

Impact of the Legalization and Decriminalization of Marijuana On the DWI System



A Study
Conducted
Under NCREP —
The National
Cooperative
Research and
Evaluation
Program

Highlights From The Expert Panel Meeting



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



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| 16. Abstract In Moving Ahead for Progress in the 21st Century (MAP-21) Act, Congress directed NHTSA to establish a cooperative program—the National Cooperative Research and Evaluation Program (NCREP)—to conduct research and evaluations of State highway safety countermeasures. NCREP was continued in the Fixing America’s Surface Transportation Act. This program is administered by NHTSA, and managed jointly by NHTSA and GHSA. Each year, the States (through GHSA) identify potential highway safety research or evaluation topics they believe are important for informing State policy, planning, and programmatic activities. One such topic identified by GHSA, the legalization and decriminalization of marijuana, forms the basis for this project. States need information about the impacts of laws that legalize or decriminalize the use of marijuana, including its impact on driving safety and the State’s driving while impaired (DWI) system. NHTSA and GHSA convened one-and-a-half day expert panel of professionals involved in and impacted by the enactment of recreational and/or medical marijuana laws. Participants represented States that had enacted such laws (e.g., Washington, Colorado, Oregon, California) and fields of practice that are engaged in the DWI system, including law enforcement, prosecutors, judges, probation, toxicologists, and highway safety officials. The objectives of the expert panel included (a) identifying changes to the DWI system following enactment of laws legalizing and/or decriminalizing marijuana for medical and/or recreational purposes; (b) identifying lessons learned by these States; and (c) identifying measures that should be used to evaluate the effects of enacting recreational and/or medical marijuana laws, and their impact on traffic safety and the DWI system, using both quantitative and qualitative methods. Convening the expert panel was Phase I of a two-phase project to determine the impacts of laws legalizing or decriminalizing marijuana. Phase II will be a project to collect the data based on the recommendations of the panelists. Details about the meeting logistics, the panelists, and their discussions and recommendations are summarized in this report. | | | |
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Background

The legalization and decriminalization of marijuana has received a great deal of media attention across the country, and many States are considering whether they should legalize marijuana for recreational or medical use. States need information about the impacts of laws that legalize or decriminalize the use of marijuana, including its impact on driving safety and the State's driving while impaired (DWI) system.

A total of 25 States, the District of Columbia, and Guam allow marijuana and cannabis programs for medical use. Recently approved efforts in 17 States allow use of “low THC, high cannabidiol (CBD)” products for medical reasons in limited situations or as a legal defense (National Conference of State Legislatures, 2016). Four States and the District of Columbia have legalized marijuana for recreational use. Nine States have ballot measures for recreational or legal marijuana and four States were either gathering ballot signatures or certifying initiatives (Underhill & Umoto, 2016).

During its most recent survey, the *2013-2014 National Roadside Survey (NRS) of Alcohol and Drug Use by Drivers*, the National Highway Traffic Safety Administration (NHTSA) collected breath, oral fluid, and blood samples to detect alcohol and drug use by weekday daytime and weekend nighttime drivers, from a nationally representative sample (Berning, Compton, & Wochinger, 2015). Nearly one in four drivers tested positive for at least one drug that could affect safety (22.4% of daytime weekday drivers and 22.5% of weekend nighttime drivers). In 2007, some 16.3 percent of weekend nighttime drivers tested positive for drugs based on the combined results of oral fluid and blood tests (Compton & Berning, 2009). In 2013-2014, the percentage of weekend nighttime drivers who tested positive for drugs (using the same criteria that had been used in 2007) had increased to 20 percent. The percentage of drivers with marijuana in their system increased by nearly 50 percent (from 8.6% in 2007 to 12.6% in 2013-2014).

A second NHTSA study, the *2015 Drug and Alcohol Crash Risk Study*, initially seemed to find a statistically significant increase in **unadjusted** crash risk for drivers who tested positive for use of illegal drugs (1.21 times), and THC (1.25 times). However, when the crash risk analysis was **adjusted** for other well-known risk factors, such as age, gender, race, and ethnicity, there was no longer a statistically significant difference in crash risk associated with the presence of these drugs. This finding indicates that these other variables (age, gender, race, and ethnicity) accounted for the detected increase in risk. This may be due, at least in part, to the fact that young males are more likely to test positive for illegal drugs and marijuana, and they are also more likely to be involved in crashes (Compton & Berning, 2015). Alcohol use was highly correlated with increased crash risk, even after adjusting for other known risk factors.

The *Impact of the Legalization and Decriminalization of Marijuana on the DWI System* project examines how the legalization and decriminalization of marijuana impacts a State's DWI system. It will focus on the impacts following enactment of recreational and/or medical marijuana laws on various aspects of the State's DWI system, including enforcement, prosecution, adjudication, probation, toxicology, communication, and highway safety operations. Lawmakers, State and local governments, the Governor's Highway Safety Association (GHSA), State Highway Safety Offices, NHTSA, and other Federal agencies, will be the primary audience.

During Phase I of the project, NHTSA and GHSA convened an expert panel of professionals involved in and impacted by the enactment of recreational and/or medical marijuana laws. Participants represented States that had enacted such laws (e.g., Washington, Colorado, Oregon, California) and fields of practice that are engaged in the DWI system, including law enforcement, prosecutors, judges, probation, toxicologists, and highway safety officials.

Objective

The objectives of the expert panel included:

- Identifying changes to the DWI system following enactment of laws legalizing and/or decriminalizing marijuana for medical and/or recreational purposes, including positive, negative and unintended changes
- Identifying lessons learned by these States, including:
 - In hindsight, things that these States would have done differently
 - Things that other States (that are currently contemplating changes to their laws) should consider
- Identifying measures that should be used to evaluate the effects of enacting recreational and/or medical marijuana laws, and their impact on traffic safety and the DWI system, using both quantitative and qualitative methods.

Participants

GHSA and NHTSA selected panelists from States that had enacted laws that legalized and/or decriminalized marijuana for medicinal and/or recreational use, and who represented professions involved in the DWI system, including law enforcement, prosecution, adjudication, probation, treatment, toxicology, highway safety, communications, and data management. The Volpe National Transportation Systems Center (Volpe Center) provided logistical support in planning and facilitating the expert panel. The invitation letter that was used to invite participants is included as Appendix A. Refer to Appendix B: Meeting Attendees for a complete list of attendees.

NCREP

NHTSA's mission is to save lives, prevent injuries, and reduce economic costs due to traffic crashes, through education, research, safety standards, and enforcement activity. In the Moving Ahead for Progress in the 21st Century (MAP-21) Act, Congress directed NHTSA to establish a cooperative program—the National Cooperative Research and Evaluation Program (NCREP)—to conduct research and evaluations of State highway safety countermeasures. NCREP was continued in the Fixing America's Surface Transportation (FAST) Act. This annual \$2.5 million program is administered by NHTSA, and managed jointly by NHTSA and GHSA. Each year, the States (through GHSA) identify potential highway safety research or evaluation topics they believe are important for informing State policy, planning, and programmatic activities. One such topic identified by GHSA forms the basis for this project, reflecting the high level of interest by the States.

Agenda

The one-and-a-half-day meeting began with welcoming remarks from Jeff Michael (Director, NHTSA Office of Research and Program Development) and Jonathan Adkins (GHSA Executive Director).

The expert panel focused on seven areas: law enforcement; prosecution; adjudication, the court system and treatment; forensic laboratories; data; state highway safety offices; and public outreach and communication.

During the first day of the meeting, subject matter experts discussed the following questions regarding each of the focus areas:

- What changed with the new laws? What really worked and what didn't work?
- Knowing what you know now, what would you have done differently?
- What are you planning to do in the future?

During the second day, subject matter experts were asked to suggest measurements to evaluate the effects of legalizing or decriminalizing marijuana, and to discuss next steps and State needs.

The full agenda used for the meeting is contained in Appendix C. This report contains highlights from the day-and-a-half meeting, based on the discussions that took place.

Meeting Highlights

The following table summarizes selected points made by expert panelists during the round table discussions. These points offer insights into the DWI systems in the States that participated in the meeting, at the time that the meeting was held. For more details about State marijuana laws, refer to Appendix D: Status of State Marijuana Laws in Expert Panel States. Appendix E contains details regarding drugged driving *per se* laws. The DWI systems are discussed at greater length in the Discussion Topics section below.

State Snapshots

| State | Selected Points from Participating States |
|-------------------|---|
| Arizona | <p>Lab reports take an average of 6 to 8 months to be provided and up to a year in some cases. Often, cases are dismissed or there are plea bargains.</p> <p>A court overturned the 5 nanogram (ng) level, stating there is no scientific evidence that it causes impairment.</p> <p>Good police work, careful and detailed observations and notes, corroborated with toxicology test results, help make the case in court.</p> |
| California | <p>Law enforcement grants are available. The focus is on enforcing the medical marijuana law. During the first year of a grant, Orange County doubled the number of drug recognition experts (DREs). Each agency now has one certified DRE. DRE classes are held each month.</p> <p>Blood samples are the best evidence. Oral fluid does not detect certain drugs.</p> <p>The State hires contract phlebotomists under the public health code, providing a one-hour turnaround. A fee is levied against the individual for the blood draw.</p> <p>There are 10 public and 20 private crime labs. It takes 12 to 18 months to validate methods for testing new drugs.</p> <p>Eight prosecutors handle DWI cases and educate district attorneys. Orange County has a 98 percent conviction rate and convicts with less than 3 ng. Warrants have a fast turnaround using a one page McNeely warrant. Cases are sent to court quickly.</p> |
| Colorado | <p>There are many unanticipated expenses in connection with a new law. For example, the budget for DRE and ARIDE increased from \$50,000 to \$500,000.</p> <p>There is also a new revenue stream from the new marijuana industry. There is potentially a great deal of money available, but you need to anticipate and document your needs and ask for a share of the funds.</p> <p>A representative of the marijuana industry has participated in State task force meetings and served as a resource for funding for public education.</p> <p>In 2009, there were 38,000 medical marijuana cards issued; in 2015, there were 116,000. The number of cards has increased, especially in areas where there are no recreational distributors.</p> <p>Holders of medical marijuana cards can receive two ounces of marijuana; others can receive just one ounce.</p> <p>The State did public outreach early, including on the topic of driving while impaired by marijuana.</p> <p>State surveys found that people are more likely to smoke and drive than drink and drive, and young people drank more alcohol and used more marijuana.</p> |

| State | Selected Points from Participating States |
|-------------------|--|
| Montana | <p>The State has DWI courts and regular courts.</p> <p>The type of treatment used is matched to each treatment group. There is a wide age range and outcomes are good.</p> <p>DWI courts in the State are participating in a study. Data is reported weekly. Seven out of 74 who received treatment were re-arrested, while 89 percent of the comparison group recidivated.</p> |
| Oregon | <p>Oregon was the first State to legalize marijuana for medical purposes.</p> |
| Vermont | <p>The State pays an outside lab \$250 per test and a \$10,000 fee for forensic testimony for each case. Courts have a backlog of 250 DWI cases. There is only one DWI court.</p> |
| Washington | <p>The three markets of illicit (untaxed/unregulated), medicinal and recreational marijuana currently are estimated to generate \$1.2 million in sales daily. Recreational marijuana generated \$75 million in tax revenue last year.</p> <p>The recreational marijuana law rules were modeled after the liquor regulations in the State.</p> <p>The State is now developing an electronic warrant system and judges will have tablets to issue a warrant. Spokane has achieved a 13-minute turnaround time.</p> <p>Public education can lead to behavior change and changes to the social norm.</p> |

Discussion Topics

In General

The legalized sale of marijuana is a new industry. When States enact laws legalizing marijuana, highway safety is typically not a primary focus. However, these law changes lead to many impacts on the DWI system and unanticipated costs, such as increases in law enforcement, prosecution, court resources, toxicology lab tests, and testimony.

Colorado and Washington State, the first two States to legalize sales of marijuana for recreational use, have generated tax revenue. However, there have been fewer funds available to support the DWI system than originally anticipated. It is important to anticipate and estimate these costs ahead of time, and seek to take advantage of the new funding stream by requesting resources to address anticipated increased needs.

States should anticipate increased costs and request resources from new funding streams.

Law Enforcement

In jurisdictions where marijuana is illegal, law enforcement officers who detect drivers with marijuana are likely to focus primarily on a “possession of marijuana” charge. When marijuana becomes a legal substance, law enforcement must change its mindset, and focus instead on whether the suspect was driving while impaired by marijuana. These enforcement efforts require training for professionals and should be supported by public education, emphasizing the risks of driving while impaired by marijuana and enforcement efforts to prevent it.

Officers should change their mindset from possession of marijuana to driving while impaired by marijuana. Officers also should focus on signs of impairment, not on the level of THC.

Revenue from marijuana legalization provides an opportunity for increased training and staffing. Law enforcement training to help officers properly identify impaired drivers is essential, especially training in Standardized Field Sobriety Testing (SFST), Advanced Roadside Impaired Driving Enforcement (ARIDE), and Drug Evaluation and Classification (DEC). Training for the arresting officer should include recognizing the signs and symptoms of drugs (including marijuana), since most officers have much more experience with alcohol than with drugs. Mock trials are useful elements of the training. They help to illustrate for officers the issues that are likely to arise in court. When developing and

delivering training, law enforcement should take advantage of experienced prosecutors and traffic safety resource prosecutors (TSRPs). Police officers should also receive training on report writing and how to testify in court. The arresting officer is typically the most critical witness in a case.

During an arrest, officers need to focus on signs of impairment, not on the level of THC. They must take good, detailed notes, based on their observations. The toxicology test can be used to corroborate their findings.

The trend in drug testing is moving away from urine and toward blood. There is interest in using oral fluid devices for some drugs (e.g., THC). The possible use of breath testing devices is also being explored.

The U.S. Supreme Court has ruled (in *Missouri v. McNeely*, 2013) that warrants are needed in most cases before drawing a blood sample. In some jurisdictions (e.g., Orange County, California), this is not difficult to do. In some jurisdictions (e.g., Arizona, Texas, and Utah), if a suspect refuses to provide a blood sample, a phlebotomist can be brought in, once a warrant has been obtained. However, blood draws are not permitted without the consent of the suspect in other States (e.g., Vermont and Washington). Phlebotomists can be hired on a contract basis.

(This is being done in California.) Regardless of the process, every effort should be made to reduce the amount of time between stop, arrest, acquiring a warrant and the blood draw.

Officers should be able to find out whether a suspect has a medical marijuana card. Health information is protected through the Health Insurance Portability and Accountability Act (HIPAA), but there are exceptions for disclosure for law enforcement purposes. A medical marijuana card offers a defense for a suspect in possession of marijuana in a “medical marijuana” State. It is not a defense, however, to driving while impaired by marijuana.

Marijuana laws can be modeled on liquor laws (e.g., Washington State). It is helpful to develop new legislation in partnership with a broad range of stakeholders, such as industry representatives, health professionals, law enforcement, prosecutors, and court officials.

Prosecutors should receive training on which questions to ask.

–Toxicologist

Prosecution

Some State statutes have a “*per se*” limit of 5 ng (e.g., Colorado). Representatives at the meeting (including from Colorado) consider that level to be “too high.” According to participants at the meeting (including toxicologists), the science does not support a *per se* level, due (at least in part) to the manner in which marijuana is processed in the human body. If not hampered by legal statutes, prosecutors in some jurisdictions go to trial and successfully obtain convictions with levels as low as 2 ng (California).

Cases should be brought to trial based on “the totality of the circumstances.” Vermont’s statute makes it illegal to drive “while impaired to the slightest degree.”

Marijuana prosecution takes more time and effort compared to other litigation. Good preparation and report writing by the arresting officer go a long way toward supporting a conviction.

Training and education (for prosecutors, law enforcement, and others) is critical to mount successful cases against defense arguments about marijuana and drug-impaired driving. Many prosecutors assigned to DWI and DUID (driving under the influence of drugs, e.g., THC, and not alcohol) are inexperienced. They are also overworked, with backlogs and not much time for preparation. Drug-impaired driving cases are challenging. Jurisdictions should insist on using experienced prosecutors (whenever possible). This is a condition of grant funds in California. If prosecutors are not experienced, they should rely on TSRPs, whose role is to provide support and serve as a liaison for front line prosecutors. The National Traffic Law Center (NTLC) is another resource for prosecutors. They offer training courses in drug-impaired driving, including “Prosecuting the Drugged Driver.” Prosecutors should attend DRE classes and mock trials when they are starting out in this field. Once they gain experience, they should support and assist law enforcement officials in delivering ARIDE and DRE training.

Marijuana prosecution takes more time and effort compared to other litigation.

Jurors may be sympathetic to offenders. They too should be educated about drug-impaired driving.

When trying cases, prosecutors should charge separately for alcohol and drugs, if their statute allows this. If not, the statute should be changed. Offenders should not be permitted to plead to a charge of reckless driving. Prosecutors should work closely with law enforcement and toxicology laboratories, and must ask toxicologists the “right questions” to elicit the facts that are needed to establish the foundation for each case. It is important for prosecutors to understand that testing positive for THC does not necessarily indicate that a suspect was impaired.

“Judges don’t want to ask questions, but they want to know.”

– Judge

Court Administration, Adjudication, Treatment, Probation, and Parole

Training and education are critically important. Judges should be educated separately (privately), so they can ask questions in a safe environment (without appearing uninformed). According to a judge serving on the expert panel, “Judges don’t want to ask questions, but they want to know.” “Wet labs” (where judges can observe subjects who have been dosed with marijuana), DRE cards, State-specific bench books, and other compilations of facts are very helpful to judges. Prosecutors can provide notices about recent changes to the law (e.g., new statutes, statutory amendments, or case law) to all judges (who hear these types of cases), through a judicial educator, or by filing pretrial motions containing the latest information.

While judges are presiding over cases, a reliable assessment of the offender is very important to ensure that appropriate treatment can be ordered as part of sentencing. Cases often involve a “battle of experts.” Judges need to be educated so they can weigh competing testimony knowledgeably.

Probation tends to be light, or even not available, for most offenses, since many impaired driving charges are not felonies (or even misdemeanors), especially on a first or second offense. However, immediacy of response is important. According to participants at the meeting, at least 60 percent of DUI/DUID offenders do not recidivate. However, the challenge is being able to predict which 40 percent is at risk of reoffending. This provides another reason why a reliable assessment is needed.

There is a great deal of support for DWI courts, but it is an expensive option, and it’s not appropriate for all offenders. DWI court is designed for serious offenders with alcohol and/or drug dependence issues. It is likely to be counterproductive for offenders who do not need that level of supervision. A hard suspension can be a barrier to DWI court, since offenders may have difficulty traveling to the court and meeting their other obligations if they are unable to drive.

Members of the expert panel asked whether DUID offenders should attend DWI court or Drug court, since DWI courts are designed for DWI offenders and focus primarily on alcohol. For best practices, see the National Center for DWI Courts online at www.dwicourts.org/.

Some laws require the use of ignition interlocks (which test only for alcohol) even if the offender was only DUID.

If individuals have a medical marijuana card and are on probation, this is no longer a violation of probation unless this is addressed individually and upfront, by the court. Judges should make sure to address this issue.

Toxicology is a critical part of the criminal justice system.

Toxicology

Toxicology is the scientific study of chemicals, drugs, and other substances, and how a person or other living thing reacts to them. Toxicology plays a critical part in the criminal justice system, especially in drug-impaired driving cases. According to a toxicologist who served on the expert panel, “Toxicologists rely on research and, unfortunately, there currently isn’t much.”

Accordingly, many cases involve competing testimony about toxicology, “expert versus expert.”

Laboratories desperately need more equipment and more staff to run tests and provide testimonies.

– Toxicologist

Chronic users (e.g., people using marijuana for medicinal purposes) can have high levels of marijuana present in their bodies, but they may not be impaired. Data is often misused. For example, carboxy (a metabolite of THC) is “inactive” but its presence may (incorrectly) be used to “show” impairment. Some drugs (e.g., prescription medications) can improve driving, while other prescription medicines, even if used as directed, can have serious impairing effects.

Toxicology laboratories are grossly underfunded. The workload is high, and it's hard to keep up. However, it is important to invest in technology to provide labs with the capacity to handle increased demands.

Laboratories desperately need more equipment and more staff to run tests and provide testimony. In Washington State, the number of tests each year increased from 4,500 positive tests to 6,000 positive tests by lowering the "cut-off" (the threshold for being considered positive). In California, only 25 percent of offenders are tested for THC.

Tests are expensive. Laboratories cannot test all offenders for all drugs. According to a prosecutor on the expert panel, "It often comes down to the money." California tests only for THC, methamphetamine, and barbiturates. In Vermont, a lack of resources has caused long delays (months) in impaired driving cases.

Delays in drawing samples can cause counts to drop, which makes it less likely that the results will be positive. Likewise, delays in testing a sample can lead to a similar result, making it harder to detect drugs. Providing testimony represents an enormous demand of time on laboratory staff. Washington State reported that testimony was required for 4,000 DUI cases in a single year.

Laboratories across the country (or even within a State) follow very different practices, such as which drugs to test and which thresholds to use as cut offs. Standardization is needed to allow statewide or national comparisons and to fill in gaps in data. Consistency in reporting should address not only positive results, but also what was tested, which cut offs were used, and whether tests were screens or confirmatory tests. The National Safety Council (NSC) Alcohol, Drugs and Impairment Division (ADID) has developed recommendations for standardized procedures. These should be promoted and adopted.

In some jurisdictions laboratories have been privatized. This can make it more difficult to achieve consistent practices.

Data Systems

There is a great deal of interest in drugged driving data, but this information is difficult to obtain. For example, if offenders test positive for alcohol (at a blood alcohol concentration, or BAC, of .08 g/dL or greater, which is illegal *per se* in every State in the U.S.), they are unlikely to be tested for drugs because of the time, expense, and difficulty in proving a drug-impaired driving case.

"The lack of data is tremendous."

-Oregon

There is also very little "pre" data, so even when data is collected (such as following a change in a State's law), it is difficult to interpret, since we do not know what conditions were present prior to the law change. When attempts are made to "compare" pre and post data, other variables can lead to misleading results. For example, if more attention is paid to drugged driving in a community, there may appear to be more positive drug results, but the increase may be because there is now more drug testing. In other words, there may have been as many positive results before, but we weren't aware of it because there was less testing.

According to a participant on the expert panel, "The lack of data is tremendous." And, "If it's not measured, it can't be addressed."

Data sharing is the biggest challenge.

- Washington State

Even when data is available, the existing data is difficult to interpret. For example, the presence of drugs does not necessarily equal impairment. For example, the Fatality Analysis Reporting System (FARS) does not distinguish between active metabolites of marijuana (e.g., hydroxy) and inactive metabolites (e.g., carboxy).

Data linkage and integration is very important, but it requires time, effort, and resources. Vital statistics should be included. The Crash Outcome Data

Evaluation System (CODES) can serve as an excellent model. It includes integrated data from hospitals, trauma registries, and the National Emergency Medical Services Information System (NEMSIS), and it links hospital discharge data with crash reports.

Improvements should be made to FARS, such as changes to the coding of marijuana, so that it is consistent with toxicological reports. Toxicological data should be standardized, and should address such elements as THC cut-off levels and which drugs were tested. Crash and arrest data should specify the time, date, and location for serious crashes, not just fatalities.

Some States use out of State laboratories, which may lead to delays, extra costs, and a lack of standardized information.

Highway Safety

The expert panel considered what is the impact of drug positive driving on highway safety. NHTSA's National Roadside Studies show that the presence of THC among drivers has increased, and THC positive driving now exceeds alcohol positive driving. However, the impact of THC on crashes is not clear. Fatal crashes have declined in many States, including Colorado and Washington, and NHTSA's Crash Risk study did not show elevated crash risk for THC positive drivers when adjustments were made for demographic factors known to be associated with high crash risk. According to a highway safety official who served on the expert panel, "We need to be data driven, but we don't have the data." Expert panel participants wondered, "How will this impact the movement 'Toward Zero Deaths' or efforts to improve the 'safety culture'?"

"Collaboration and coordination is critical."

- Highway safety official

According to expert panel participants, major issues include data, funding, training, studies of the impacts of marijuana-positive driving, and evaluations of countermeasures. States should either form or expand the scope of existing task forces, advisory committees, or leadership teams to focus on these issues. They can (and should) include a broad range of "partners," including law enforcement, prosecutors, and non-traditional partners, such as the new marijuana industry. These task forces, advisory committees, and leadership teams can help identify pressing issues and set priorities. As stated by a highway safety official on the expert panel, "Collaboration and coordination is critical." Plans to address drugged driving should be included in Highway Safety Plans (HSPs), which are submitted to NHTSA, and Strategic Highway Safety Plans (SHSPs), which are submitted to the Federal Highway Administration.

Legalized sales of marijuana can generate a great deal of State revenue, and if allowed by statute, funding can be used to support TSRPs, experienced prosecutors, DWI courts, law enforcement training and equipment, toxicology laboratory staffing, equipment, and court testimony costs. Federal funding can sometimes be used for only limited purposes, such as NHTSA Section 402 funding, which can be used only for highway safety purposes, and Section 154 and Section 164 transfer funds, which can be used only for alcohol-impaired driving. According to a highway safety official on the expert panel, "Funding can help fill gaps or try to serve as a catalyst, but it can't support it all." A representative from Washington State on the expert panel noted that there is no funding stream until sales of marijuana begin, and existing funds tend to already be committed.

"There is little regulation or oversight over the sale of marijuana—especially medical marijuana."

- Oregon

To date, there is little regulation or oversight over the sale of marijuana, especially medical marijuana. Its use is expected to rise, even in States that permit recreational marijuana (because the cost for medical marijuana tends to be much lower).

Issues relating to marijuana and safety are of interest to many (including the media). State Highway Safety Offices (SHSOs) have become the “go to” source for a range of related and time-consuming questions, requiring SHSO staff to be well informed about these issues.

Communications

Medical and recreational marijuana users have become a new “target audience” that require new messages. The public perception seems to be “Pot is legal, so it must be safe.” States should do public outreach before marijuana use becomes legal. Public education can lead to behavior change and changes to the social norm.

Colorado’s message is “Drive High—get a DUI.”

Current efforts include Colorado’s campaign, “Drive High—Get a DUI.” The message is that even though it’s now legal to use marijuana, it’s not legal to drive when you’re high. The Drive High slogan is considered humorous, but it is intended also to be informative and to warn marijuana users of the risk of arrest should they choose to drive impaired by marijuana.

The campaign rolled out three months after recreational marijuana was legalized in the State in 2012. There has been a great deal of interest about the law change and the media campaign. The State conducted a survey and disseminated the results. The survey showed 46 percent recognition of the campaign. This has generated a great deal of earned media.

Warning labels are needed. The marijuana industry seems to be eager to “partner” with State officials to ensure safety, especially in connection with edibles, which present unique risks since there can be a delay between consuming an edible and feeling its effects. Some users unintentionally consume too much and then experience an unexpectedly (and, in some cases, dangerously) intense level of impairment. States should consider partnering with the industry to develop handouts for medical marijuana dispensaries, similar to prescription drug warnings, describing the effects and duration.

“Education is key. Marijuana today is different from the marijuana of yesterday.”

– Oregon

State expert panel members also expressed the need for talking points to address public misconceptions and potential misinterpretations of the data, including nanogram levels. One expert panelist noted, “Education is key. Marijuana today is different from the marijuana of yesterday.”

Recommendations

Convening the expert panel was Phase I of a two-phase project to determine the impacts of laws legalizing or decriminalizing marijuana on the DWI system. Phase II will be a field study. On the second day of the expert panel meeting, the participants were asked what measures should be considered for use during the field study. The following measures were suggested.

Potential Measures for Phase II of the Study

- Presence of marijuana with pre and post levels in:
 - serious crashes
 - fatal crashes
 - single nighttime crashes
 - DUI and DUID arrests (separately)
 - DRE evaluations
- Roadside survey (pre and post levels)
- Self-reported attitudes, awareness, and behavior (pre and post levels)
- Number of DREs and officers trained in SFST and ARIDE
- Number of arrests for DUI/DUID (separately)
- Number of convictions
- Number of cases presented or rejected and their “cut offs” and characteristics
- Licensing actions
- Funding and staffing for law enforcement, prosecution, and toxicology laboratories
- Number of medical cards and scripts (for medical marijuana)
- Volume of sales

The participants were also invited to identify research needs related to marijuana and driving, and to offer any other recommendations that would be helpful regarding this topic. We received the following recommendations.

Recommended Research Needs

- Develop a field sobriety test for marijuana (validation studies for SFST were based on alcohol; not marijuana or other drugs)
- Explain nanograms
- Analyze data from States with data collection, e.g.:
 - drug presence in crashes (Washington State)
 - prosecutions (Orange County, California)
- Support the linking of serious crashes (not just fatal crashes)
- Develop new questions for use in State surveys, e.g., age of first use, driving within three hours of using marijuana
- Develop a histogram containing time of contact, blood draw, and testing

Other Recommendations

- Revise the coding used in FARS to include marijuana and multi-drug use.

- Standardize toxicology laboratory practices (e.g., drugs tested, levels, use, and reporting).
- Include time, date, and location in crash and arrest data.
- Assess a wider range of financial costs, e.g., costs needed to “gear up,” including training, staffing, equipment, DRE, ARIDE, prosecutors, laboratories, and testimony.
- Determine whether an increase in marijuana use leads to an increase in crashes.
- Identify “best (or promising) testing practices,” e.g., using blood or oral fluid.
- Determine whether model laws would be helpful.
- To the extent permitted by law, conduct “wet labs” to train and educate law enforcement, prosecutors, judges, and the media about the broad spectrum of marijuana types and users. Cover medical and recreational marijuana in addition to chronic and occasional users.

In addition, the participants discussed resources that are available. These are listed below.

Resources

- Recent State studies (Colorado, Washington State):
 - Volume of sales, THC levels, taxes, products, labeling, and youth access
- Recent, ongoing, or planned research (NHTSA):
 - 2007 NRS (3-volume report) and 2013-2014 NRS (Research Note published in 2015; Methodology report published in 2016; two additional volumes of full report with Alcohol and Drug Results expected in 2016):
 - shows the average proportion of drivers on the road during weekend nighttime hours and weekday daytime hours with alcohol or drugs in their systems
 - Crash Risk Study (Research Note published; report expected in 2016)
 - examines the driver crash risk associated with alcohol and drug use
 - Crash Risk Study II (recently awarded):
 - focuses on serious injury and fatal crashes
 - Inhaled Cannabis (data collection completed; data analysis continuing):
 - focuses on whether inhaled cannabis (with and without alcohol) impaired driving abilities tested on the National Advanced Driving Simulator
 - Washington State Roadside Survey (report published in 2016):
 - reports on the presence of alcohol and drugs, including THC before and after legalized marijuana sales took place
 - Oral Fluid Devices (data collection recently completed; report expected in 2016):
 - evaluates the use of oral fluid devices based on a pilot test in California

Conclusions

“Take Aways”

Laws

Carefully craft new laws. Coordinate and obtain input from those who are most knowledgeable about the topic, including State officials who will be responsible for developing and implementing the regulations. Consider seeking input also from representatives of the marijuana industry.

Carefully craft new laws.

Educate yourself and prepare before a law is enacted. Work with a broad range of stakeholders, including industry representatives, health professionals, law enforcement, criminal justice officials, communication specialists, State highway safety office personnel and toxicologists.

Avoid per se levels. The science does not support them.

Training and Education

Training and education is critical. It is needed for law enforcement, prosecutors, judges, probation officers, toxicologists, State highway safety office personnel and members of the public.

Focus on SFST, ARIDE, and DREs. All law enforcement officers involved in traffic enforcement should receive SFST and ARIDE training. Jurisdictions should train a sufficient number of DREs to meet their needs.

Law enforcement should focus on documenting evidence of impairment. Officers need to observe and document the totality of the circumstances. The presence of THC is corroborating evidence. Officers should not rely on set levels of THC.

Communication

Conduct public outreach and education early. The public needs to be informed about driving impaired by marijuana prior to legislative action and before new laws go into effect.

Educate the public about the term “impairment” and driving while impaired. The public needs to be reminded that “driving impaired by marijuana” is illegal, even if possession and use of marijuana may now be legal.

Collaboration

Involve the medical marijuana industry in discussions and planning. They may be willing (or even enthusiastic) about helping to fund certain expenses, such as communications.

Involve the marijuana industry in discussions and planning.

Strengthen relationships among members of the criminal justice system. These include law enforcement, prosecutors, probation, and toxicology.

Funding

Request a fair share of new funding streams. New funding streams may become available. Anticipate and estimate increased costs that are likely to result and request a fair share of those funds.

Obtain funding for training and education and other critical expenses. Training and education can support law enforcement (e.g., ARIDE and DRE), prosecutors, judges, and others. Funding

may be needed also for public information campaigns, highway safety activities, toxicological testing, and testimony.

Have a better understanding of “per se thresholds.”

Needs

Have a better understanding of “per se thresholds.” For example, understand why a threshold of 5 ng is not a good idea.

Create a “system” before marijuana is legalized in your State. For example, determine who will be responsible for licensing dispensaries and establish arrangements for data collection and data sharing.

Think about the potential impacts of marijuana legalization on other areas. In particular, consider the impacts on highway safety, health, law enforcement, the courts, toxicology laboratories, and other related areas.

Overarching Themes

Training and Education

Training and education should be provided to law enforcement, prosecutors, judges, probation, and toxicology laboratory staff.

Key areas include signs of impairment (for law enforcement, prosecutors, and judges), report writing (for law enforcement), and courtroom testimony (for law enforcement and toxicologists).

Coordination

It is critical that law enforcement, prosecution, and toxicology laboratories communicate with each other regarding court cases.

Regarding broader issues, such as policy, the development of laws and regulations, identifying needs and resources, and setting priorities, it is helpful to involve both traditional (e.g., highway safety and criminal justice) and non-traditional (e.g., the marijuana industry) partners.

Potential Use of Non-Traditional Partners

Use of non-traditional partners should be considered when involved in developing laws, identifying and optimizing resources, educating the public, and setting priorities.

Use non-traditional partners.

References

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- Underhill, W., & Umodu, P. (2016, October 14). *Voters face bounty of ballot measures*. State Legislatures Magazine (October/November 2016). Retrieved. from: www.ncsl.org/research/health/state-medical-marijuana-laws.aspx

Appendix A: Invitation Letter



February 25, 2015

Name

Address

City, State

Dear Name,

You are invited to participate on an Expert Panel to discuss medical marijuana and the legalization and decriminalization of marijuana on the driving while impaired (DWI) system. This facilitated Expert Panel is being convened in Washington, DC by the National Highway Traffic Safety Administration (NHTSA), the Governors Highway Safety Association (GHSA), and Volpe, The National Transportation Systems Center. The Expert Panel will meet at the Hall of the States, 444 N. Capitol Street, NW, just north of the Capitol. The one and a half-day meeting, to be held **July 14 and July 15, 2015**, will start at 9:00 a.m. on the first day and end at 2:00 p.m. on the second day.

Background

NHTSA's mission is to save lives, prevent injuries, and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity. MAP-21 gave NHTSA statutory authority to establish a cooperative program to research and evaluate state highway safety countermeasures. MAP-21 provides that the *National Cooperative Research and Evaluation Program (NCREP)* be administered by NHTSA and jointly managed by NHTSA and GHSA. Under the NCREP, states are requested to submit research and evaluation proposals on traffic safety topics they believe are important for informing state policy, planning, and programmatic activities.

One such proposal submitted by the states is the basis for this project, *Examination of the Legalization and Decriminalization of Marijuana on the DWI System*. NHTSA's Office of Behavioral Research is currently investigating how a state's DWI system evolves with the legalization and decriminalization of marijuana. This study will "tell the story" of how states manage the enforcement, prosecution, adjudication, and communication following enactment of recreational and/or medical marijuana laws. NHTSA is looking for professionals at the state level involved in/impacted by the enactment of a recreational/medical marijuana law (e.g., toxicologists, probation, treatment, judicial, and prosecutors) to develop a means for "telling the story."

Panel Goals and Activities

The goal of the Expert Panel is to identify and provide feedback on the best-available measures to evaluate the effects of passing recreational and/or medical marijuana laws—especially the effect on driving safety—by developing objective quantitative and qualitative methods to evaluate the impact of the legalization and decriminalization of marijuana on the DWI system. Questions will be broken down by topic areas, such as law enforcement and judicial. Examples of the types of questions likely to be discussed include:

- What did you wish you had known before marijuana was legalized in your state based on what you know now?
- What worked/didn't work when the law changed?

- What kind of impacts/opportunities are there?
- What information/measures for tracking are available/did you wish were available?
- What are the impacts on border states?
- What do “new” states need to know before enacting or implementing the law?

With your help, we will be able to develop more objective measures and guidelines for assessing a state's drugged driving policy and to identify the best available measures of success.

Contact for Information for Travel Arrangements

All invitational travel arrangements for participants will be reimbursed by the Volpe Center. Travel reservations made outside of these arrangements may not be eligible for reimbursement. Katherine Millette from the Volpe Center will provide specific travel instructions about the expert panel, hotel reservations, and procedures for invitational travel. She will contact all expert panelists attending the meeting but should you have questions, you may reach her at 617-494-2455 or kat.millette.CTR@dot.gov.

Contact for Information about the Panel

If you have any questions about the purpose, goals, or content of the workshop, please contact Dereece Smither from NHTSA at 202-366-9794 or Dereece.Smither@dot.gov, or Eve Rutyna from Volpe at 617-494-3447 or Eve.Rutyna@dot.gov.

Thank you in advance for your professional service to NHTSA, GHSA, and the *Examination of the Legalization and Decriminalization of Marijuana on the DWI System* study.

Sincerely,



Dr. Richard P. Compton, Director,
US Department of Transportation / NHTSA
Office of Behavioral Safety Research
1200 New Jersey Avenue, SE, NTI-130
Washington, DC 20590



Mr. Jonathan Adkins
Executive Director
Governors Highway Safety Association
444 North Capitol Street, NW, Suite 722
Washington, DC 20001



Appendix B: Meeting Attendees

Panelists

| First | Last | Organization | State | Position | Panel Topic Area(s) |
|----------|----------|---|-------|---|------------------------------|
| Mark | Stodola | American Probation and Parole Association | AZ | Probation Fellow | Probation/ Parole/ Treatment |
| Jennifer | Harmon | Orange County Crime Lab | CA | Assistant Director Toxicology, Forensic Alcohol Controlled Substances | Toxicology |
| Susan A. | Price | Orange County District Attorney's Office | CA | Assistant Head of Court - West Justice Center | Prosecutor/ TSRP |
| Glenn | Davis | Office of Transportation Safety | CO | Highway Safety Manager | Law Enforcement |
| Jack | Reed | Department of Public Safety/ Criminal Justice | CO | Statistician | Data |
| Bob | Ticer | Avon, Colorado Police Department | CO | Chief | Law Enforcement |
| Emily | Wilfong | Department of Transportation | CO | Communications Manager | State Highway Safety Office |
| Neil | Axel | Judicial Outreach Liaison NHTSA Region 3 | MD | Retired District Court Judge | Court |
| Aaron M. | Turcotte | State Police | ME | Trooper - Traffic Safety/Impaired Driving Unit; President, Maine State Troopers Association | Law Enforcement |
| Audrey | Allums | GHSA/ Montana DOT | MT | Grants Bureau Chief for MT DOT, NCREP Committee Chair | Court |

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| First | Last | Organization | State | Position | Panel Topic Area(s) |
|--------------|-------------|---|--------------|---|-----------------------------|
| Mary Jane | Knisely | 13th Judicial District, Yellowstone County, Montana | MT | Judge | Court |
| Troy | Costales | Oregon Transportation Safety Division | OR | Governor's Representative and Administrator | State Highway Safety Office |
| Chuck | Hayes | IACP | OR | DEC Program Regional Operations Coordinator | Law Enforcement |
| Leanna | Depue | GHSA | TX | NCREP Consultant | Highway Safety |
| John | Flannigan | Vermont State Police | VT | Lieutenant. DRE Program Coordinator | Law Enforcement |
| Greg | Nagurney | Vermont Office of the States Attorneys | VT | Traffic Safety Resource Prosecutor | Prosecutor/TSRP |
| Mandy | White | Vermont Agency of Transportation | VT | Crash Technician, Vermont Agency of Transportation | Data |
| Dr. Fiona | Couper | Washington State Patrol Toxicology Laboratory | WA | State Toxicologist, Forensic Laboratory Services Bureau | Toxicology |
| Darrin | Grondel | GHSA/ Washington Traffic Safety Commission | WA | Director | Highway Safety |
| Dr. Staci | Hoff | Washington Traffic Safety Commission | WA | Research and Data Manager | Data |
| Steve | Johnson | Washington State Liquor and Cannabis Control Board | WA | Deputy Chief | Substance Control |

NHTSA, GHSA, and Volpe Center Attendees

| First | Last | Organization | ST | Position |
|----------|----------|-----------------------|----|--|
| Jonathan | Adkins | GHSA | DC | Executive Director |
| Kara | Macek | GHSA | DC | Communications Director |
| Amy | Berning | U.S. DOT/NHTSA | DC | Research Psychologist |
| Michael | Brown | U.S. DOT/NHTSA | DC | Director, Office of Impaired Driving and Occupant Protection |
| Heidi | Coleman | U.S. DOT/NHTSA | DC | Chief, Behavioral Research Division |
| Richard | Compton | U.S. DOT/NHTSA | DC | Director, Office of Behavioral Safety Research |
| John | Marshall | U.S. DOT/NHTSA | DC | Director, Office of Safety Programs |
| Jeff | Michael | U.S. DOT/NHTSA | DC | Associate Administrator, Research and Program Development |
| Bill | O'Leary | U.S. DOT/NHTSA | DC | Highway Safety Specialist |
| Dereece | Smither | U.S. DOT/NHTSA | DC | Research Psychologist, NCREP Project Manager |
| Philip | Weiser | U.S. DOT/NHTSA | DC | Acting Chief, Enforcement and Justice Service Division |
| Diane | Wigle | U.S. DOT/NHTSA | DC | Chief, Impaired Driving Division |
| Kathy | Blythe | U.S. DOT/Volpe Center | MA | Consultant |
| Jeffrey | Bryan | U.S. DOT/Volpe Center | MA | Supervisory Transportation Specialist |
| Eve | Rutyna | U.S. DOT/Volpe Center | MA | Transportation Industry Analyst |
| Felicity | Shanahan | U.S. DOT/Volpe Center | MA | Engineer Research Psychologist |

Appendix C: Agenda

| Tuesday, July 14, 2015 | |
|--------------------------|---|
| 8:30 am to 9:00 am | Registration Welcome |
| 9:00 am | Introductions NCREP Background Overview of the Examination of Marijuana on the DWI System Project, Phase I Phase II Project Plans Expert Panel Discussion Enforcement (Discussion questions will be the same for each topic) |
| 9:45 am | <ol style="list-style-type: none"> 1. What changed with the new laws? <ol style="list-style-type: none"> a. What really worked? b. What didn't work? 2. Knowing what you know now what would you have done differently? 3. What are you planning to do in the future? |
| 10:30 am | Break |
| 10:45 am | Prosecution |
| 11:30 am | Adjudication, the Court System, and Treatment |
| 12:15 pm to 1:30 pm | Lunch |
| 1:30 pm | Forensic Laboratory |
| 2:15 pm | Data (<i>moved to Wednesday morning</i>) |
| 3:00 pm | Break |
| 3:15 pm | State Highway Safety Office |
| 4:00 pm | Public Outreach and Communication |
| 4:45 pm | Wrap up / What is unfinished from today? |
| 5:15 pm | Close |
| Wednesday, July 15, 2015 | |
| 9:00 am | Measurements to Evaluate the Effects of Legalizing or Decriminalizing Marijuana |
| 10:45 am | Break |
| 11:00 am | Open Discussion about Next Steps and State Needs |
| 12:00 pm | Close |

Appendix D: Status of State Marijuana Laws in Expert Panel States

| State | Medical ¹ | Possession Limits ² | Recreational | Comments |
|------------|---|---|---|--|
| Arizona | X Passed 11/2/2010 Effective 4/14/2011 ³ | 2.5 oz. usable; 12 plants | | A legalization measure (Arizona Regulation and Taxation of Marijuana Act Initiative) may appear on the November 8, 2016, ballot. Upon voter approval, the measure would legalize the possession and consumption of marijuana by persons aged 21 years or older. Persons may grow up to 6 plants in their homes. A 15 percent tax would be levied on the sale of marijuana. The act establishes a Department of Marijuana Licenses and Control, as well as empowers local governments to regulate and limit marijuana businesses. ⁴ |
| California | X Passed 11/5/1996 Effective 11/6/1996 | 8 oz. usable; 6 mature or 12 immature plants | | The Recreational and Medical Marijuana Legalization Initiative (#15-0049) will not be on the November 8, 2016, ballot in California. ⁵ |
| Colorado | X Passed 11/7/2000 Effective 6/1/2001 | 2 oz. usable; 6 plants (3 mature, 3 immature) | X Passed 11/6/2012 ⁶ Effective 12/10/2012 ⁷ | Amendment 64, a Colorado Marijuana Legalization Amendment, was approved on the November 6, 2012, ballot in Colorado as an initiated constitutional amendment. The measure legalized marijuana in the state. ⁸ The amendment provides regulation of marijuana, permitting a person 21 years of age or older to consume or possess limited amounts of marijuana (1 oz. or less)... or possession of no more than six marijuana plants. ⁹ |

¹ <http://medicalmarijuana.procon.org/view.resource.php?resourceID=000881> (site updated 6/28/2016)

² <http://medicalmarijuana.procon.org/view.resource.php?resourceID=000881>

³ [https://ballotpedia.org/Arizona_Medical_Marijuana_Question,_Proposition_203_\(2010\)](https://ballotpedia.org/Arizona_Medical_Marijuana_Question,_Proposition_203_(2010))

⁴ [https://ballotpedia.org/Arizona_Regulation_and_Taxation_of_Marijuana_Act_Initiative_\(2016\)](https://ballotpedia.org/Arizona_Regulation_and_Taxation_of_Marijuana_Act_Initiative_(2016))

⁵ [https://ballotpedia.org/California_Recreational_and_Medical_Marijuana_Legalization_Initiative_\(2016\)](https://ballotpedia.org/California_Recreational_and_Medical_Marijuana_Legalization_Initiative_(2016))

⁶ [https://ballotpedia.org/Colorado_Marijuana_Legalization_Initiative,_Amendment_64_\(2012\)](https://ballotpedia.org/Colorado_Marijuana_Legalization_Initiative,_Amendment_64_(2012))

⁷ www.huffingtonpost.com/2012/12/10/hickenlooper-signs-amendm_n_2272168.html

⁸ [https://ballotpedia.org/Colorado_Marijuana_Legalization_Initiative,_Amendment_64_\(2012\)](https://ballotpedia.org/Colorado_Marijuana_Legalization_Initiative,_Amendment_64_(2012))

⁹ [www.leg.state.co.us/LCS/Initiative%20Referendum/1112initrefr.nsf/c63bddd6b9678de787257799006bd391/cfa3bae60c8b4949872579c7006fa7ee/\\$FILE/Amendment%2064%20-%20Use%20&%20Regulation%20of%20Marijuana.pdf](http://www.leg.state.co.us/LCS/Initiative%20Referendum/1112initrefr.nsf/c63bddd6b9678de787257799006bd391/cfa3bae60c8b4949872579c7006fa7ee/$FILE/Amendment%2064%20-%20Use%20&%20Regulation%20of%20Marijuana.pdf)

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| State | Medical ¹ | Possession Limits ² | Recreational | Comments |
|----------|---|--|---|--|
| Maine | X Passed 11/2/1999 Effective 12/22/1999 | 2.5 oz. usable; 6 plants | | The Maine Legalize Marijuana Initiative (Question 1) is on the Maine November 8, 2016, ballot. The act would allow possession and use of up to 2 ½ oz. of marijuana by persons 21 years of age or older. Persons can possess up to 6 immature plants or seedlings, and up to six flowering marijuana plants at the person’s home. The act would allow the cultivation, manufacture, distribution, testing, and sale of marijuana/products subject to state regulation, taxation, and local ordinance. ¹⁰ |
| Maryland | X Passed 4/14/2014 Effective 6/1/2014 | 30-day supply, amount to be determined. | X Filed: 2/22/2016 <i>Adjourned sine die</i> ¹¹ Effective: October 1, 2016 ¹² | Marijuana CONTRol (Cannabis Oversight and Nondiscrimination through Taxation, Regulation, and Legalization) Act of 2016 is in the house. Repeals specified criminal and civil prohibitions against the use and possession of marijuana. ¹³ |
| Montana | X Passed 11/2/2004 Effective 11/2/2004 | 1 oz. usable; 4 plants (mature); 12 seedlings. | | The Marijuana Legalization Initiative, CI-115 may be on the Montana ballot November 8, 2016. The measure would establish that adults have the right to purchase, consume, and possess marijuana, subject to age limitations. ¹⁴ |
| Oregon | X Passed 11/3/1998 Effective 12/3/1998 | 24 oz. usable; 24 plants (6 mature, 18 immature) | X Passed 11/4/2014 ¹⁵ Effective 07/1/2015 ¹⁶ | The Oregon Legalized Marijuana Initiative, Measure 91, was approved on the November 4, 2014, statewide ballot in Oregon as an initiated state statute. The measure legalized recreational marijuana for people 21 years of age and older, allowing adults over this age to possess up to 8 oz. of “dried” marijuana and up to four plants. ¹⁷ |

¹⁰ [https://ballotpedia.org/Maine_Legalize_Marijuana_Initiative,_Question_1_\(2016\)](https://ballotpedia.org/Maine_Legalize_Marijuana_Initiative,_Question_1_(2016))

¹¹ <https://legiscan.com/MD/bill/HB1580/2016>

¹² <http://mgaleg.maryland.gov/webmga/frmMain.aspx?pid=billpage&stab=01&id=hb1580&tab=subject3&ys=2016RS>

¹³ <https://trackbill.com/bill/md-hb1580-marijuana-control-cannabis-oversight-and-nondiscrimination-through-taxation-regulation-and-legalization-act-of-2016/1271928/>

¹⁴ [https://ballotpedia.org/Montana_Marijuana_Legalization_Initiative,_CI-115_\(2016\)](https://ballotpedia.org/Montana_Marijuana_Legalization_Initiative,_CI-115_(2016))

¹⁵ [https://ballotpedia.org/Oregon_Legalized_Marijuana_Initiative,_Measure_91_\(2014\)](https://ballotpedia.org/Oregon_Legalized_Marijuana_Initiative,_Measure_91_(2014))

¹⁶ www.thedailychronic.net/2014/38266/oregon-has-legalized-marijuana-an-overview-of-measure-91/

¹⁷ [https://ballotpedia.org/Oregon_Legalized_Marijuana_Initiative,_Measure_91_\(2014\)](https://ballotpedia.org/Oregon_Legalized_Marijuana_Initiative,_Measure_91_(2014))

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| State | Medical ¹ | Possession Limits ² | Recreational | Comments |
|------------|--|--|---|---|
| Vermont | X Passed 5/26/2004 Effective 7/1/2004 | 2 oz. usable; 9 plants (2 mature, 7 immature). | X Passed: 2/25/2016 Effective: 1/2/2018 (expected) | Vermont Senate passed bill S. 241 on 2/25/2016 to allow possession and sales of recreational cannabis to people 21 years and older beginning January 2, 2018, if enacted. The bill does not permit edibles or personal growing of marijuana. ¹⁸ |
| Washington | X Passed 11/3/1998 Effective 11/3/1998 | 24 oz. usable; 15 plants | X Passed 11/6/2012 Effective ¹⁹ 12/6/2012 | The Washington Marijuana Legalization and Regulation, Initiative 502, was approved on the November 6, 2012, statewide ballot. The measure legalized the production, possession, delivery, and distribution of marijuana. The initiative regulated the sale of small amounts of marijuana to people 21 and older. Additionally, the measure made it illegal for a motorist to have more than 5 nanograms of THC per mL of blood in their system. ²⁰ |

¹⁸ <http://thinkprogress.org/justice/2016/02/27/3754529/vermont-legalize-marijuana/>

¹⁹ www.liq.wa.gov/publications/Marijuana/I-502/Fact-Sheet-I502-11-7-12.pdf

²⁰ [https://ballotpedia.org/Washington_Marijuana_Legalization_and_Regulation,_Initiative_502_\(2012\)](https://ballotpedia.org/Washington_Marijuana_Legalization_and_Regulation,_Initiative_502_(2012))

Appendix E: Drugged Driving Per Se Laws²¹



NATIONAL CONFERENCE of STATE LEGISLATURES

The Forum for America's Ideas

Drugged Driving Per Se Laws

| State/Jurisdiction | Statutory Citation | Per Se Laws (Statutes that make it a criminal offense to have a drug in one's body/body fluids while operating a motor vehicle.) |
|--------------------|--------------------------------------|---|
| Arizona | Ariz. Rev. Stat. § 28-1381 | Any amount of Drug or Metabolite. |
| Colorado | Colo. Rev. Stat. §42-4-1301 | 5 nanogram threshold of THC. |
| Delaware | 21 Del. Code § 4177 | Any amount of Drug or Metabolite. |
| Georgia | Ga. Code Ann. § 40-6-391 | Any amount of Drug or Metabolite. |
| Illinois | Ill. Comp. Stat. § 625 ILCS 5/11-501 | Any amount of a prohibited drug. |
| Indiana | Ind. Code Ann. § 9-30-5-1 | Any amount of Drug or Metabolite. |
| Iowa | Iowa Code § 321J.2 | Any amount of a prohibited drug. |
| Kentucky | Kentucky Rev. Stat. §189A.010 | Any amount of (a) Any Schedule I controlled substance except marijuana; (b) Alprazolam; (c) Amphetamine; (d) Buprenorphine; (e) Butalbital; (f) Carisoprodol; (g) Cocaine; (h) Diazepam; (i) Hydrocodone; (j) Meprobamate; (k) Methadone; (l) Methamphetamine; (m) Oxycodone; (n) Promethazine; (o) Propoxyphene; and (p) Zolpidem. |

²¹ <http://www.ncsl.org/documents/transportation/persechartOct2015.pdf>

| | | |
|----------------|---------------------------------------|---|
| Virginia | Va. Code §18.2-266 | Specified amounts of specified prohibited drugs. |
| Washington | Initiative 502 | 5 nanogram threshold of THC. |
| Wisconsin | Wis. Stat. Ann. § 346.63 | Any amount of a prohibited drug. |
| Michigan | Michigan Vehicle Code § 257.625 | Any amount of a prohibited drug. ¹ |
| Minnesota | Minn. Stat. Ann. §169A | Any amount of Drug or Metabolite. ² |
| Montana | 2013 MT House Bill 168 | 5 nanogram threshold of THC. |
| Nevada | Nev. Rev. Stat. Ann. § 484C.120 | Specified amounts of specified prohibited drugs. |
| North Carolina | N.C. Gen. Stat. §§ 20-138.1, 20-138.3 | Any amount of schedule I substance. Illegal for any person age 21 to drive with any amount of a prohibited drug or substance. |
| Ohio | Ohio Rev. Code § 4511.19 | Specified amounts of specified prohibited drugs. |
| Oklahoma | Oklahoma Stat. Ann. §11-902 | Any amount of schedule I controlled substance (as defined by Oklahoma statutes) or metabolites or analogs. |
| Pennsylvania | Pa. Con. Stat. §75-3802 | Any amount of Drug or Metabolite. |
| Rhode Island | R.I. Gen. Laws § 31-27-2 | Any amount of a prohibited drug. |
| South Dakota | S.D. Codified Laws §32-23-1 | Illegal for any person age 21 to drive with any amount of a prohibited drug or substance. |
| Utah | Utah Code §41-6a-517 | Any amount of Drug or Metabolite. |

*All other states require the drugs to render a driver “incapable” of driving safely, require that the drug impair the driver’s ability to operate safely, or require a driver to be “under the influence or affected by an intoxicating drug”.

Notes:

1. The Michigan Supreme Court ruled that “medical” marijuana users were not subject to the per se standard. In cases of drugged driving by an approved medical marijuana user, the state must prove the driver was impaired by marijuana at the time of the arrest.
2. The statute specifically exempts marijuana from the per se standard.

Source: (NHTSA, 2009; NCSL, 2015)

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