rates.
- Maine had significantly less fatalities and lower crime rates.
- Ultimately no direct correlation could be found that would implicate cannabis in crime rate or road fatality drops/increases.
- Some of the factors used to disqualify regulation as a cause for incident increases:
  - If overall DUI levels decreased then consumption of an intoxicating substance wasn’t causal for rate increases
  - Patterns that held steady and were in progress before the regulations took effect, which meant those trends started prior to cannabis access
  - Population growth at or near the same rates as increases
  - Irrational fluctuations up and down that would suggest that rate changes are independent of regulation
2008-2010 were peak years for Colorado’s medical cannabis patient registry. Despite a 13.2% population growth from 2010 until 2018*, patient registry numbers held somewhat evenly then declined when there was no benefit to being on the registry outside saving tax money.

*https://www.census.gov/quickfacts/CO

Since Medical was legalized, Colorado’s overall crime rate is down with only slight fluctuations since the legalization of adult-use. Nothing in this data suggests that legalization of cannabis correlates to increased crime levels.

https://www.colorado.gov/pacific/dcj-ors/or-crimestats

Colorado’s overall motor vehicle fatality rate has declined since 2002, with a brief uptick in crashes peaking in 2017. Since then, fatality rates have started to decline again. According to a 2018 study by the Colorado department of Criminal Justice, “The total number of DUI citations issues by the Colorado State Patrol (CSP) decreased from 5,705 in 2014 to 4,849 in 2017.” This means any increases in traffic fatalities did not correlate with an increase in intoxication of any substance.


In November 2016, the State of Nevada legalized adult-use cannabis. Crash fatality rates remained relatively the same, and an upward trend had started several years before cannabis regulation. According to US DOT and Nevada State data, fatality rates through the end of 2019 look like this:

2017: 311*
2018: 330*
2019 through November: 243**

Nevada’s crime rates have steadily been dropping and continued that trend after regulation of recreational. Medical access became effective in 2001, and the crime statistics overall are significantly lower. ***

As with Colorado, impaired driving rates in Nevada declined from 2016 through the end of 2018*, the most recent statistics available. **Nevada’s regulation of cannabis access has not resulted in any data that can directly correlate accidents and crime with cannabis access.**

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* [https://cdan.nhtsa.gov/stsi.htm](https://cdan.nhtsa.gov/stsi.htm)


Vermont:

Crime and Motor Vehicle Fatalities Data

Vermont adult-use cannabis regulation impacts are still too soon to calculate, but medical access has been around since 2004. A Fiscal Year 2020 report from NHTSA reports that impaired driving rates were steadily declining*, which would exempt impairment as a cause for fatal crash increases. There is no viable correlation between crime rates, traffic fatalities, and cannabis laws.

In Vermont, traffic fatalities have remained independent of regulation impacts, with increases in fatalities not correlating to cannabis laws.

According to news reports, Vermont had a sharp decline in the number of road fatalities from 2018-2019:

2019: 44*

Vermont regulated medical access in 2004 and recreational in 2018. From 2016 through 2019, crime rates in Vermont have steadily increased, though they are still far below the national average. Crime rates after adult-use cannabis laws were passed remains relatively unchanged from 2018 through 2019. ***

*https://cdan.nhtsa.gov/stsi.htm


Overall, since the beginning of cannabis regulation, crime in Oregon has fallen. Crime rates after adult-use cannabis laws were passed have only slightly increased, and are lower than the population growth. No correlation to cannabis regulation can be attributed to crime rates.***

Traffic Safety Performance (Core Outcome) Measures* For Oregon

<table>
<thead>
<tr>
<th>Year</th>
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<tr>
<td>Traffic Fatalities</td>
<td>Total (C-1)</td>
<td>377</td>
<td>317</td>
<td>331</td>
<td>337</td>
<td>313</td>
<td>357</td>
<td>446</td>
<td>498</td>
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<tr>
<td>Rural</td>
<td>292</td>
<td>216</td>
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<td>229</td>
<td>199</td>
<td>237</td>
<td>282</td>
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<td>Urban</td>
<td>85</td>
<td>101</td>
<td>114</td>
<td>108</td>
<td>114</td>
<td>120</td>
<td>163</td>
<td>189</td>
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</table>

Overall, since the beginning of cannabis regulation, crime in Oregon has fallen. Crime rates after adult-use cannabis laws were passed have only slightly increased, and are lower than the population growth. No correlation to cannabis regulation can be attributed to crime rates.***

*https://cdan.nhtsa.gov/stsi.htm
**https://www.census.gov/quickfacts/fact/table/OR/PST045219
****https://www.oregon.gov/ODOT/Get-Involved/CIAC/D2_Apr%202019%20CIAC%20KPMs.pdf
Cannabis regulation for medical use began in 2012, with adult-use following in 2016. Traffic fatalities have hovered in the same pattern since 2009 with little change.* Between 2010 and 2019, Massachusetts had a population increase of 5.3%.** Alcohol related road deaths have dropped in Massachusetts since 2014.* Crime rates are on a steady trend downward as well. There is no relationship between cannabis regulation and traffic fatalities or crime rates.

* [https://cdan.nhtsa.gov/stsi.htm](https://cdan.nhtsa.gov/stsi.htm)
** [https://www.census.gov/quickfacts/fact/table/MA/PST045219](https://www.census.gov/quickfacts/fact/table/MA/PST045219)
Maine:

Crime and Motor Vehicle Fatalities Data

Cannabis regulation for medical use began in 1999, with adult-use following in 2016. (4) Crime, fatal accidents, and rates of impaired driving are all relatively unchanged in Maine. (1) (2) (3)

There is no relationship between cannabis regulation and traffic fatalities or crime rates.

Alaska:

Crime and Motor Vehicle Fatalities Data

Alaska has always bucked the norms when it comes to personal liberty, and the regulation of cannabis has had an interesting journey there. In a 1975 case (Ravin vs State), Alaska preserved the rights of citizens to use cannabis on their own private property. Cannabis regulation for medical use began in 1998, with adult-use industry regulation following in 2014. (4) Due to the small population and extreme distance between populations, Alaska does not have a robust cannabis industry. Medical caregivers service patient needs, and there are adult-use shops in population centers like Anchorage. Violent crime (3) and vehicle deaths (1) have risen, but are more likely related to the drastic economic downturn experienced in Alaska from 2014 that is still in recovery. (6) The State of Alaska points to environmental traumas and mental illness as the leading causes of substance abuse. (2) There is no direct correlation to cannabis regulation.

Washington State has seen an increase in road fatalities. (3)(4)(5) Given the most recent data, THC only related fatalities were at 9% of the overall fatality rate. The most common impairment was alcohol use with other drugs, then alcohol-only related fatalities. (4) Use of methamphetamines and opioids has sharply risen, with researchers citing a 134% increase in opiate use.(5) Cannabis for medical use has been regulated since 1998, with adult-use following in 2012.(1) Washington State is the only state that has followed this trend and more research is needed. The poly-drug involvement and rise in fatalities is increasing across the board for all drugs, except cocaine. (5)

Neither medical regulation or adult-use regulation has changed crime rates which are fluctuating independently of regulatory measures. Overall the crime rates in Washington State have dropped since 1998.

There is no relationship between cannabis and crime rate increases.

3 https://wtsc.wa.gov/programs-priorities/impaired-driving/
5 https://adai.washington.edu/WAdata/
California:

Crime and Motor Vehicle Fatalities Data

Cannabis regulation for medical use began in 1996, with adult-use following in 2016. (4) Traffic fatalities have steadily been rising for over 10 years. (1) Between 2010 and 2019, California had a population increase of 6.1%, and the impaired driving rate increased 9.3% almost matching the population increase. (2)(5) Crime rates have consistently decreased. (3)

There is no relationship between cannabis regulation and traffic fatalities or crime rates that can be determined from this data.

<table>
<thead>
<tr>
<th>Core Outcome Measure</th>
<th>Year</th>
<th>2009</th>
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<th>2011</th>
<th>2012</th>
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<td>1,320</td>
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</table>

California has one of the most robust medical programs that allows patient cultivation, open access, and has a regulated industry. To date, this has not resulted in sharp increases in traffic fatalities, crime, or impaired driving. The data patterns are unchanged and appear to fluctuate independently from cannabis regulation.

5. https://www.census.gov/quickfacts/CA