



COLORADO
Department of Transportation

FY 2020 Report

The Cannabis Conversation

From the Colorado Department of Transportation

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Executive Summary

Colorado continues to see cannabis-involved traffic crashes that result in serious consequences. Ongoing education and outreach campaigns in recent years have successfully raised awareness that driving under the influence of cannabis is illegal, but studies show behavior is not changing, and motorists are continuing to drive after consuming cannabis.

In 2017, the Colorado Department of Transportation (CDOT) launched The Cannabis Conversation, a two-year, statewide campaign to learn about Coloradans' opinions regarding driving under the influence of cannabis (DUI). This report summarizes what CDOT

has learned from the campaign, which engaged with tens of thousands of people throughout Colorado.

- 1. People who consume cannabis more often consider driving under the influence of marijuana to be less dangerous.**
- 2. Many cannabis users are highly skeptical of the laws, policies and enforcement regarding driving under the influence of cannabis – and want credible, nuanced information.**
- 3. The key to reaching some skeptics is to lead with feelings and follow with facts.**



“I was able to contribute a little bit to an issue that is pretty important to our state ... I think it’s great that cannabis users were involved. I felt like my opinion was valued.”

NON-HISPANIC WHITE MALE 35-44, \$100-\$150K

THE QUOTES IN THIS REPORT INCLUDE THE AVAILABLE DEMOGRAPHIC DATA FOR EACH PARTICIPANT. ALL RESEARCH PARTICIPANTS ARE ANONYMOUS AND CHOSE WHAT DEMOGRAPHIC INFORMATION TO SHARE.

Introduction

In summer 2017, CDOT began a multi-year PR, public involvement, and multicultural outreach campaign called The Cannabis Conversation to engage people in Colorado in conversation. A central objective of The Cannabis Conversation was to create a behavior change ad campaign, with the ultimate goal of reducing driving under the influence of cannabis. CDOT knew that as the first state to legalize recreational cannabis, Colorado had an opportunity to help establish norms and safe behaviors so people don't drive under the influence of cannabis.

CDOT used a conversational approach to learn from cannabis users and their reactions to past campaign efforts. Engaging with cannabis users and hearing their feedback enabled CDOT to share messages about not driving under the influence of cannabis throughout the ad campaign creation

process rather than waiting until the creative campaign launch to engage the public. This research effort led to the creation of campaign concepts which we then tested and refined several times. Since early 2018, CDOT has engaged in five successive research projects to learn:

- **Why some people drive under the influence of cannabis**
- **What the public perceives as the dangers of driving while cannabis impaired**
- **What would convince people not to drive high**
- **Norms and opinions around driving high from multiple perspectives**
- **Reactions to past campaigns to reduce high driving**
- **Reactions to new campaign ideas to reduce high driving**

Key Findings

1

People who consume cannabis more often consider driving under the influence of marijuana to be less dangerous.

The more often respondents consumed cannabis, the more they talked about individual differences in consumption or tolerance as a mitigating factor in someone's ability to safely drive under the influence. They considered driving high a personal choice about their individual tolerance and safety. Respondents who consume cannabis less often or who do not use cannabis were more likely to say that driving after using cannabis was unsafe.

Many daily users considered driving under the influence of cannabis to be safe, and some even told us they drove better after using cannabis because they were calmer. Yet others were very cautious and took extra precautions when driving after using cannabis.

People who DUIC told us they often rely on a "gut check" to determine safety. They look to personal tolerance and past experience driving high.

Key Findings

2

Many cannabis users are highly skeptical of the laws, policies and enforcement regarding driving under the influence of cannabis — and want credible, nuanced information.

Focusing on the illegality of driving high or threats of legal enforcement may be well received by opponents of cannabis. However, many who drive under the influence of cannabis are not convinced or deterred by messaging about the illegality or legal consequences of driving under the influence of cannabis.

Many cannabis users said they wanted more information that was credible, nuanced, and empirical that could prove the dangers of driving after using cannabis.

Some wanted better research on detection methods, accurate ways to

measure their own impairment, dosage-based guidelines for legal limits, and specific guidelines on how long to wait before driving.

Many do not find current statistics and studies convincing enough to merit changing their behavior. Additionally, some respondents said they had heard there was research that cannabis improves reaction time or driving ability.

Some of the respondents who drive after using cannabis dismissed existing research and data as counter to their own experiences.

Key Findings

3

The key to reaching some skeptics is to lead with feelings and follow with facts.

Most research respondents who don't drive after using cannabis, or don't use cannabis at all, are very uncomfortable with the idea that others drive under the influence. Yet many cannabis users don't share that uncomfortable feeling.

However, most cannabis users told us there were times when they were uncomfortably high or knew that they were not safe to drive after using cannabis.

Our ad concept that invoked this feeling of discomfort around driving after using cannabis was the most effective at moving people through

the behavior change continuum. The “Uncomfortable High” concept got cannabis users who drive high to feel uncomfortable about that decision and rethink their beliefs.

We learned that the personal “gut check” people do to confirm they feel comfortable driving after they use cannabis often includes multiple factors and is open to influence. The ad campaign uses those factors, including driving with children in the vehicle or risky activities that require skill.

Research & Campaign Strategy

Grounded in behavior change continuum

This research sought first to understand where different target audiences are in the behavior change continuum, why people were at the stage they were in, and what had led some people to progress through the continuum.



With that basic understanding, the creative team developed advertising campaign concepts designed to help people progress through the behavior change continuum.

Then the research measured each concept's effectiveness at reaching people at different places in the behavior change continuum. This enabled CDOT to choose a concept that spoke to many cannabis users and non-users throughout the behavior change continuum.

Research Methods

FEB - AUG 2018 SURVEY

16,123 participants

This survey focused on hearing from a lot of people to better understand the behavior and opinions of both cannabis users and non-users. This survey recruitment prioritized cannabis users who are likely to drive under the influence of cannabis. The results of this online survey provided the groundwork for the in-depth research and insights into patterns of behavior and beliefs for different demographic and psychographic groups.

MAR - APR 2018 STUDY

64 cannabis users

This in-depth study allowed CDOT to gain a deeper understanding of cannabis users, including their reactions to past CDOT drugged driving prevention campaigns. The preliminary survey findings informed many of the questions asked during this qualitative study to provide deeper insights and a more nuanced understanding of beliefs around DUIC.

JAN - FEB 2019 SURVEY

400 participants

After the creative concepts were developed based on the previous research, we conducted a quick survey to get direction on how to improve the concepts and learn which concept(s) were not worth developing further. The research findings led to refining all the concepts and merging the best parts of the two weakest concepts into one improved concept.

APR - MAY 2019 SURVEY

7,669 participants

With the refined concepts ready for a wider audience, this survey went big on recruitment to test four campaign concepts with a large audience of Coloradans, many of whom say they drive after using cannabis. The results of this survey led us to narrow down to the top three concepts and informed specific questions for the focus groups.

MAY 2019 FOCUS GROUP

30 cannabis users

During this focus group, we presented the three refined concepts to cannabis users to gain a deeper understanding of what did and did not resonate with them. The information helped to further refine these concepts and ultimately the final concept decision.

MAR - APR 2020 SURVEYS

We conducted a series of three surveys to test variations of the top campaign concept, test ad tagline and message options, and gather final input to refine campaign materials before the big launch.



“I think it’s kind of cool that CDOT is working with folks like you all to thoughtfully think about this topic and the messaging around it, and I hope that it continues to be thoughtful and isn’t fear mongering, is fact-based, and is informative. I think that carries a lot of weight.”

NON-HISPANIC WHITE FEMALE 55-64, \$50K-\$100K, DUIC LESS THAN MONTHLY, RECREATIONAL CONSUMER

Norms & Beliefs

The more often people consumed cannabis, the less dangerous they considered driving under the influence of cannabis to be. Respondents who use cannabis typically believed individual differences in consumption or tolerance were mitigating factors in someone's ability to safely drive under the influence.

Most users are critical of laws, policies, and enforcement surrounding driving under the influence of cannabis. Cannabis supporters saw government policies as out-of-touch. Respondents suggested there needs to be more research on detection methods and guidelines for self-assessment of impairment, dosage-based legal limits, and how long to wait before driving. The implication of this, which was expressed in the qualitative research, seemed to be that further research would indicate that driving under the influence of cannabis is not as dangerous as the government and law enforcement believe it is.



“I think cannabis tolerance plays a huge factor in what ‘under the influence’ might be. I am a heavy user ... if an inexperienced user consumed a normal amount for me, they would probably be unsafe to drive.”

NON-HISPANIC WHITE MALE 35-44, DAILY CANNABIS USER

“Daily users can smoke and drive perfectly fine, because of tolerance.”

NON-HISPANIC WHITE MALE 25-34, LOW-INCOME, DAILY CANNABIS USER



Behaviors: Driving Under the Influence of Cannabis

Many daily cannabis users in Colorado told us they at least occasionally drove under the influence of cannabis. However, people who were less than daily cannabis users typically waited at least two hours to drive after consuming. In addition to waiting it out, many users limit their intake when they expect to drive soon. Many regular users, and even more infrequent users, said they consume less cannabis when they know they will need to drive.

People who drive under the influence often indicated they expect passengers to intervene if they feel unsafe, but passengers said they generally do not speak up even when they are uncomfortable. Though they often hadn't spoken up, most respondents who had been a passenger with a driver under the influence of cannabis said they had felt worried, annoyed or angry.

Many users have normalized driving high, but most still consider whether they are impaired before driving. Their top considerations are:

1. Travel conditions
2. Feeling alert enough
3. How recently they consumed cannabis



“My first thought is how far do I have to go and then what time of day it is. At night is when I consider how much I have consumed.”

BLACK MALE 25-34

Skepticism

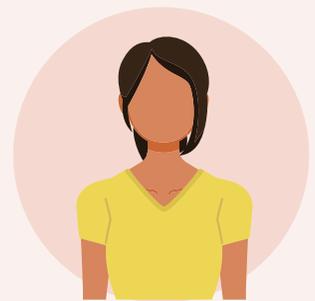
Overall, users were skeptical of information, and most messengers, that might say driving under the influence of cannabis is dangerous. Similarly, most cannabis users were sensitive to any messages or ads they perceived as overstating the dangers, stereotyping cannabis users, or that were simply unrealistic.

Statistics

Respondents told us they wanted independent, empirical research on drugged driving (e.g. large-scale institutional studies, preferably experiments). Yet they were highly skeptical of the empirical studies we showed them because they did not align with their personal experiences.

“I think it’s just kind of a waste of time showing a video like that because I don’t believe a collision is 2x more likely as driving unimpaired. I’ve just seen people wreck from little things and have never really seen anyone I know wreck in a collision from smoking weed.”

HISPANIC FEMALE 25-34, LESS THAN \$35K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL AND MEDICAL CONSUMER



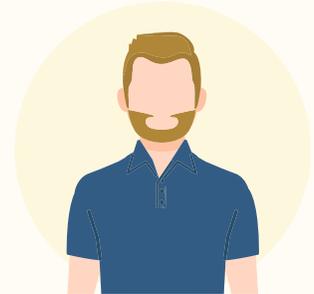


“What are the statistics of people who are driving impaired, regardless of their tolerance?”

NON-HISPANIC WHITE FEMALE 55-64, \$50K-\$100K, DUIC LESS THAN MONTHLY, RECREATIONAL CONSUMER

“I would like to see the research to include motor skills as well as cognitive processes determining one’s ability ... I also would like to see data on THC levels in the body for every day consuming.”

NON-HISPANIC WHITE MALE 45-54



“I think it’s best to go with advertisements that say ‘Hey, as someone that works for the state, I’m looking out for you.’ Living in a mountain town, I highly appreciate CDOT. They make sure I can get to work, they’re awesome dudes. You know we Bow to the Plow up here. We don’t want them to look at us as we’re all just pot heads living up here in mountain towns.”

FEMALE 25-34, \$35K-\$50K, DUIC 1-4 DAYS PER WEEK, MEDICAL CONSUMER



Enforcement

Cannabis users were more skeptical than non-users about legal consequences and the ability of police to enforce DUI laws regarding cannabis.

The primary critiques were that:

- **The current legal limit of active THC in the bloodstream is not based on sufficient evidence**
- **Bloodstream THC is an inaccurate measure of impairment because tolerance varies widely based on individual characteristics**
- **THC stays in a person’s system for a much longer time than alcohol—several weeks or months, depending on how much or how frequently someone uses**

They also drew on research they had done on their own or through their experiences to support their claim that experienced users could drive safely under the influence.

Over the course of the research, we gained a clear picture of what tactics and tones are not effective at reaching cannabis users.

“It’s really hard to regulate that just because somebody has more than 5 nanograms in their blood stream means they’re impaired. I think the use of that statistic might cause anger and frustration in regular users of cannabis.”

HISPANIC FEMALE 25-34, \$50K-\$100K, DUIC 5-7 DAYS PER WEEK,
RECREATIONAL AND MEDICAL CONSUMER



What Doesn't Work

Stereotypes

Cannabis users were sensitive to the stoner stereotypes and said that an effective campaign needs to be inclusive of a wide variety of cannabis users and not play into negative stereotypes.

“I believe that appealing to all kinds of cannabis users is the key, not just the stereotypical users.”

NON-HISPANIC WHITE FEMALE



“I liked that they didn't use the stereotypical movie 'stoner guy' as that would've ruined the whole campaign. Having people of all ages also shows the broad spectrum of people who use cannabis so will reach a wider audience.”

NON-HISPANIC WHITE MALE

Scare Tactics

Scare tactics are interpreted as condescending or out of touch.

“It comes off as a scare tactic ... instead of just basically talking to someone as an adult and relating information to them.”

NON-HISPANIC WHITE MALE 35-44, LESS THAN \$35K, DUIC 1-3 DAYS PER MONTH, MEDICAL CONSUMER



“When you’re talking about marijuana and cross over into that ‘and then he died’ phase ... you cross over into that area where you’re getting unbelievable and those of us who partake are going, ‘Oh my gosh, again?’ When you aren’t realistic, it gets really frustrating and nobody listens.”

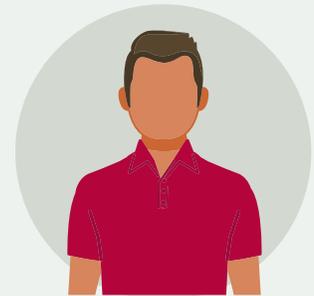
NON-HISPANIC WHITE FEMALE 35-44, \$50K-\$100K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL AND MEDICAL CONSUMER

Threats

Some said they didn't want to be penalized or targeted since cannabis is legal. They wanted to feel like CDOT was looking out for them, not criminalizing them.

“I'm okay with it being the law ... I just don't want it to have a repercussion on me and my insurance or whatever.”

HISPANIC MALE 55-64, \$35K-\$50K, DUIC 1-4 DAYS PER WEEK,
RECREATIONAL AND MEDICAL CONSUMER



“I don't understand how you can make something legal and then try to restrict it on the driving side when they have absolutely no scientific evidence that it is actually impairing your driving ability.”

HISPANIC MALE 55-64, \$35K-\$50K, DUIC 1-4 DAYS PER WEEK,
RECREATIONAL AND MEDICAL CONSUMER

What Resonates

Tone: simple, upbeat, authentic, talk like a friend

Cannabis users liked ads that focused on providing information or a different perspective but didn't feel heavy-handed or condescending. They liked campaign materials that have an honest tone, a straightforward approach, and feel more like they are being talked to by a friend, not a parent.

“Something that opens it up to more of a conversation to, ‘Hey, let’s enjoy ourselves and go out and we can take an Uber or a Lyft or whatever to get to where we’re going.’ I think that opens it up to more of something that people are willing to think about versus automatically writing it off as nonsense.”

NON-HISPANIC WHITE MALE 25-34, \$50K-\$100K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL CONSUMER



“I think the best bet to getting people to really hear this message is to engage with them, not preach at them.”

NON-HISPANIC WHITE FEMALE 25-34

1. Realistic and factual

While statistics alone were not enough to convince users to not drive after using cannabis, the consensus among cannabis users is that facts and statistics are a necessary part of any effective campaign about cannabis use.

Include a citation for all statistics where people can read the research for themselves. We don't expect most viewers to review the research, but just proving the research exists improves CDOT's credibility.

Clarify statistics where possible to say they apply to "even experienced cannabis consumers."

"I think transparency is huge. So use more than just one source because otherwise it just seems like a charged argument if you're just providing one source."

HISPANIC FEMALE 25-34, \$50K-\$100K



"These ads are a great start, promoting actual **FACTS** of the use of Cannabis. In these facts, it should be included that 'not everyone has the same reaction to Cannabis, but everyone will face the same legal consequences,' just to nip in the bud anyone that thinks they're *above* these issues just because they believe they're a wonderful driver while high."

NON-HISPANIC WHITE FEMALE 18-24

“Research, data, and information are always welcomed. Negative or positive, I think that easily accessible, correct data is important for the citizens of Colorado to know.”

NON-HISPANIC WHITE FEMALE 25-34, DAILY USER



“Police are trained to recognize impairment and yet they are still human and make mistakes ... I agree with these facts, and I still disagree that these facts contribute to car accidents, fatalities, and tickets.”

AMERICAN INDIAN OR ALASKAN NATIVE, HISPANIC FEMALE 25-34

2. Solutions-oriented

Respondents generally reacted well to messages and campaigns that they saw as focused on providing solutions. They often preferred campaigns that offered an alternative behavior to campaigns that told them what not to do.

“This [postcard] I like a lot. Many people are unaware that they can get a DUI for being high just like being drunk and this makes that clear. Also makes the Lyft discount offer clear as a solution.”

NON-HISPANIC WHITE MALE 45-54



Terminology: use industry lingo, but don't overdo it

1. Call it “cannabis”

While respondents used terms such as “weed” and “pot,” we learned from respondents that they preferred for CDOT to use the terms “cannabis” or “marijuana.”

Originally, our research used the term “marijuana” as previous message testing indicated it was a less formal term.

2. Call it “driving under the influence of cannabis”

Many users told us they don't necessarily feel “high” when they use cannabis. The result is that telling people not to “drive high” is not necessarily interpreted as telling people not to drive when they are under the influence of cannabis.

3. Incentivize alternatives to driving, or advocate waiting

Less frequent users were more open to paying for a ride or finding other ways to get around after they partake. While more frequent users were rarely open to finding alternative transportation options given how regularly they drive after they partake, most already consume less when they plan to drive soon and some are open to waiting longer before driving.



“In the past, if I was high and had to drive, I did even though I was nervous. Now I won't smoke if I know I have to drive, or I will wait until the high wears off.”

NON-HISPANIC WHITE FEMALE 45-54

“I would not say that I'm high, I'd rather use the term properly medicated. But I can still focus, use my head, and have no problems understanding most situations.”

ASIAN FEMALE 18-24



The Challenge: Liking an Ad Doesn't Always Lead to Behavior Change

Throughout the research, we kept a focus on which ads were scoring high on measures of increasing behavior change, not just the ads that people liked. Some of the favorite ads were the funniest or provided the clearest solution, yet they weren't effectively helping people who drive under the influence of cannabis progress through the behavior change continuum. While an effective campaign needs to resonate and be appreciated, those characteristics alone will not make the campaign effective.

“I contradicted myself about not driving with my kids while using cannabis but being willing to drive while other kids are on the road. That made me open my eyes a little bit.”

BLACK OR AFRICAN AMERICAN FEMALE 25-34, \$50K-\$100K, DUIC 1-3 DAYS PER MONTH, RECREATIONAL CONSUMER



What Changes Behavior

Over the course of the research, it became clear that while cannabis users who drive after they partake are interested in knowing the facts and statistics, they trust their own feelings more. Simply providing more or better facts about how DUIC is unsafe is unlikely to result in behavior change if the data doesn't reflect what people feel. Instead, message testing indicated that getting people who drive under the influence of cannabis to feel something that counters their deeply held beliefs is most effective in changing their behavior. The feeling of unease provides an opening that can start a process of questioning, increased awareness, and progress toward sustained behavior change.

The chosen concept influenced users to rethink DUIC

The concept CDOT selected for the campaign - Uncomfortable High - was the most effective campaign among survey respondents across all demographics and driving behaviors because it made people feel something. It was the only concept that got some focus group participants to immediately rethink driving after they use cannabis.



“It’s not so fear monger ... it’s just like ‘Hey, you maybe should just take a second to think about it,’ which I think is a reasonable thing to ask versus ‘You’re going to die.’”

NON-HISPANIC WHITE FEMALE 25-34, \$100K-\$150K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL CONSUMER

“I think it’s really effective. I got a little moved and it’s not even finished.”

NON-HISPANIC WHITE FEMALE 35-44, \$50K-\$100K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL AND MEDICAL CONSUMER



“It’s not preachy, and it’s not saying don’t do something. It’s really about your behavior modification ... and making more responsible choices. So I love the approach that Colorado has been taking: ‘No, let’s make people think instead of telling them what to do.’ Because I don’t think it’s worked in the past. Not with my generation.”

NON-HISPANIC WHITE FEMALE 45-54, LESS THAN \$35K, DUIC 1-3 DAYS PER MONTH, RECREATIONAL AND MEDICAL CONSUMER

“I really like how [Uncomfortable High] didn’t just show one person kind of putting themselves at risk, but how there is the potential of other people being put at risk while driving high. ... That definitely got me thinking.”

NATIVE AMERICAN / WHITE FEMALE 45-54, \$50K-\$100K, DUIC 1-4 DAYS PER WEEK, MEDICAL CONSUMER



Show how the choice to drive under the influence puts others at risk

Most focus group participants found the impact of DUIC on others, especially children, evocative.

Connect the risks of DUIC and the risks associated with doing other things under the influence. Participants may be skeptical about risks associated with DUIC, but they are firmly against several things:

1. Their medical providers practicing under the influence
2. Other people DUIC with children in the vehicle

“It’s not just other drivers [who are at risk of people DUIC], it’s kids on bikes, it’s folks walking their dogs.”

NON-HISPANIC WHITE FEMALE 55-64, \$50K-\$100K, DUIC LESS THAN MONTHLY, RECREATIONAL CONSUMER



“I feel like if you’re ingrained in your ways, you probably won’t give yourself too much thought, but if you start questioning the safety of others, it’s a little bit more weight on your conscience and gives you a little more pause and think about, ‘Is this okay?’”

NON-HISPANIC WHITE MALE 25-34, \$100K-\$150K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL CONSUMER

“It’s their decision to make, but it affects everybody around them.”

NON-HISPANIC WHITE FEMALE 35-44, \$50K-\$100K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL AND MEDICAL CONSUMER



“I would never want to be under the care of a physician that’s high when it’s something really important on my life. I think everyone can relate to that.”

NON-HISPANIC WHITE FEMALE 45-54, LESS THAN \$35K, DUIC 1-3 DAYS PER MONTH, RECREATIONAL AND MEDICAL CONSUMER

“Children didn’t do anything, so if I find out someone got into an accident while high and it involved children I’m going to be upset. Not because they were using marijuana, but because their use affected children.”

BLACK OR AFRICAN AMERICAN FEMALE 18-24, \$35K-\$50K, DUIC 1-4 DAYS PER WEEK, RECREATIONAL CONSUMER



Conclusions & Next Steps

As we head into the campaign launch, the public's focus will shift from The Cannabis Conversation to the Uncomfortable High campaign. With this campaign, CDOT endeavors to move individuals through the behavior change continuum to help them make safe choices and transform what we heard from tens of thousands of people in

Colorado into a cultural shift to keep us all safer.

This campaign is fundamentally rooted in hearing from and engaging meaningfully with the people it affects. Even as we embark on this new phase, it is important that The Cannabis Conversation continues.