

PUBLIC INFORMATION AND OUTREACH MATERIALS: CANNABIS IMPAIRED DRIVING



States With Legalized Recreational Marijuana

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We appreciate the assistance from Sam Cole, Colorado Department of Transportation, Ryan Stone, Oregon Department of Transportation, and Tim Weisburg, California Office of Traffic Safety. Their contributions of campaign materials were essential to crafting this report. The willingness of states to collect market research over time and collaborate with each other to deliver effective and fiscally responsible campaigns is crucial to navigating the changing landscape of cannabis policy and its impact on traffic safety across the country.

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INTRODUCTION

The landscape of cannabis legalization is rapidly changing in the United States. As more states begin to legalize cannabis, there is a genuine concern for traffic safety. Marijuana impairs psychomotor skills, doubling the crash risk. The drug impacts a person's risk taking, decision making, reaction time, and divided attention skills. Additionally, driving under the influence of marijuana increases lane weaving, following distances, and causes reduced speeds. When combining cannabis with alcohol, there is an additive effect, causing the person to be more impaired than with using either drug on its own (Burt, 2021).

While there is limited scientific data to help us determine impairment levels in the way that we understand alcohol impairment, state governments and public safety professionals have a duty to educate the public about the implications of cannabis use as it relates to the driving task. These public education campaigns are relatively new as it has only been ten years since the first states legalized recreational cannabis use. Nevertheless, it is important to inform cannabis users that it is not safe to drive high.

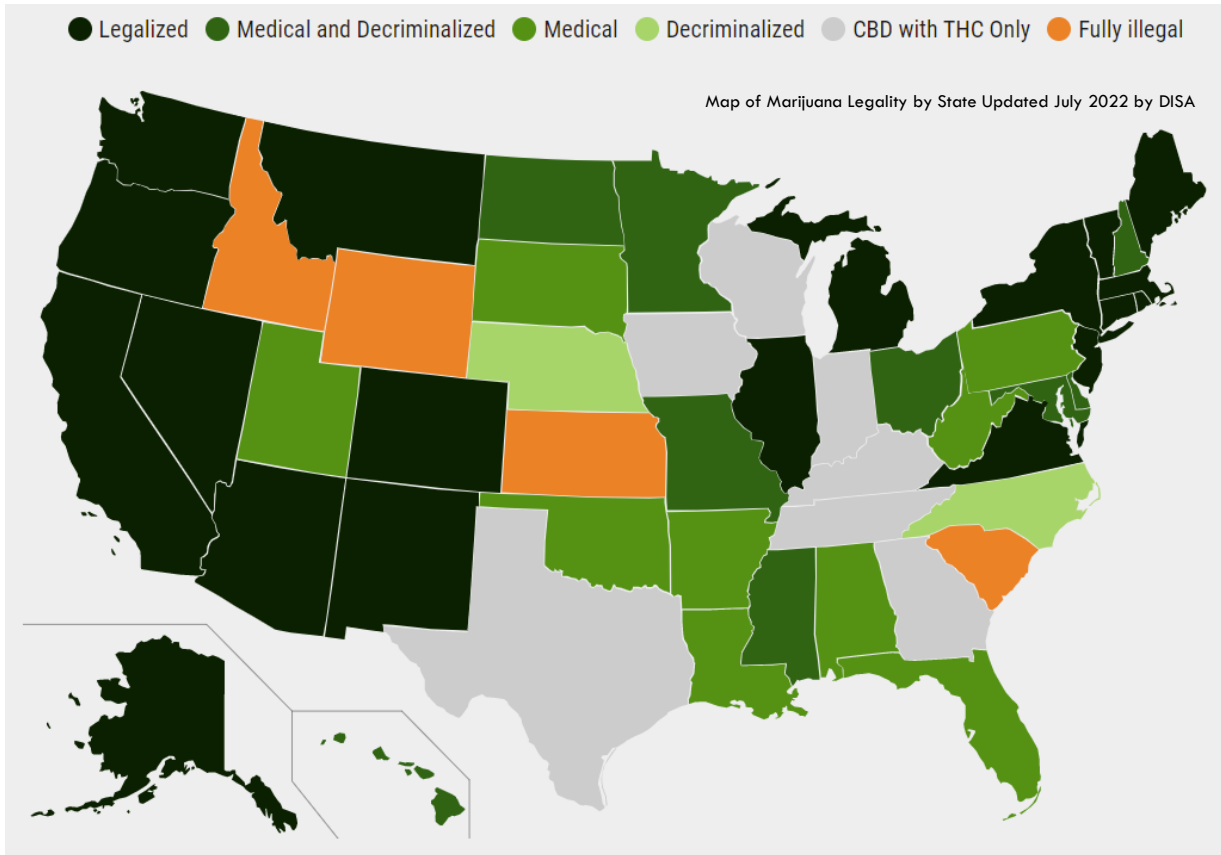
History of Cannabis in the United States

During the 1930s state governments and other countries started banning marijuana. This led to the passage of the Marihuana Tax Act of 1937, which began regulation of importation, cultivation, possession, and distribution of marijuana. This act essentially stopped the use of the plant as a recreational drug and ensured proper payment of tax for any other use (US Customs and Border Protection, 2019).

In 1951, the passage of the Boggs Act amended the Narcotic Drugs Import and Export Act and set mandatory sentences for drug convictions. A first offense of marijuana possession carried a minimum sentence of 2-10 years in prison and a fine up to \$20,000 (GovTrack).

In 1970, the United States Congress passed the Controlled Substances Act, which established categories, or schedules, of drugs based on their potential for abuse and medical usefulness. This was the piece of legislation that first listed marijuana as a Schedule 1 drug along with LSD and heroine (Martin, 2016). The Schedule 1 designation made it difficult for physicians or scientists to procure marijuana for research studies.

After more than two and half decades of prohibition, California was the first state to legalize cannabis for medical purposes in 1996 (Yu et al., 2020). Washington State and Colorado both legalized cannabis for recreational use in 2012. While federally, cannabis remains a Schedule 1 substance, by July of 2022, 18 states have passed Medical Marijuana Laws and 19 additional states have both medical and recreational markets.



Source: DISA Global Solutions, 2022

METHODOLOGY

The Texas A&M Transportation Institute (TTI) developed a list of states in which recreational cannabis is legal. Nineteen states were identified. With the objective of analyzing the evolution of cannabis safety messaging over time, the list was reduced to states who legalized recreational use in or before 2018. This narrowed the list to eleven states: Alaska, California, Colorado, Maine, Massachusetts, Michigan, Nevada, Oregon, Vermont, Washington DC, and Washington State.

Several departments were contacted via email and/or phone in the identified states:

- Office of Traffic Safety: California and Nevada
- Department of Transportation: Colorado and Oregon
- Office of Highway Safety Planning: Michigan
- State Highway Safety Office: Vermont
- Washington Traffic Safety Commission: Washington State
- Department of Health and Human Services: Alaska
- Offices of Grants and Research: Massachusetts
- Office of Cannabis Policy: Maine and Massachusetts

- Alcohol Beverage Regulation Administration: Washington DC

Of the contacted departments, three states responded to the request for information. Sam Cole, Traffic Safety Communications Manager for the Colorado Department of Transportation provided a wealth of information. Ryan Stone, Impaired Driving Program Manager for the Oregon Department of Transportation and Tim Weisberg, Public Information Officer for the California Office of Traffic Safety both provided substantial materials to contribute to this report. TTI researchers also gathered presentations and materials from Alaska, Massachusetts, and Michigan through internet search engines.

STATES WITH RECREATIONAL CANNABIS MARKETS

States across the nation are moving toward legalized retail sales of adult-use cannabis. With this trend come concerns about a rise in impaired driving. State Highway Safety Offices (HSOs) have developed public information and awareness campaigns to address these concerns. This document discusses the lessons learned from those states that have experience developing and executing campaigns that specifically address cannabis-impaired driving.

Alaska

Alaska first allowed for medical use of cannabis in 1998. In 2014, Alaskans voted to legalize recreational use of marijuana through voter initiative. This measure became known as Ballot Measure 2. This initiative became law on February 24, 2015, and recreational shops opened in 2016. Of interesting note, Alaskans have been able to possess and cultivate small quantities of marijuana since 1975. However, Ballot Measure 2 extended the protections and freedoms already afforded to Alaskans under the law (National Organization to Reform Marijuana Laws [NORML], 2022).

In 2015, the Alaska Department of Health and Social Services, Division of Public Health launched a public education campaign about marijuana legalization. This campaign focused on the facts about marijuana and the new law (Smith, 2016). The campaigns also focused on public health issues, such as using marijuana while pregnant and underage marijuana use (Smith, 2016). Television, radio, and social media ads were used (Smith, 2016). Additionally, informational websites were established to display [fact sheets](#) (Alaska DHHS, 2016b).



Source: Smith, 2016

In 2016, marijuana campaigns became less about the law and more about public health. This was partly based on data from other states (Colorado, Washington, Oregon) indicating that emergency room visits, hospitalizations, and calls to poison control centers were up since legalization. Public health topics included (Smith, 2016):

1. Driving High is a DUI
2. Potency
3. Edibles delayed high
4. Pregnancy and breastfeeding
5. Kids and animals

PSA ads ran on television, radio, Facebook, and YouTube. Key concepts included:

- legal age;
- pot affects people differently;
- it can take a while for full effects to kick in;
- these aren't your grandma's brownies;
- steer clear when pregnant and breastfeeding;
- cannabis edibles can look like treats and make kids sick (Alaska DHHS, 2016a).



Source: Smith, 2016

There were several lessons learned from Alaska's initial cannabis public information campaigns (Smith, 2016):

- Do not use scare tactics. Use suggestions.
- Do not demonize cannabis users
- No unfounded claims
- Incorporate humor, but not at the expense of cannabis users
- Alaskans don't like to be told what to do, especially by the government

In 2018, Alaska started using the slogan "Drive High, Get a DUI". Alaska has also aligned with NHTSA's Marijuana DUI campaign – "If you feel different, you drive different".

California

California was the first state to allow the medical use of marijuana with the passage of the Compassionate Use Act of 1996. In November 2016, California voters passed the Adult Use of Marijuana Act (AUMA) also known as Proposition 64, which legalized the recreational use of marijuana in the state. This initiative formally became law on November 9, 2016, however, sales of marijuana for recreational use did not begin until January 1, 2018 (California Department of Cannabis Control, 2022).

Tim Weisburg, Public Information Officer (PIO) for the California Office of Traffic Safety (OTS) Marketing and Public Affairs Division provided the following information and campaign materials.

In 2017, before cannabis sales began, the California Office of Traffic Safety began the [“DUI doesn’t just mean booze” campaign](#). This ad series used the tag line “No matter why, I don’t drive high”. The ad briefly hit the airwaves before being met with criticism saying it “glorified and promoted marijuana use,” according to Mr. Weisburg. The intent was to show understanding for the many reason that people may consume cannabis, but that it is never acceptable to drive high. In the end, Mr. Weisburg said, “The message was lost in mostly touting the benefits of marijuana, versus the danger it may pose if you drive after consumption.”

In 2021, marijuana DUI campaigns transitioned to “Don’t Drive the ‘High’-Way”. The ad reminds consumers that many substances can impair the ability to drive. It encourages users of cannabis and medications to choose a sober driver. The image below was place on social media platforms and the video ran as a [15 second Public Service Announcement](#).



Source: Tim Weisburg, California OTS

According to Mr. Weisburg, the biggest lessons learned in messaging pre-recreational legalization and post-legalization are:

- It is not the same as drunk driving. Perception is that it is known it is illegal to drive under the influence, but not as bad as drunk driving.
- Use facts. Highly skeptical about dangers without facts.
- Enforcement – challenging because there is no per se limit and is not like alcohol. Impairment affects people differently based on variety of factors. Alcohol is more black and white. You drink this much, you are this impaired. Hence, threats of consequences don’t work in messaging.
- Stereotypes and scare tactics don’t work. Not all marijuana users are consuming for pleasure. Lumping everyone into the “pothead” category. There are a variety of users.
- Marijuana and cannabis are interchangeable. Just don’t say “pot” or “weed.”
- We are still learning about proper messaging and imagery. What is appropriate for broadcast TV, social media channels, etc.

Colorado

On November 7, 2000, 54% of Colorado voters approved Amendment 20, which amended the State Constitution to allow the use of marijuana in the state for approved patients with written medical consent.

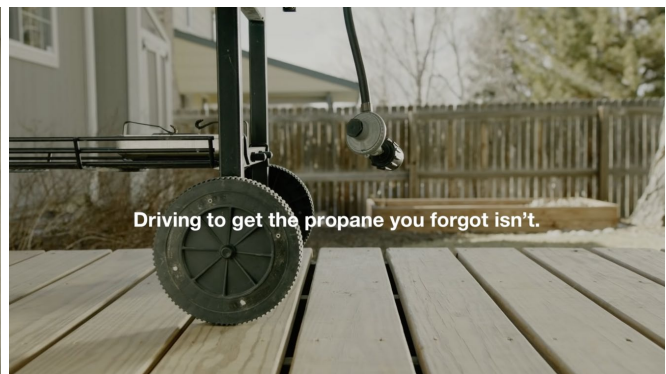
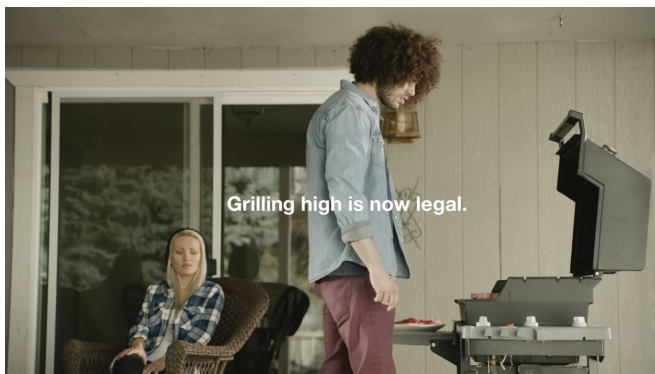
In 2012, Colorado voters voted in favor of Amendment 64, a constitutional amendment legalizing the recreational possession and use of marijuana. This law formally took effect on January 1, 2014 (State of Colorado, 2022).

Sam Cole, Traffic Safety Communications Manager for the Colorado Department of Transportation (CDOT) provided the following information and campaign materials. Since the law went into effect in 2014, there have been several marijuana DUI campaign approaches by CDOT. The budget has also increased dramatically from \$150,000 in 2014 to \$950,000 in 2020 (Cole, 2020).

In 2014, CDOT began marijuana and driving public information campaigns. Focus groups were conducted to determine the most effective traffic safety messaging discouraging driving while under the influence of marijuana. Key findings included (Cole, 2020):

- Lack of awareness that you can get a DUI for consuming marijuana
- All felt it was safer to drive under the influence of marijuana versus alcohol
- Don't respond well to heavy-handed government message – don't 'demonize' me
- When humor-based, fact-based and enforcement-based messages were tested, fact-based resonated the most

Based on these results, CDOT wanted to focus on awareness and education. The guiding principles included not criminalizing marijuana users, taking a neutral stance on marijuana use while focusing on the education about laws and dangers, and connecting with marijuana users to establish trust. In 2014, the public information campaign was "Drive High, Get a DUI". The initial advertising approach focused on education, specifically that you can get a DUI if you drive under the influence of marijuana. Messaging included "You can do a lot of things while high, but driving isn't one of them" and the goal was to keep the messaging light-hearted and humorous to connect with marijuana users. Based on traffic safety research, males between the ages of 21 and 34 years were the target audience of public information campaigns. This demographic was less aware of marijuana DUI laws and consequences, felt it was okay to drive after smoking marijuana, and had a higher binge risk. The advertising campaigns showcased males looking incompetent while high, such as trying to turn on a grill without a propane tank attached. According to Sam Cole, Traffic Safety Communication Manager (CDOT), these ads were stereotypical and did not accurately portray most marijuana users. Based on results from a post-campaign survey, nearly half of respondents reported recalling the message "Drive High, Get a DUI" after only 3 weeks of marketing. Additionally, there were 1.2 billion impressions made at the state, national and global level – meaning the messaging was reaching a large amount of marijuana users (Cole, 2020).



Source: Cole, 2020

In 2015, a driver survey was conducted, and 21 percent of participants still did not know you can get a DUI if you drive high. CDOT continued advertising about DUI laws. Additionally, new tactics to engage users were introduced, such as hotboxing a car and arcade games. In the hotboxing car example, a car would be placed at an event, such as the “The Cannabis Cup” and it would fill with smoke to mimic hotboxing and the message “Drive High, Get a DUI” would appear. Arcade games with traffic safety messaging were also be placed in cannabis dispensaries to engage marijuana users. Between these two approaches, 200 million media impressions were earned through editorial coverage. With one car and a dozen arcade games, CDOT was able to engage with millions of marijuana users (Cole, 2020).

In 2016, awareness that you can get a DUI while high increased from the previous year. However, 20 percent of marijuana users think they are safe to drive high. So, CDOT campaigns needed to pivot from awareness to communicate the dangers of driving high. A new campaign called “Dangerous Combinations” launched, which was a crashed car billboard formed like a join that read, “Hits Lead to Hits. Don’t Drive High.” The Dangerous Combination billboards amounted to 13 million media impressions. Other creative billboards were also used focusing on the dangerous combination of driving and marijuana use, such as the one pictured below displaying a car crash edible. Additionally, a “Slow Speed Chase” was demonstrated at events around Colorado, such as Snoop Dog’s 4/20 concert. The “Slow Speed Chase” were vehicles wrapped in messaging taken to local events. One car was wrapped in marijuana leaves and the other car was wrapped like a police vehicle. The two interacted as though they were in a traffic stop. Ultimately, both of these campaigns got a lot of public pushback and was deemed a scare tactic (Cole, 2020). According to Mr. Cole, key lessons learned included:

- Don’t use images of death and destruction with marijuana use; and
- Don’t offend marijuana users – the goal is to engage consumers with safety messaging



Source: Cole, 2020



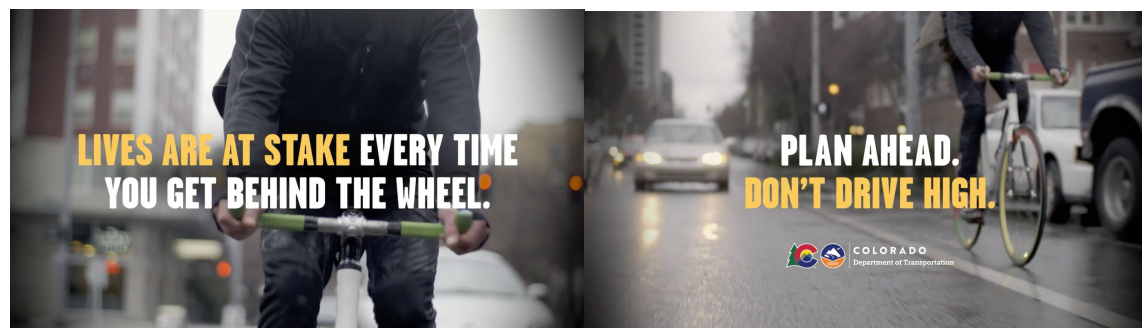
In 2017, since many of the tactics and advertising used in 2016 did not connect with the public and were seen as government scare tactics, marijuana campaigns moved in a much more positive direction. Since the public was now educated about laws and dangers, the goal was to drive people to take action and

change behavior. One major campaign theme was the “320 Movement”. Since 420 is known for getting high, 320 was about planning ahead. Leading up to the 420 “holiday”, Lyft vehicles were branded with the 320 slogan – “Plan a Ride Before You’re High”. Information cards were left in the backseat highlighting the dangers of driving while high, as well as Lyft credits. Downloadable weekly Lyft discounts were available to encourage safe behavior. Codes were released each Sunday at 3:20pm leading up to 4/20. A website was developed to educate the target audience on the dangers of driving while high. Additionally, 420 Mile Markers were hidden at 420 events and concerts with promo codes to redeem \$42 worth of Lyft credits. According to Sam Cole, the 320 Movement campaign performed incredibly well. The target market connected with the content and were prone to share and engage with the ads, especially the Lyft promo codes. Dispensaries also were utilized as safety messengers in 2017. For example, educational videos were distributed to dispensaries to play in waiting rooms and purchase rooms. Overall, nearly 175 million media impressions were made during this campaign year (Cole 2020).



Source: Cole, 2020

From 2019-2022 ads continued to focus on increasing the social norm to plan ahead.



Source: Cole, 2020

Additionally, a new engagement approach began. From 2017 to 2020, the marijuana DUI campaign centered around the “Cannabis Conversation”. Research had shown that while knowledge had increased over the past few years about the marijuana and driving, the needle was not moving forward in terms of behavior change. So, CDOT launched the largest engagement campaign of its kind in the world – the Cannabis Conversation. The campaign included: a multi-year approach to inform future campaigns, working with the public to gather feedback together, broad-ranging dialogue rather than a traditional,

one-way awareness marketing campaign, and the need for a cultural shift in how cannabis consumers think about driving high. The campaign started with community outreach, including online surveys, public meetings, event booths, and interviews at dispensaries. Additionally, partnerships were formed with over 30 stakeholders, including ride-share operators, law enforcement, and industry groups. There was also a great deal of paid media, including digital billboards, online ads, and social media ads – which combined for a total of over 35 million impressions. One concept that came out of the campaign was [“Uncomfortable High”](#), in which the audience was shown people using cannabis before performing work duties, such as a hair stylist cutting hair or a school bus driver getting ready to drive kids to school, to cause the viewer to reassess the casualness with which they drive high. A key finding of the Cannabis Conversation was that marijuana users prefer to see drugged driving safety campaigns that are both emotional and based in scientific fact. Additionally, dispensaries are a trusted source of information and should play a key role in educating customers about the laws and dangers of marijuana-impaired driving (Cole, 2020). According to Mr. Cole, there were several findings from the Cannabis Conversation about “what works” and “what doesn’t work” in cannabis impaired driving campaigns as seen in the table below.

What Works	What Doesn’t Work
Tone – realistic, factual, conversational, direct/straightforward <ul style="list-style-type: none"> • Impact of DUIC on others, especially children • Credible risks and consequences • Government is looking out for cannabis users, not criminalizing them 	Tone – heavy, condescending, heavy-handed
Terminology – use industry lingo <ul style="list-style-type: none"> • Cannabis instead of “weed” or “pot” • “Driving under the influence of cannabis: instead of driving high 	Scare Tactics
Incentivize alternatives to driving (e.g. Lyft discount codes) or advocate for waiting	Threats
Financial and legal consequences	Stereotypes
Messaging from marijuana industry, local methods of delivery, community leaders	Comparing marijuana use to alcohol use
“Uncomfortable High” campaign	Saying “Don’t do it”
Emphasize slowed-down reaction time	Explanation of why DUIC impairs driving
Use statistics and sources	Attacks on cannabis users
Couple the cautionary feeling of Uncomfortable High with providing a positive solution. This pairing effectively conveys the problem and shows that cannabis enthusiasts can choose to make responsible choices.	Humor – makes an ad more appealing, but does not get people to rethink DUIC
Present clear alternatives to DUIC	Overgeneralizing
Connect the risks of DUIC and the risks associated with doing other things (such as surgery or transporting kids) under the influence.	Depicting cannabis users as irresponsible or dangerous and assuming they will have a wreck

Colorado was one of the first states to legalize marijuana for recreational purposes and has spent a lot of time and resources determining best practices for marijuana DUI campaigns. The main takeaway from Colorado’s experience is that marijuana DUI campaigns should include messaging from trusted

stakeholders, including the marijuana industry, that messaging is credible and doesn't over-exaggerate the problem – instead the messaging should help people understand the dangers of driving high and that driving high can lead to a DUI arrest and should encourage consumers to plan ahead (Cole, 2020).

According to Mr. Cole, other lessons learned include:

- The tone is important
- Don't offend, engage
- Establish trust
- Take a neutral stance rooted in education about the law and dangers
- Don't pair images of death and destruction with marijuana use
- Language is essential – "cannabis consumer" rather than "marijuana user"
- The audience does not want to feel criminalized
- Phased messaging
 - Phase 1 - Awareness (law, dangers) – Cannabis is legal; driving impaired is not
 - Phase 2 - Behavior change (take rideshare, plan ahead)
- Positive social norming
- Be efficient with ad buys – geo-fence digital buys; target social posts
- Stakeholder partnerships
 - Allow industry and stakeholders to carry the message
 - Assure "skin in the game" from partners
 - Industry Partners are a trusted source for educating customers about impaired driving

Massachusetts

Massachusetts legalized medical cannabis in 2012. Massachusetts voters approved Question 4, which legalized the recreational use of marijuana in the state in November 2016. This law took effect on December 15, 2016. Retail sales from licensed dealers became legal on November 20, 2018 (Massachusetts Cannabis Control Commission, 2022).

The Massachusetts Legislature requires the Cannabis Control Commission and Department of Public Health to establish science-based public awareness campaigns informing adults about responsible use of cannabis, reducing youth cannabis use, and warning against the dangers of home manufacturing. Massachusetts has utilized a public health prevention framework, outlined in the *More About Marijuana Public Awareness Campaign Effectiveness* report (Doonan, 2020).

The ["More About Marijuana" campaign](#) was implemented in two phases. In 2018, parents of youth were targeted ("parent campaign") and in 2019 the general public was targeted ("responsible use campaign"). The goal of the "parent campaign" was to educate parents about the risks of marijuana use in youth and provide them with the tools they need to talk openly with their children. The "responsible use" campaign targeted Massachusetts adults ages 21 years old and the goal was to inform adults ages 21+ who use, or are interested in using, marijuana about the law to promote safe and responsible use. Content addressing the dangers of home manufacturing was distributed in a subsequent phase of the public awareness campaign. The campaign ran on multiple mediums and outlets. Deliverables included development of a dedicated website, Out-of-Home ads (billboards, transit posters, etc.), HTML 5 ads, 15-second, 30-second, and 90-second animated ads, brochures or "rack cards", and branded

merchandise. The Campaign used multiple platforms to reach a broad and diverse audience. Outlets included: YouTube, Snapchat, Facebook, Twitter, television, radio, billboards, convenience stores posters, public transportation posters, and print brochures. A total of \$2,000,000 over the course of two fiscal years were allocated to the campaign (Doonan, 2020).

To build the campaign, focus groups were conducted with 206 Massachusetts adults around the state. Focus group data collection informed the 10 key messages for the campaign (Doonan, 2020):

1. Legal age;
2. Places smoking is allowed or not allowed;
3. What constitutes operating under the influence;
4. Exceptions, including landlords, employers, towns, federal government;
5. Amount person/household can carry/grow;
6. Penalties for breaking laws;
7. More information on edibles, including potency and delayed response;
8. Side effects/health effect for kids;
9. Transporting across state lines; and
10. Rules on storing marijuana products at home.

Two survey instruments aided campaign development. A focus group survey and a statewide pre-implementation survey gauged respondents' cannabis law knowledge, use patterns, and campaign dissemination preferences. Results directly informed the content of the campaign. Based on the focus group and survey findings, several campaign messages were launched including (Doonan, 2020):

1. "Marijuana is legal, know the laws."
2. "You can't use it in public or on federal land."
3. "You can have up to 1 oz on you."
4. "You can grow up to 6 plants at home."
5. "Marijuana can affect brain development in kids."
6. "With edibles, start low and go slow."
7. "Talk to your kids about the risks of marijuana."



Source: Doonan, 2020



Did you know that while marijuana is legal in MA for adults 21+, you can't consume it in public or on federal land? And you can't carry it across state lines. Know the laws - learn more at MoreAboutMJ.org #MoreAboutMJ



11:00 AM - 22 Mar 2019

75 Retweets 166 Likes

28 75 166

After the campaign ended, a second representative survey of Massachusetts residents (“post-implementation survey”) was conducted to assess constituent behaviors, perceptions of marijuana, and the campaign. The post-implementation survey captured core survey questions from the pre-implementation survey and asked additional questions to see whether participants recalled seeing the campaign. Based on the assessment results of the campaign, the Commission has continued the public awareness campaign to ensure continued compliance with the respective laws, responsible consumption behavior, prevention of youth use, and awareness about the dangers of home manufacturing. As other states begin developing cannabis public information campaigns, the Massachusetts Cannabis Control Commission recommends (Doonan, 2020):

- Starting public awareness campaigns and data collection prior to policy enactment or align with enactment/implementation.
- Align survey measures with goals of public awareness campaign (i.e. measures assessing changes in knowledge, etc.).
- Conduct focus groups before population survey implementation so measures adequately address campaign goals.
- Over-sample cohorts of interest (i.e. parents) in pre-and-post surveys.
- Add measure on frequency of campaign views, which includes the “never” option.
- Fund public awareness campaigns in a manner that allows for content design and distribution prior to the opening of stores.

Furthermore, the Massachusetts Executive Office of Public Safety and Security (Massachusetts EOPSS) has also released campaigns, such as the [“Wisdom” ads](#). These ads use a peer-to-peer approach featuring local cannabis users talking about their personal experiences with, and thoughts on, driving after

consuming cannabis, alcohol, or other drugs (Massachusetts EOPSS, 2019). Additionally, the Massachusetts EOPSS also borrowed the “Grilling” ad series from Colorado, which portrays a man trying to turn on a grill without a propane tank. The messaging is “Grilling high is now legal. Driving to get the propane you forgot isn’t” (Massachusetts OHS, 2017). Massachusetts also used several other ads from NHTSA, including the ones pictured below.



Source: Massachusetts EOPSS Twitter

Michigan

Michigan voters approved a measure to allow for medical use of cannabis in 2008. In November 2018, Michigan voters passed Proposal 1, which legalized the recreational possession and use of marijuana in the state. The law took effect December 6, 2018, and Michigan adults who are 21 and older can legally use and grow marijuana recreationally. December 1, 2019 was the first day of recreational sales in Michigan (Marijuana Policy Project [MPP], 2022).

In 2017, prior to legalization, the Michigan Office of Highway Safety Planning contracted a firm to conduct four focus groups regarding drugged driving. The groups consisted of male respondents, 18-35 years of age. Each respondent was screened for having used stimulants, pain killers, or cannabis in the past year. Most respondents had used multiple variations of the listed drugs in the past year. Of concern, only 7 percent of respondents believed smoking cannabis and driving was dangerous. Additionally, repeated comments indicated that respondents believed that they were better drivers, more productive, and more focused when they were high. There was also widespread agreement that alcohol was more dangerous than cannabis. Respondents were asked about the risks of drugged driving. The greatest risks associated with drugged driving were the ramifications of a DUI, death of themselves or others, and a crash or accident. Respondents were presented four unique television ad/billboard concepts. After each presentation, respondents were asked if the concept would get their attention if they saw it. There were several lessons learned from these focus groups (Czuba, 2017):

- Paid actors used to deliver the messages were ineffective. When paid actors were used, the ad felt like ‘propaganda’ anti-drug messaging. Concepts that used paid actors in scenarios failed to pass the ‘cheesy’ test.

- Effective messages were blunt, graphic, and got to the point of the consequences
- Singling out cannabis created immediate dismissal of the messaging. It was more effective to include all drugs.
- Cannabis users are highly sensitive to the stigma of being seen as losers
- Use of green lettering was seen as an attack on cannabis
- The most effective messaging reminded respondents that people around them could become victims because of their choice. Imagery of children was particularly effective.

Since legalization, the Michigan Department of Licensing and Regulatory Affairs (LARA) has released several fact sheets detailing some of the laws and regulations (Michigan LARA, 2018). There were also several [PSAs](#) released by various non-profit groups and local health departments (Health Department of Northwest Michigan, 2018). These PSAs used a peer-to-peer approach detailing the dangers of youth marijuana use. Overall, there are few, if any, statewide marijuana public information campaigns in Michigan.

There are three marijuana-related acts that are now state law:

2008 Michigan Medical Marihuana Act	2016 Medical Marihuana Facilities Licensing Act	2018 Michigan Regulation and Taxation of Marihuana Act
<ul style="list-style-type: none"> ▶ Allows for patient/caregiver relationship regarding medical marijuana. ▶ Patients may possess up to 12 plants and 2.5 ounces of marijuana. ▶ Caregivers may register to serve up to 5 patients. ▶ Patients/caregivers must be registered with the state registry program. ▶ May not sell marijuana. 	<ul style="list-style-type: none"> ▶ Allows for commercial sale of marijuana to patients and caregivers. ▶ Five different types of licenses granted by the Medical Marijuana Licensing Board: growers, processors, provisioning centers, secure transporters, safety compliance facilities. ▶ May not sell marijuana to non-cardholders. ▶ Map of licensed facilities available at Michigan.gov/BMR. 	<ul style="list-style-type: none"> ▶ Up to 12 plants per household and 10 ounces. Amounts greater than 2.5 ounces must be locked in a safe. ▶ Up to 2.5 ounces on your person, no more than 15 grams of marijuana concentrates. ▶ Allows for commercial sale of marijuana to adults over the age of 21. ▶ Six different types of licenses granted by the Bureau of Marijuana Regulation: growers, processors, retailers, microbusinesses, secure transporters, safety compliance facilities. ▶ Commercial license applications available by December 6, 2019.

LARA
LICENSING AND REGULATORY AFFAIRS
CUSTOMER DRIVEN. BUSINESS MINDED.

This information is accurate as of December 6, 2018. The provisions of all three laws are concurrently in place and active.

For more information, please visit Michigan.gov/BMR

Source: Michigan LARA, 2018

Oregon

Oregon voters approved the use of cannabis as medicine in 1998. Oregon voters passed Measure 91 in November 2014, legalizing the possession and use of marijuana for recreational purposes in the state. Legalization became effective on July 1, 2015, and by the beginning of 2016, the state began accepting dispensary license applications (Oregon Health Authority, 2022).

Ryan Stone, Impaired Driving Program Manager for the Oregon Department of Transportation (ODOT) provided the following media samples from 2014 through 2018. Since then, ODOT has been utilizing NHTSA-produced content via traditional and social media channels.

In 2014, the marijuana DUI campaign slogan was “Drive Sober. The Way to Go”. The ad featured a weed joint labeled “Doobie” and car keys labeled “DUII”. The goal of the ad was to associate cannabis with Driving Under the Influence of Intoxicants (DUII).



Source: Ryan Stone, ODOT

In 2015, the marijuana DUI campaign transitioned to “Driving impaired will get you busted”. This ad series featured people getting pulled over by police with clever slogans, such as “Cannabis Regretiva” and “MarijuWhatWasIThinking?”. This campaign still focused on associated marijuana use with DUII but used humor/puns.



Source: Ryan Stone, ODOT

In 2018, the campaign shifted yet again to “Make the right Choice”. The ad featured cannabis consumers contemplating if they were too high to drive and some of the potential consequences. Ultimately, the drivers chose not to drive.



Source: Ryan Stone, ODOT

ODOT also has an [educational site](#) with posters, fact sheets, videos, social media graphics about legalization in Oregon. This site includes information on what the laws are, such as possession age and limits, licensing, and DUI.

Educate Before You Recreate

In Oregon, it's legal for adults 21 and older to possess and use recreational marijuana (from approved medical marijuana dispensaries)... but there are limits.

<h3 style="font-size: 2em;">21+</h3> <p style="font-size: 0.8em;">You can possess and use recreational marijuana if you are 21 and older. If you are younger, it's illegal.</p>	 <p style="font-size: 0.8em;">Approved medical dispensaries may sell small amounts of marijuana to recreational users of legal age.</p>	 <p style="font-size: 0.8em;">You can possess up to 8 oz of usable marijuana in your home & 1 oz of usable marijuana outside the home.</p>
 <p style="font-size: 0.8em;">You can grow up to 4 plants per residence, out of public view.</p>	 <p style="font-size: 0.8em; color: green;">WHATSLEGALEOREGON.COM</p>	 <p style="font-size: 0.8em;">Driving under the influence of marijuana remains illegal. Please be responsible.</p>
 <p style="font-size: 0.8em;">You can use recreational marijuana at home or on private property. PUBLIC USE IS ILLEGAL.</p>	 <p style="font-size: 0.8em;">You can't take marijuana in or out of the state. That includes Washington.</p>	 <p style="font-size: 0.8em;">You can make edible products at home or receive them as a gift, and can only use them in private places.</p>

PLEASE SHARE THIS INFORMATION WITH PEOPLE YOU KNOW

Some aspects of the law are still being determined.
To stay up to date, sign up for our e-newsletter or find us online:

WHATSLEGALEOREGON.COM    @whatslegalOR

Source: *What is Legal Oregon*, n.d.

Post 2018, ODOT has run ads from the National Ad Council funded by NHTSA. The slogan for these campaigns is “If you feel different, you drive different”. Most of these ads are light-hearted and humorous. Some of these ads include (National Ad Council, 2022):

1. I’m in an Ad – 2022 <https://youtu.be/ow6rLxCAT0k>
2. Not Camping Day – 2022 <https://youtu.be/3fs77Clor6Q>
3. You Can Run But You Can’t Drive High – 2021 https://youtu.be/lq-tZXS_hxg
4. Spotted: Driving High (Cheetah) – 2020 <https://youtu.be/dMRVvdNdYS8>
5. Feel Different Social – 2018 <https://youtu.be/yrTVtlvAdhQ>

Other print ads include (National Ad Council, 2022):

1. [A little high is still too high to drive](#)

2. [This is an ad that says you shouldn't drive high](#)
3. [If you're high, just don't drive](#)
4. [Puff puff pass on driving high](#)
5. [To put it bluntly: Don't drive high](#)
6. [Blaze your own path. Just don't drive high](#)

CONCLUSION

Over 30 percent of the fatal crashes in the United States result from some form of impairment, including alcohol, cannabis, and other drugs (Centers for Disease Control and Prevention, 2020). Of concern, based on survey and focus group findings from the states in the sections above, some cannabis users feel safe driving while under the influence of the drug. Additionally, many cannabis users do not know the laws relating to legalization in their state, such as impaired driving laws. Cannabis public information campaigns can be established to help educate cannabis consumers, and ultimately change their behaviors.

Evolution of Cannabis Education Campaigns in the US

Based on the information obtained from the states included in this report, there were several themes that emerged when it came to messaging tactics. First, almost all states recognized the need to inform cannabis consumers of the laws in their state, including impaired driving laws. Initial focus group and survey findings found that many cannabis consumers were not aware that you could get a DUI for driving after consuming marijuana. States created educational fact sheets and/or websites to educate the public. Some states also shared this information via television, radio, and social media ads. Additionally, in the beginning stages of legalization, some states, including Alaska and Massachusetts, also focused on public health issues, such as using marijuana while pregnant and youth marijuana use. The tone and messaging of these ads varied from:

- humorous – [“Grilling” ad](#) (see Colorado)
- fact-based- [“More About Marijuana” campaign](#) (see Massachusetts)
- clever/witty- “Cannabis Regretiva” (see Oregon)
- peer to peer - [“DUI doesn't just mean booze” campaign](#). (see California)

While ads and campaigns focusing on laws and public health helped to educate the public on these topics, many cannabis consumers still did not think driving high was dangerous. According to research conducted in Colorado, Massachusetts, and Michigan, many cannabis consumers believed smoking cannabis and driving was not dangerous and they were better drivers high. State cannabis education campaigns shifted to attack those notions. One example of this included Colorado's [“Dangerous Combinations” campaign](#). Another example included the [“Wisdom ads”](#) in Massachusetts, which used a peer-to-peer education approach. Additionally, Oregon's “Making the Right Choice” ad series, which featured cannabis consumers contemplating if they were too high to drive and some of the potential consequences. Many of these ads were viewed as anti-cannabis propaganda and using fear tactics. These campaigns, with the exception of the “Wisdom” ads, were not well liked by the public.

Next, once public information campaigns tackled communicating the dangers of driving high, states wanted to drive behavior change with their messaging. Specifically, planning ahead and appointing a

designated sober driver. Colorado used plan ahead messaging and gave Lyft vouchers to the public. Massachusetts used the messaging – “If you plan on getting high, plan on getting a ride”.

Overall, cannabis public information campaigns were generally phased. First, campaigns focused on awareness of laws and dangers. Then, campaigns focused on behavior change, such as planning ahead. Among the states, there were several successful campaigns and several unsuccessful campaigns. No matter the effectiveness in deterring cannabis-impaired driving, there were many lessons learned that can guide campaigns in other states as cannabis continues to be legalized across the country.

The most successful campaigns included the “Wisdom” ads, the “Uncomfortable High” ads, and Colorado’s 320 campaign. The Wisdom ads were successful because they used a peer-to-peer approach; research shows that cannabis consumers want to be talked to like a friend, not lectured by the government (CDOT, 2020). The “Uncomfortable High” ads were the most effective campaign among survey respondents across all demographics and driving behaviors because it invoked a feeling of discomfort around driving after using cannabis– the feeling of unease provides an opening that can start a process of questioning, increased awareness, and progress toward sustained behavior change (CDOT, 2020). The 320 campaign in Colorado drove cannabis consumers from awareness to action – ads should be solution-oriented (e.g. positive suggestions for avoiding a DUI – designate driver, ride share, taxi or just spend the night) (Cole, 2020).

Some of the least successful campaigns, according to the state representatives interviewed for this report, included California’s “DUI doesn’t just mean booze” ad, Colorado’s “Grilling” ads, and Colorado’s “Dangerous Combination” ads. The “DUI doesn’t just mean booze” ad used a peer-to-peer approach but instead of deterring cannabis-impaired driving, it encouraged cannabis use; ads should avoid being too pro-industry and focus on the issue. The “Grilling” ads were funny but also very stereotypical – cannabis users are sensitive to the stoner stereotype and said that an effective campaign needs to be inclusive of a wide variety of cannabis users and not play into negative stereotypes (CDOT, 2020). The “Dangerous Combination” ads connected cannabis use with death and destruction – scare tactics are interpreted as condescending or out of touch (CDOT, 2020).

Lessons Learned

Overall, States experimented with various tones and messaging approaches since legalization. There have been many lessons learned through trial and error, which can help inform cannabis public information campaigns in other states. Recommendations that can help guide Texas campaigns include:

- **Tone is very important.** The target audience, cannabis consumers, need to be respected. You can incorporate humor but not at the expense of the cannabis consumer. Avoid Unrealistic or derogatory scenarios that may elicit mockery.
- **Avoid threats/scare-tactics.** Take a neutral stance rooted in education about the law and dangers. Additionally, don’t pair images of death and destruction with marijuana use.
- **Partner with the industry.** Allow the cannabis industry and stakeholders to carry the message as they are trusted sources for consumers.
- **Encourage peer-to-peer communication.** There is a lot of distrust in the government, so a peer-to-peer approach is more engaging for cannabis consumers.

- **Encourage Alternatives.** Messaging emphasizing that driving after using alcohol or drugs is a choice that should be avoided. Calling on a designated driver is the solution if the choice to ingest marijuana is made.
- **Be credible and factual.** Use statistics and cite sources. Emphasize slowed reaction time. Additionally, discuss credible risks and consequences.
- **Messaging that connects** the risks of driving while high and the risks associated with doing other things (such as surgery or transporting kids) under the influence. Incorporating kids has been shown to elicit more of a response from the target audience.

REFERENCES:

- Alaska Department of Health and Human Services [Alaska DHHS]. (2016a.). Cannabis PSA [Video]. YouTube. <https://www.youtube.com/watch?v=le-DZ81W8Hk>
- Alaska Department of Health and Human Services [Alaska DHHS]. (2016b.). Get the Facts About Marijuana. Retrieved from: https://health.alaska.gov/dph/Director/Documents/marijuana/MJFactSheet_DUI.pdf
- Yu, B., Chen, X., Chen, X. et al. Marijuana legalization and historical trends in marijuana use among US residents aged 12–25: results from the 1979–2016 National Survey on drug use and health. *BMC Public Health* **20**, 156 (2020). <https://doi.org/10.1186/s12889-020-8253-4>
- Burt, T. S., Brown, T. L., Milavetz, G., & McGehee, D. V. (2021). Mechanisms of cannabis impairment: implications for modeling driving performance. *Forensic science international*, 328, 110902.
- California Department of Cannabis Control. (2022). California's Cannabis Laws. Retrieved from: <https://cannabis.ca.gov/cannabis-laws/laws-and-regulations/>
- California Office of Traffic Safety [California OTS]. (2021). OTS DUID: 15 [Video]. YouTube. <https://www.youtube.com/watch?v=dr142whhZNs>
- California Office of Traffic Safety [California OTS]. (2017). 'DUI Doesn't Just Mean Booze' Campaign [Video]. YouTube. <https://www.youtube.com/watch?v=bjQamzcl8s4>
- Centers for Disease Control and Prevention. (2020). Impaired Driving: Get the Facts. Retrieved from: https://www.cdc.gov/transportationsafety/impaired_driving/impaired-driv_factsheet.html
- Cole, Sam. (2020). *Colorado Department of Transportation Public Education Campaign – Marijuana and Driving* [Presentation]. Texas Impaired Driving Forum, San Marcos, TX.
- Colorado Department of Transportation [CDOT]. (2020). The Cannabis Conversation. Denver, CO: Colorado Department of Transportation. https://www.codot.gov/safety/impaired-driving/druggeddriving/assets/2020/cannabis-conversation-report_april-2020.pdf
- Czuba, R. (2017, June 17). *Drugged Driving Focus Group Report* [Memorandum]. Michigan Office of Highway Safety Planning. https://www.michigan.gov/-/media/Project/Websites/msp/ohsp/pdfs/2017_Drugged_Driving_Focus_Group_Report_final.pdf
- DISA Global Solutions. (2022). Map of Marijuana Legality by State. Retrieved from: <https://disa.com/map-of-marijuana-legality-by-state>
- Doonan SM., Sinclair C., Curley MG., Johnson JK., (2020, June). *More About Marijuana Public Awareness Campaign Effectiveness*. Boston, MA: Massachusetts Cannabis Control Commission. https://masscannabiscontrol.com/wp-content/uploads/06092020_RschRpt_PAC-FINAL.pdf
- GovTrack. *H.R. 3490 (82nd): An Act to amend the penalty provisions applicable to persons convicted of violating certain narcotic laws, and for other purposes*. <https://www.govtrack.us/congress/bills/82/hr3490/text>
- Health Department of Northwest Michigan. (2018). Marijuana PSA [Video]. YouTube. https://www.youtube.com/watch?v=9PzaGA_HFLc

Massachusetts Cannabis Control Commission. (2022). Know the Laws: Everything You Need to Know About Marijuana in Massachusetts. Retrieved from: <https://masscannabiscontrol.com/know-the-laws/#adult-use-marijuana>

Massachusetts Executive Office of Public Safety and Security [Massachusetts EOPSS]. (2019). Impaired Driving. Retrieved from: <https://www.mass.gov/service-details/impaired-driving>

Massachusetts Executive Office of Public Safety and Security [Massachusetts EOPSS]. (2017). EOPSS – Drive Sober or Get Pulled Over 2017 [Video]. YouTube. https://www.youtube.com/watch?v=IJMuU_S-o8c

Marijuana Policy Project [MPP]. (2022). Michigan. Retrieved from: <https://www.mpp.org/states/michigan/>

Martin, S. (2016, April 20). A Brief History of Marijuana Law in America. *Time*. <https://time.com/4298038/marijuana-history-in-america/>

Michigan Department of Licensing and Regulatory Affairs [Michigan LARA]. (2018). Adult-Use Marijuana Added to LARA's Renamed Bureau of Marijuana Regulation. Retrieved from: <https://www.michigan.gov/lara/news-releases/2018/12/06/adult-use-marijuana-added-to-laras-renamed-bureau-of-marijuana-regulation>

National Ad Council. (2022). Drug-Impaired Driving Prevention. Retrieved from: <https://www.adcouncil.org/campaign/drug-impaired-driving-prevention>

National Organization to Reform Marijuana Laws [NORML]. (2022). Alaska Legalization. Retrieved from: <https://norml.org/laws/alaska-legalization/>

Oregon Health Authority. (2022). Cannabis Laws in Oregon. Retrieved from: <https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Pages/laws.aspx>

Smith, D. (2016, July 19). *Chronic Disease Prevention & Health Promotion Webinar Series: Marijuana Campaigns* [Webinar]. Alaska Health and Social Services. https://dhss.alaska.gov/dph/Chronic/Documents/webinars/Webinar13_CDPHP_MJCampaign.pdf

State of Colorado. (2022). Legal Marijuana Use in Colorado. Retrieved from: <https://cannabis.colorado.gov/legal-marijuana-use-in-colorado>

U.S. Customs and Border Protection. (2019, December 20). *Did You Know... Marijuana Was Once a Legal Cross-Border Import?* <https://www.cbp.gov/about/history/did-you-know/marijuana>

What is Legal Oregon. (n.d.). Educate Before Your Recreate. Retrieved from: <https://whatslegaloregon.com>