Oregon Health Authority

OREGON YOUTH MARIJUANA PREVENTION PILOT CAMPAIGN

Stay True to You

12-MONTH PILOT CAMPAIGN EVALUATION RESULTS

JUNE 2017

Still from sample campaign video describing a social norm among Oregon youth.
Video: *You're Not Alone if You Don't Smoke Weed*

RMC RESEARCH

Prepared by

RMC Research Corporation
111 SW Columbia Street, Suite 1030
Portland, OR 97201

Prepared for

Oregon Health Authority
Public Health Division
800 NE Oregon Street, Suite 730
Portland, OR 97232

CONTENTS

EXHIBITS

OREGON YOUTH MARIJUANA PREVENTION PILOT CAMPAIGN
12-MONTH SUMMARY OF EVALUATION FINDINGS: SUPPORT FOR A CAMPAIGN EFFECT

Evaluation Question	Page	Strong Support	Some Support	No Support
1. To what extent did the campaign reach the populations of pilot areas and the target audiences?	17–22	▪ *Stay True to You* campaign reach	▪ *Talk With Them* campaign reach	
2. Did the campaign affect the perceived risk of youth marijuana use among the target audiences in pilot areas relative to comparison areas?	23–24		▪ Youth and young adults' perceived risk of marijuana use	▪ Adults' perceived risk of youth and young adults' marijuana use
3. Did the campaign messages affect youth and young adults' knowledge and attitudes about marijuana in the pilot areas relative to the comparison areas?	24–27	▪ Youth and young adults' knowledge of: - the social norms of underage marijuana use - the legal consequences of underage marijuana use	▪ Youth and young adults' knowledge of the negative effects of marijuana on teenagers' developing brains ▪ Youth and young adults' perception that: - marijuana use can limit a person's ability to have memorable experiences - using marijuana may encourage those who look up to them to use marijuana (for example, a younger brother or sister)	▪ Youth and young adults' attitudes - Using marijuana makes being a teenager easier and more fun - Using marijuana could make it harder to remember things I learn at school or work
4. Did the campaign reduce behavioral intentions to use marijuana among youth and young adults in the pilot areas relative to comparison areas?	27–28			▪ Youth and young adults' intent to use marijuana in next 12 months ▪ Youth and young adults' intent to use marijuana before age 21

Evaluation Question	Page	Strong Support	Some Support	No Support
5. Did the campaign change knowledge and attitudes among parents of youth and youth-serving adults in the pilot areas relative to the comparison areas?	29–30			▪ Adults' knowledge of: - social norms related to youth marijuana use - the vulnerability of teenagers' developing brains - the legal consequences of underage marijuana use ▪ Adults' attitudes - concern about the negative effects of underage marijuana use on Oregon's youth - belief that communities should engage in appropriate activities to reduce underage marijuana use - perception that their own use of marijuana could encourage people who look up to them to use marijuana. - belief that using marijuana could make it more difficult for youth to remember things they learn at school or work
6. How did the level of exposure to the media campaign influence outcomes of youth and young adults in evaluation questions 2–4?	31–32	Association between exposure level and youth and young adults' **knowledge** about marijuana use. More frequent exposure in the last 9 months was related to youth and young adults' knowledge of: - social norms. - the vulnerability of teenagers' developing brains. - the legal consequences of underage marijuana use.	▪ Association between exposure level and youth and young adults' **attitudes** about marijuana use. More frequent exposure in the last 9 months was related to youth and young adults': - perception that marijuana use could make it harder to remember things at school or work.	▪ Exposure level was not related to youth and young adults': - intent to use. - perceived risk of marijuana use. - refusal skills (i.e., taking marijuana if offered by a friend). - other attitudes (e.g., marijuana limits memorable experiences, marijuana makes being a teenager easier or more fun, marijuana encourages those who look up to them to use).

EXECUTIVE SUMMARY

In 2016 the Oregon legislature invested $3.9 million for the Oregon Health Authority Public Health Division (OHA-PHD) to design, implement, and evaluate a youth marijuana prevention media campaign in Clackamas, Jackson, Josephine, Multnomah, and Washington Counties. This campaign aims to prevent youth from using marijuana by providing motivating, factual, and believable information to youth, young adults, parents, other caregivers, and youth-serving adults. OHA-PHD identified several research-based messages and through Coates Kokes, its media contractor, developed and piloted a prevention campaign to communicate the effects of youth marijuana use. The primary audience for this campaign is Oregon youth and young adults aged 12–20. The secondary audiences are parents and youth-serving adults such as coaches, teachers, and school officials.

OHA-PHD contracted RMC Research to conduct an independent third-party evaluation of the pilot campaign. Findings from this evaluation describe short-term and intermediate outcomes of the youth marijuana prevention campaign among the primary and secondary audiences in the pilot areas. Data collection in 3 counties in Oregon not exposed to the pilot campaign—Coos, Douglas, and Lane Counties—supported conclusions about the campaign's effects on perceptions of health risks, awareness of potential negative consequences of marijuana use, and youth and young adult intent to initiate or delay use.

The findings revealed no significant differences in youth and young adult intent to use marijuana between baseline and evaluation end. The evidence indicates that the campaign has had a strong positive effect on youth and young adults' perceptions of the social norms related to youth marijuana use and knowledge of the legal consequences of marijuana use before age 21. The evidence provides some support that the campaign has affected youth and young adults' perceived risk of marijuana use, knowledge of the vulnerability of teenagers' brains, perceptions around marijuana use limiting their ability to have memorable experiences, and perceptions that using marijuana might encourage those who look up to them to use marijuana. The evidence also showed that at mid-evaluation the campaign had affected Oregon adults' knowledge of social norms around marijuana use and the vulnerability of teenagers' developing brains; however, those effects were no longer present at evaluation end.

OHA-PHD recommends providing support throughout the state to youth, young adults, and parents to prevent underage use of marijuana. In addition, OHA-PHD recommends adopting policies to track marijuana advertising, limit marijuana marketing and promotion, prohibit the sale of flavored products, and maintain local control to protect Oregon's youth and young adults from the potential negative health effects of marijuana use. This report presents the final pilot campaign evaluation results.

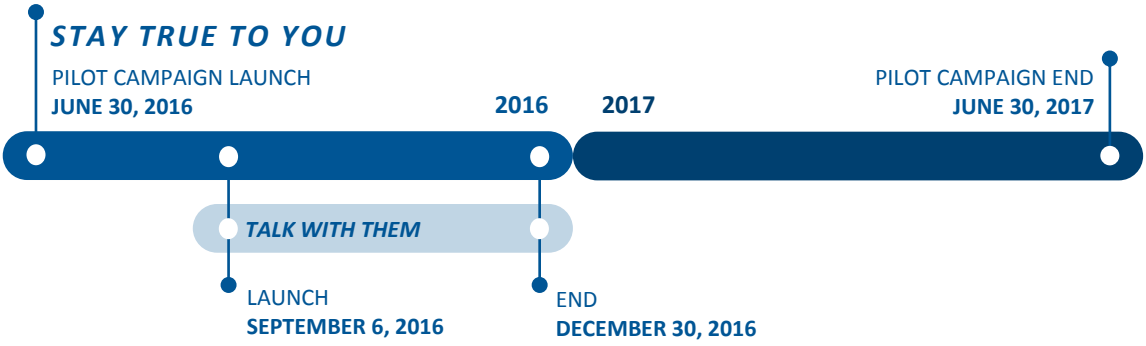
BACKGROUND

As of July 2015, Measure 91 permitted Oregonians aged 21 and over to legally use marijuana recreationally. In March 2016, the Oregon legislature passed House Bill 4014, tasking OHA-PHD with the design, implementation, and evaluation of a pilot health education campaign to increase awareness of the possible negative health effects of marijuana use by youth and young adults. Oregon's youth marijuana prevention campaign aims to protect the public's health by providing motivating, factual, and believable information to help prevent or delay underage marijuana use.

OHA-PHD created ***Stay True to You***, a mass media health education campaign directed at youth and young adults that includes ***Talk With Them***, a component targeting parents and youth-serving adults. Legislative intent guided OHA-PHD in choosing the Portland metropolitan area (Clackamas, Multnomah, and Washington Counties) and southern Oregon (Jackson and Josephine Counties) as urban and rural locations for this pilot campaign. Throughout this report, "pilot areas" refers to these 5 counties.

The pilot ***Stay True to You*** campaign was launched on June 30, 2016, and was active through June 30, 2017. The ***Talk With Them*** campaign was launched on September 6, 2016, and ended December 30, 2016.

Exhibit 1
The pilot ***Stay True to You*** campaign was active from **June 2016 through June 2017**.



SOCIAL NORMS CHANGE. The pilot campaign occurred in the context of increased marijuana advertising and access to retail marijuana—recent changes that could promote underage marijuana use. There are no systems or laws that enable the tracking of the magnitude of marijuana advertising in Oregon. However, Oregon's marijuana retail locations are almost twice as common as Starbucks or McDonald's.[1]

> "IF THERE IS NOT A DISPENSARY, THERE IS A BILLBOARD ADVERTISING ONE."

[1]http://www.businessinsider.com/there-are-more-marijuana-shops-in-oregon-than-starbucks-and-mcdonalds-2015-6

Attitudes toward substance use (including risk perceptions), misperceptions of social norms (see Appendix A for a review of research on social norms theory), and perceived control or consequences are known predictors of substance use behavior.[2,3,4,5] The ***Stay True to You*** campaign seeks to change predictors among Oregon youth and young adults, as shown in Exhibit 2. In addition, the campaign seeks to prevent or delay the initiation of marijuana use by individuals under 21 years of age.

Exhibit 2

The campaign seeks to **change known predictors of substance use behavior**.

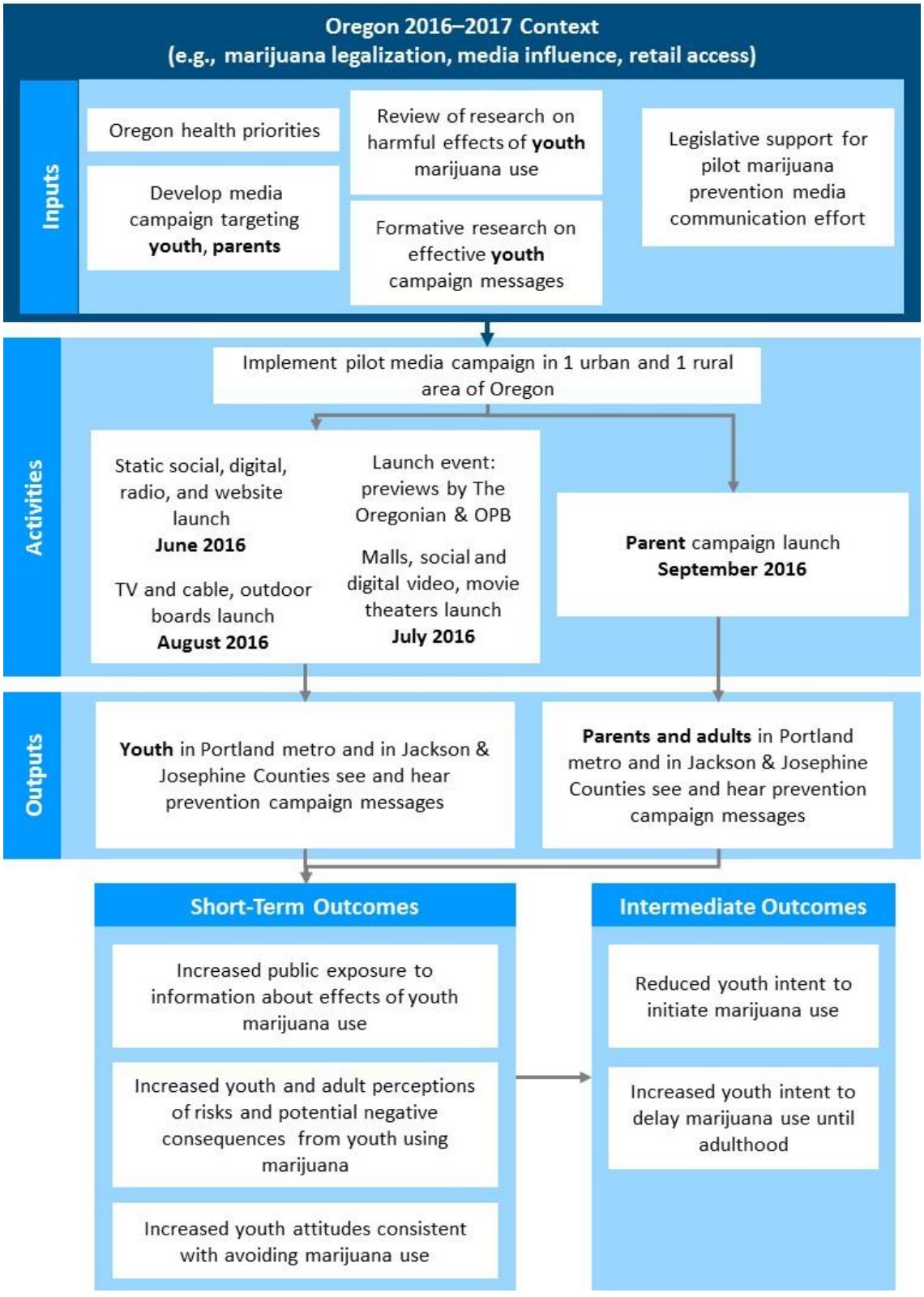
The campaign is primarily expected to influence **attitudes toward** and **perceptions around youth marijuana use**.

The logic model presented in Exhibit 3 displays more detailed relationships between Oregon's local context, the pilot campaign activities, exposure to prevention campaign messages, short-term outcomes (attitudes and perceptions of risks regarding youth marijuana use), and intermediate outcomes (decreased intent to initiate and increased intent to delay marijuana use until age 21).

[2]Schulz, P.W., Nolan, J.M., Cialdini, R.B., Goldstein, N.J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science, 18*(5), 429.
[3]Webb, T.L. & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, *132*(2), 249.
[4]Hawkins, J.D., Catalano, R.F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, *112*(1), 64.
[5]Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50,* 179–211.

Exhibit 3

The logic model displays relationships between Oregon's local context, pilot campaign activities, exposure to campaign messages, and short-term and intermediate outcomes.



CAMPAIGN OVERVIEW

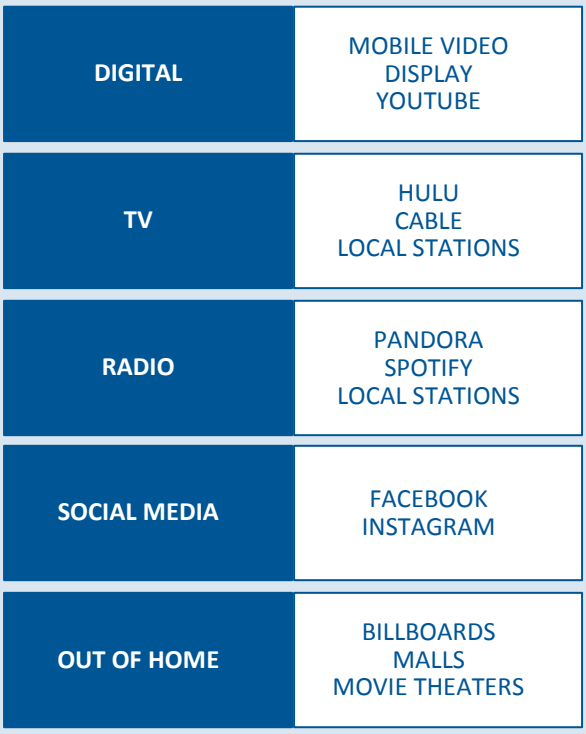
CAMPAIGN AUDIENCE

The primary audience for ***Stay True to You*** (**www.staytruetoyou.org**) is Oregon youth and young adults aged 12–20. The campaign's messages target the so-called "movable middle" of this population, which includes occasional marijuana users and individuals considering use—not youth and young adults who are already heavy users or have no intention of using marijuana.

The ***Stay True to You*** pilot campaign messages were delivered through multiple channels, including digital media, TV, radio, social media, and out of home (see Exhibit 4).

Exhibit 4
The ***Stay True to You*** pilot campaign was delivered through **multiple channels**.

STAY TRUE TO YOU
CAMPAIGN **DELIVERY CHANNELS**



Select channels targeted **youth and young adults** and **rural and minority** populations

The pilot ***Talk With Them*** campaign component targeted parents and youth-serving adults such as teachers, coaches, and school officials and included Spanish-language television and radio ads distributed in collaboration with Multnomah County. Ads directed audiences to **www.talkwiththem.info** and **www.hablaconellos.info** where a guide developed by OHA-PHD is available for download.

CAMPAIGN MESSAGES

With guidance from the Retail Marijuana Scientific Advisory Committee, OHA-PHD identified 4 messages sufficiently grounded in science to use in the ***Stay True to You*** campaign:

- When you get high you may have difficulty with learning and memory.
- Being high may interfere with your ability to drive, play sports, or ride a bike.
- Brain development is not complete until your twenties and for the best chance to reach your full potential, you should not use marijuana to get high while you are young.
- It may be harder to stop using marijuana if you start at a young age.

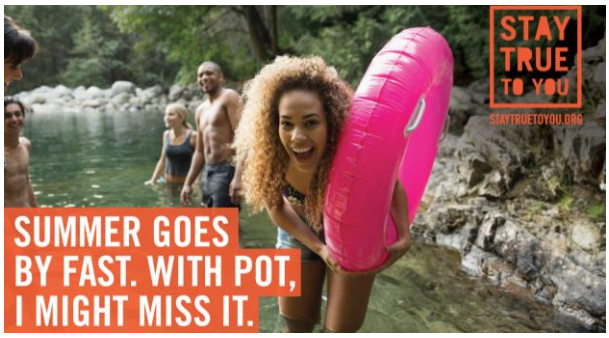
The ***Stay True to You*** pilot campaign delivered these science-based messages to youth and young adults by evoking values and emotions identified as meaningful during audience research. Exhibit 5 displays 2 sample campaign messages.

Stay True to You:

- Answers frequently asked questions about marijuana's effects on the developing brain and the potential legal consequences of underage use.
- Depicts how role models influence marijuana use.
- Highlights aspirations toward long-term goals (job, driver's license).
- Empathizes with the struggles of youth and young adults.

Exhibit 5

The Stay True to You campaign delivers **science-based messages** to youth and young adults by **evoking values and emotions**.



Video: ***Be a Role Model for Your Copycat***

EVALUATION METHODS

DESIGN

This mixed-methods quasi-experimental evaluation involved quantitative and qualitative data collected from 2 pilot areas receiving OHA-PHD's campaign messaging and comparable areas not receiving the campaign. Inclusion of a comparison area provided a means to assess outcomes for a population exposed to the campaign relative to a population that was not exposed.

The evaluation assessed Oregon youth and young adults (the primary audience) and adults in a position to influence the primary audience (the secondary audience).[7] To assess the extent to which the pilot campaign reached the intended audiences, RMC Research used campaign output data collected by the media contractor, Coates Kokes. RMC Research used survey data collected before, during, and toward the end of the pilot campaign to assess the effects on youth and adult short-term outcomes (e.g., attitudes, perceived risk) and intermediate outcomes (e.g., intent to use marijuana). Survey responses from the pilot areas were contrasted with survey responses from comparison areas that did not receive the campaign. Qualitative focus group data provide more in-depth understanding of youth, young adult, and parent attitudes toward risks of youth marijuana use; the extent to which the campaign (and various campaign messages and formats) reached audiences; and how the prevention campaign influenced perceptions of youth and young adult marijuana use.

QUESTIONS

Exhibit 6 outlines the evaluation questions for Oregon's pilot youth marijuana prevention campaign and the accompanying data elements and data sources.

Exhibit 6

Six questions assessed the effects of Oregon's pilot youth marijuana prevention campaign.

Evaluation Question	Data Elements	Data Source(s)
1. To what extent did the campaign reach the populations of pilot areas and the target audiences?	▪ Message outputs (e.g., impressions, gross rating points, reach, frequency) ▪ Ad recall ▪ Message awareness and salience	▪ Coates Kokes ▪ Youth and Young Adult Survey ▪ Adult Survey
2. Did the campaign affect the perceived risk of youth marijuana use among the target audiences in pilot areas relative to comparison areas?	▪ Perceived risk of youth and young adult marijuana use	▪ Youth and Young Adult Survey ▪ Adult Survey ▪ Focus Groups
3. Did the campaign messages affect youth and young adults' knowledge and attitudes about marijuana in the pilot areas relative to the comparison areas?	▪ Knowledge about consequences of underage marijuana use ▪ Attitudes consistent with avoiding marijuana use	▪ Youth and Young Adult Survey ▪ Focus Groups

(exhibit continues)

[7]Target secondary audiences includes parents of youth aged 12–20 and youth-serving adults (e.g., teachers, school staff).

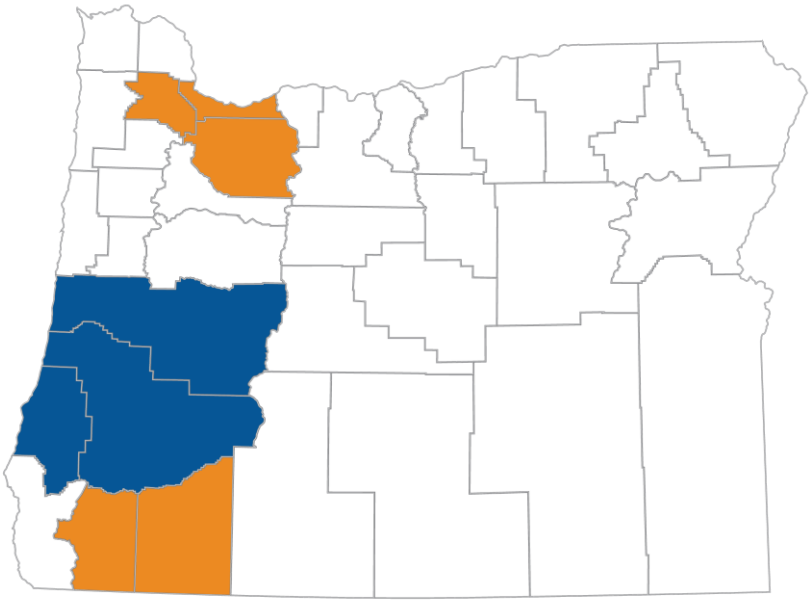
Exhibit 6 continued

Evaluation Question	Data Elements	Data Source(s)
4. Did the campaign reduce behavioral intentions to use marijuana among youth and young adults in the pilot areas relative to comparison areas?	▪ Behavioral intentions to use marijuana ▪ History of use (lifetime, 30-day)	▪ Youth and Young Adult Survey
5. Did the campaign change knowledge and attitudes among parents of youth and youth-serving adults in the pilot areas relative to the comparison areas?	▪ Perceived risk of youth and young adult marijuana use ▪ Attitudes toward youth marijuana use ▪ Knowledge about consequences of youth marijuana use	▪ Adult Survey ▪ Focus Groups
6. How did the level of exposure to the media campaign influence outcomes of youth and young adults in Evaluation Questions 2–4?	▪ Self-reported campaign exposure (from surveys) and penetration of media campaign into geographic areas (from Coates Kokes)	▪ Coates Kokes ▪ Youth and Young Adult Survey ▪ Adult Survey

PILOT AND COMPARISON AREAS

Five counties in 2 geographic areas served as campaign pilot areas: Clackamas, Jackson, Josephine, Multnomah, and Washington Counties. OHA-PHD and RMC Research selected 3 demographically similar counties with minimal exposure to the campaign messaging to serve as the comparison areas for the evaluation. Exhibit 7 presents a map of Oregon depicting the pilot and comparison counties.

Exhibit 7
Five counties served as campaign pilot areas and 3 counties served as comparison areas.



PILOT AREA COUNTIES
Clackamas • Jackson • Josephine
Multnomah • Washington

COMPARISON COUNTIES
Coos • Douglas • Lane

RMC Research selected the comparison areas based on the following criteria:

1. Similarity to pilot region population sizes and demographics.
2. Absence of known youth marijuana prevention campaign exposure.
3. Similarity to target areas based on baseline measures of marijuana use indicators from the 2014 Oregon Student Wellness Survey.

Exhibit B1 in Appendix B presents key population demographic characteristics of the target and comparison counties based on U.S. Census data, and Exhibit B2 shows selected marijuana indicators for the target and comparison areas on the 2014 Oregon Student Wellness Survey.

DATA COLLECTION

The evaluation included 3 data collection activities: a **Youth and Young Adult Survey**; an **Adult Survey**; and **focus groups** with youth, young adults, and parents.

Sampling

The sample for the **Youth and Young Adult Survey** was youth aged 13–20 residing in the pilot areas of the Portland metropolitan area[8] and Jackson and Josephine Counties and in the comparison areas of Douglas, Coos, and Lane Counties. The population for the **Adult Survey** was parents and youth-serving adults aged 21 and older residing in the pilot and comparison areas. For each survey, the sample goal was 2,400 respondents per survey administration. At these sample sizes, the resulting estimates would be accurate within a +/- 4% margin of error.

RMC Research sampled 6 **youth focus groups** in pilot areas: 3 in the Portland metropolitan area and 3 in Jackson and Josephine counties, split by age group (i.e., ages 13–14, 15–17, and 18–20). RMC Research also sampled 6 **parent focus groups** in the pilot areas: 4 in the Portland metropolitan area (2 conducted in English and 2 conducted in Spanish) and 2 in Jackson and Josephine Counties.

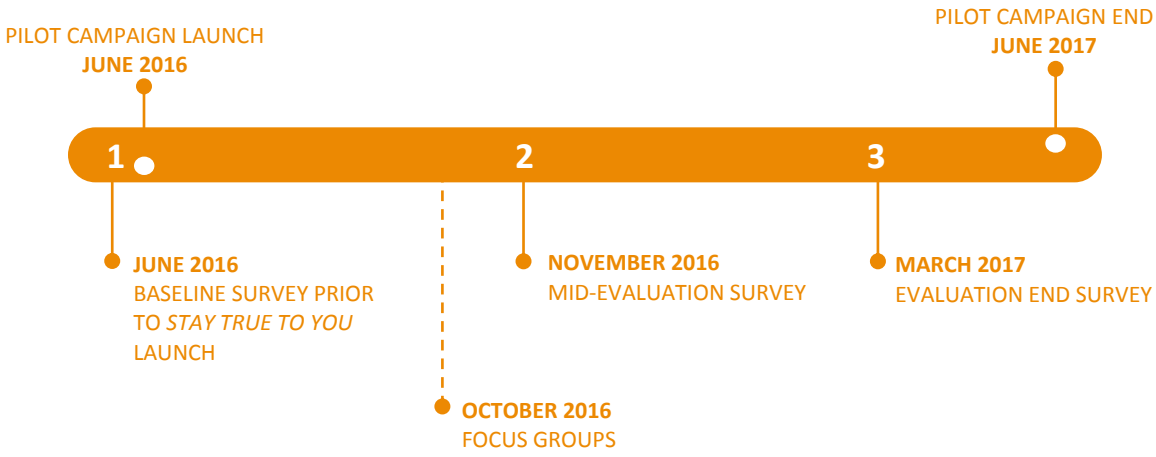
Timeline

RMC Research scheduled quantitative survey data collection at 3 time points, as depicted in Exhibit 8. Baseline data were collected in June 2016 before campaign messaging began. The mid-evaluation data collection occurred in November 2016 after the peak of campaign implementation and assessed the effects of the campaign after 5 months. The final data collection occurred in April 2017 and assessed the effects of the campaign after 9 months. RMC Research collected qualitative data by conducting focus groups in October 2016.

[8]Portland metropolitan area is defined as Multnomah, Clackamas, and Washington counties.

Exhibit 8

The **campaign evaluation collected survey data** from the target audiences in June 2016, November 2016, and April 2017 and **focus group data** in October 2016.



Recruitment and Procedures

At baseline, mid-evaluation (5 months after the campaign launch), and evaluation end (9 months after the campaign launch), RMC Research administered a **Youth and Young Adult Survey** to individuals aged 13–20 to gather information about perceived risk of youth marijuana use, attitudes toward marijuana use, and intent to use marijuana. RMC Research recruited youth and young adult participants via social media (i.e., Facebook, Instagram) ads that targeted individuals in the appropriate age ranges and areas (see Appendix C for a detailed description of the social media recruitment process). Recruitment included youth and young adults in the pilot areas in which the campaign was implemented and in the comparison areas that did not receive the campaign. Each data collection period lasted 2 to 3 weeks. The Youth and Young Adult Survey took participants approximately 10 minutes to complete, and participants had the option to include their contact information if they wanted to participate in upcoming focus groups or enter a lottery to win $25 and $100 gift cards (i.e., for every 75 surveys completed RMC Research randomly selected a participant to win a $25 gift card, and at the end of each data collection period RMC Research randomly selected 2 participants to win a $100 gift card). Gift cards were emailed using contact information collected from participants in a separate Survey Monkey survey, which ensured the anonymity of youth and young adult responses.

To gather information about parents' and youth-serving adults' attitudes toward youth marijuana use, knowledge about effects on youth, and lifetime use, RMC Research administered an **Adult Survey** to parents and adults who serve youth in the 12–20 age range (e.g., teachers, coaches, after-school program staff). RMC Research also recruited Adult Survey participants via social media ads, and the Adult Survey was administered at the same time points and in approximately the same timeframe as the Youth and Young Adult Survey. Adult participants had the option to include their contact information if they wanted to participate in upcoming focus groups or be entered into a lottery to win $50 and $100 gift cards (i.e., for every 50 surveys completed RMC Research randomly selected a participant to win a $50 gift card, and at the end of each data collection period RMC Research randomly selected 5 adult participants to win a $100 gift card).

The purpose of the **focus groups** was to gather more in-depth information from youth and adults in the pilot areas. At mid-evaluation, RMC Research conducted a total of 12 focus groups, 5 in each of the 2 pilot areas and, in collaboration with a consultant in the Portland metropolitan area, 2 additional adult focus groups with Spanish-speaking parents. RMC Research recruited focus group participants via multiple methods (see Appendix C). Focus groups were approximately 1 hour in duration and each participant received a $50 gift card.

INSTRUMENTS

The evaluation assessed the pilot campaign's effects on (a) awareness of the possible negative effects of youth marijuana use, perceptions of the health risks, and intent to delay marijuana use among youth and young adults—the campaign's primary audience and (b) attitudes toward and knowledge about youth marijuana use among parents and youth-serving adults—the secondary audience.

Youth and Young Adult Survey

The Youth and Young Adult Survey questions addressed current and lifetime marijuana use, behavioral intentions to use marijuana, perceived risks of youth use, and susceptibility to experimentation. Measures were drawn from multiple sources, including the Oregon Healthy Teens Survey,[9] the Oregon Student Wellness Survey,[10] the National Survey of Parents and Youth,[11] and the Youth Risk Behavior Surveillance System.[12] Additional questions created by RMC Research assessed knowledge and attitudes related to specific campaign messages, such as the effects of marijuana on the developing brain and the percentage of high school juniors who use marijuana in Oregon. The mid-evaluation and evaluation end surveys included questions about exposure to and awareness of the media campaign messages. The Youth and Young Adult Survey is in Appendix D.

Adult Survey

The Adult Survey questions included lifetime marijuana use, perceived risk of youth use, and attitudes toward youth use. Measures were drawn from the Oregon mORe 2012 Adult Survey[13] and a compendium of community service measures developed for the Washington State Strategic Prevention Framework State Incentive Grant. In collaboration with OHA-PHD and Coates Kokes, RMC Research designed questions to assess campaign-specific knowledge about effects of youth marijuana use. The Adult Survey is in Appendix D.

Youth and Adult Focus Groups

Focus group protocols focused on perceptions of marijuana-related community and school changes that occurred in the past year; the extent to which youth, young adults, and adults recalled the campaign and campaign messages; reactions to the campaign messages; and how the campaign influenced perceptions and behaviors. RMC Research reviewed and finalized protocol content in collaboration with OHA-PHD and Coates Kokes. The Youth and Adult Focus Group protocols are in Appendix D.

---

[9]https://public.health.oregon.gov/BirthDeathCertificates/Surveys/OregonHealthyTeens/Pages/index.aspx
[10]https://oregon.pridesurveys.com/
[11]The NSPY was a 4-year panel survey conducted in concert with the National Youth Anti-Drug Media Campaign (David et al., 2010).
[12]Centers for Disease Control and Prevention. (2015). *Youth Risk Behavior Survey Questionnaire*. Retrieved June 21, 2016 from www.cdc.gov/yrbs
[13]Oregon mORe. (2012). *Oregon Positive Community Norms 2012 Community Adult Survey Statistical Report*. Unpublished report.

HUMAN PROTECTIONS ADMINISTRATION COMMITTEE REVIEW

RMC Research requires that all projects undergo either an external institutional review board (IRB) or internal human protections administration (HPA) committee review. The purpose of the review is to ensure that data collection instruments and procedures are in compliance with federal guidelines for research with human subjects. The evaluation of the youth marijuana prevention pilot campaign did not necessitate an external IRB review because it did not meet criteria for a research study. Therefore, RMC Research's HPA Committee conducted a review of the campaign evaluation and determined that the data collection procedures and instruments established the appropriate protections for human subjects.

DATA ANALYSIS

The quantitative and qualitative analysis methods are described below. Appendix E and Appendix F present item frequencies for the Youth and Young Adult Survey and Adult Survey, respectively. Appendix G and Appendix H contain detailed focus group analyses.

Quantitative Data

Because the survey samples for this evaluation were collected through social media platforms (i.e., Facebook, Instagram) rather than a random sampling methodology,[14] the potential for demographic bias in the sample was higher, which reduces the generalizability of the findings to the population at large. Youth and Young Adult Survey respondents were more likely to identify as a racial and ethnic minority compared to the population estimates for the pilot and comparison regions provided by the U.S. Census Bureau. Older teenagers and females were also overrepresented among survey respondents. To increase the generalizability of the sample to the population, the evaluation team weighted the Youth and Young Adult Survey data at each time point (see Appendix I for additional details regarding the biases of the sample and the weighting method). Unless otherwise specified, all Youth and Young Adult Survey percentages in this report are based on the weighted frequencies that control for demographic biases of the sample. Weighting was not possible for the Adult Survey because of lack of population estimates for parents of youth aged 12–20 and youth-serving adults.

To examine the extent to which the campaign reached target regions and audiences (Evaluation Question 1), the evaluation team examined data received from Coates Kokes and respondents' self-reported exposure to the campaign. To address Evaluation Questions 2–5, the evaluation team used generalized linear models to examine whether youth marijuana use, behavioral intention to use, perceptions (e.g., perceived risk of youth marijuana use), and attitudes changed significantly during the course of the campaign in the pilot and comparison areas. The dependent variables in these analyzes were dichotomized (i.e., 2-category) versions of the survey questions. For example, for the survey item assessing perceptions of risk of harm of marijuana use, youth and young adults were divided into 2 groups: one group that believed there was *no risk* or *slight risk* to regular marijuana use and another group that believed there was *moderate risk* or *great risk*. The generalized linear model examined whether a significant percentage of youth and young adults moved from the no/slight risk category to the moderate/great risk category over time and whether this change differed significantly between the pilot and comparison groups. In addition to examining differences over time and between pilot and comparison regions, the analysis entered demographic (age, race, gender, ethnicity) and marijuana use variables as predictors in the model to control for differences between the groups surveyed at each time point.[15]

[14]Random sampling was not possible because of resource constraints.

[15]Exploratory analyses determined that the mid-evaluation survey sample included significantly more marijuana users than the baseline and evaluation end survey samples, biasing the sample in the direction of more positive attitudes toward marijuana.

Finally, to examine whether exposure to the media campaign messages affected outcomes in a dose-dependent fashion (Evaluation Question 6), the evaluation team conducted additional analyses on respondents at mid-evaluation and evaluation end. In these analyses, self-reported campaign exposure was entered as a predictor of outcomes such as behavioral intention to use marijuana and perceived risk of use.

Qualitative Data

Focus groups were audio recorded, transcribed, and translated as necessary. The evaluation team analyzed the focus group and open-ended survey questions using an inductive process by which raw data were reviewed to identify emerging themes. The evaluation team then used NVIVO qualitative software to analyze and code the data by theme and then synthesized the findings. This inductive process allows for themes in the responses to emerge organically from the data. The qualitative data were triangulated with the quantitative data to add supporting detail and provide context.

EVALUATION LIMITATIONS

Resource and time constraints resulted in important limitations to the evaluation. The use of social media to recruit survey respondents was the most efficient use of resources to learn about the perceptions and attitudes of the target population; however, a random sampling of respondents is generally considered a more rigorous sampling design that typically results in a more demographically representative sample of the target population. To address the biases of the social media sampling method, the evaluation team conducted poststratification weighting to increase the generalizability of the sample to the target population.

Resource constraints and the need to maintain respondents' anonymity and reduce participant burden meant that it was not possible to measure responses from the same individuals before and during the campaign. Instead, the evaluation team sampled a cross-section of the population at each time point, resulting in a less powerful analytic design and introducing the possibility of sample differences between time points.

Due to the lack of an ideal comparison area for the pilot counties, the pilot and comparison area samples differed. In particular, Portland is the only large metropolitan area within Oregon and is unique in its demographic and socioeconomic characteristics. To address limitations related to sample differences between time points and differences between the pilot and comparison areas at baseline, statistical analyses controlled for demographic and marijuana use differences both over time and between the pilot and comparison areas.

Another limitation is the brief duration of the media campaign and evaluation timeline. Typically, media campaigns are in the field much longer before conclusions about their effects are drawn. Thus the ability to measure long-term effects (e.g., reductions in marijuana use behavior) was limited by the short duration between campaign launch and evaluation end.

SAMPLE CHARACTERISTICS

The sample goal was 2,400 respondents per survey administration. Exhibit 9 shows that the sample sizes for the Youth and Young Adult Survey were 2,476 at baseline, 2,551 at mid-evaluation and 2,371 at evaluation end, thus meeting the sample goal for those survey administrations. The Adult Survey sample sizes were 1,057 at baseline, 776 at mid-evaluation, and 917 at evaluation end. These sample sizes fell short of the Adult Survey goal, thereby increasing the margin of error.[16]

Exhibit 9

Overall sample size goals were met for the Youth and Young Adult Survey.

	Youth and Young Adult Survey			Adult Survey		
Area	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Pilot	1,462	1,462	1,404	738	571	513
Comparison	1,014	1,089	967	319	205	404
Total	2,476	2,551	2,371	1,057	776	917

Youth and Young Adult Survey. The survey samples were demographically similar in regards to age and race across time points: the average respondent age was 17 and most respondents identified as White (range 77–80%). Some gender, ethnicity, and current marijuana use differences were evident across time points. There were fewer male respondents at mid-evaluation (37%) compared to baseline and evaluation end (40%) and more past 30-day marijuana users at mid-evaluation (40%) than at baseline (35%) and at evaluation end (36%). The percentage of respondents who identified as Hispanic or Latino was higher at baseline (14%) than at both mid-evaluation and evaluation end (12%). Exhibits J1 through J3 in Appendix J present detailed youth and young adult sample characteristics.

Adult Survey. The survey samples were demographically similar across time points. The majority of respondents at baseline, mid-evaluation, and evaluation end were aged 30 to 59 (86%, 84%, 90%, respectively) and White (89%, 89%, 88%, respectively). The percentage of respondents that identified as Hispanic or Latino was 8% at baseline, 8% at mid-evaluation, and 7% at evaluation end. Across time points, most respondents were female, but the percentage was lower at baseline (74%) than at mid-evaluation (81%) or evaluation end (85%). A significant difference emerged at evaluation end regarding lifetime marijuana use: whereas 36% and 37% of respondents at baseline and mid-evaluation, respectively, had never used marijuana, a significantly greater percentage (44%) of respondents at evaluation end had never used. Exhibits J4 and J5 present detailed adult sample characteristics.

Focus Groups. The sample goal was 6–8 participants per focus group. The total focus group sample was 65: 27 youth and young adults and 38 parents. Groups averaged 5 participants, and group sizes ranged from 1 to 9 participants.[17] The majority of focus group participants identified as female and White. The majority of youth and young adult focus group participants reported not using marijuana in the past 30 days (67%) and perceived the regular use of marijuana to be a moderate or great risk. The majority of parent focus group participants reported never using marijuana in their lifetime (67%). Exhibits J6 through J9 present focus group sample characteristics.

[16]Sample goals were based on population estimates. Because determining the size of the actual population of parents of 12–20-year-olds and youth-serving adults was not possible, these sample goals might have been overestimated.

[17]In one focus group only one participant attended though more had signed up.

CAMPAIGN EFFECTS

This section presents the evaluation results. The data were synthesized from the following sources:

- **CK** Coates Kokes
- **YS** Youth and Young Adult Survey (see Appendix C)
- **AS** Adult Survey (see Appendix C)
- **FG** Focus Groups

Data gathered in focus groups illustrate the context around marijuana use in the campaign pilot area communities. Coates Kokes provided information about campaign reach that was integrated with responses from the Youth and Young Adult Survey and the Adult Survey. Survey and focus group responses addressed evaluation questions around perceived risk, knowledge and attitudes toward underage marijuana use, and the influence of level of campaign exposure on these outcomes. **Some support for a campaign effect** was indicated by a statistically significant difference between the pilot and comparison areas at evaluation end that was not evident at baseline. A **strong campaign effect** was indicated by a statistically significant difference between the pilot and comparison areas at evaluation end that was not evident at baseline *and* a statistically significant difference in change over time between the pilot and comparison groups.

CAMPAIGN CONTEXT

In 8 of the 12 youth and parent focus groups conducted in pilot campaign areas, participants reported an increase in the visibility of dispensaries, marijuana advertising, and marijuana-related products in the past year. In 10 of the 12 youth and parent focus groups, participants reported observing in the past year an increase in marijuana use by people of all ages in parks and other public areas and while driving. In 8 of the 12 youth and parent focus groups, participants reported changes in communication and discussion related to marijuana in the past year. Youth participants reported an increase in marijuana-related discussions on social media. Parent participants reported marijuana use being more openly discussed within the community, including with youth, and discussions about marijuana becoming more difficult. In 2 of 6 youth focus groups, participants reported an increase in school-related issues associated with marijuana use, including increased suspensions and decreased attendance.

> “EVER SINCE IT WAS LEGALIZED A LOT OF PEOPLE ARE MORE OPEN AND WILLING TO DO IT IN PUBLIC. THEY WERE DOING IT MORE PRIVATELY BEFORE.”
>
> MEDFORD 18–20-YEAR-OLD

> “SO MUCH IS SAID ABOUT [MARIJUANA] THAT MY 10-YEAR-OLD SON WHO IS IN FIFTH GRADE—EVEN HE TALKS TO ME ABOUT MARIJUANA.”
>
> SPANISH-SPEAKING PARENT

CAMPAIGN REACH

CK YS AS FG

Evaluation Question 1
To what extent did the campaign reach the populations of pilot areas and the target audiences?

Stay True to You

The evidence provides support for a **high level of *Stay True to You* exposure** in pilot areas.

Media data provided by Coates Kokes show that the ***Stay True to You*** campaign successfully reached more than 90% of youth and young adults in the pilot areas with a high level of exposure, consistent with standards for a fully implemented media campaign. Exhibit 10 presents the cumulative number of impressions delivered by the ***Stay True to You*** campaign at mid-evaluation (November 30, 2016) and evaluation end (March 31, 2017).

Exhibit 10
The number of impressions delivered by the ***Stay True to You*** pilot campaign was consistently high across multiple media channels.

Campaign Delivery Channel	Mid-Evaluation	Evaluation End
Digital		
Mobile Video & Display	6,409,774	11,427,887
YouTube	2,499,391	3,134,963
TV		
Hulu	1,470,837	2,369,923
Cable/TV	453,200	548,200
Radio		
Pandora	6,717,813	13,036,122
Spotify	1,450,582	2,925,372
Social Media		
Facebook	2,582,393	4,103,640
Instagram	2,395,363	3,698,140
Twitter	930,965	1,484,780
Out of Home		
Billboards	19,429,818	19,429,818
Movie Theaters	1,212,047	3,327,338

Note. Mall impressions are not included in this table because there is no method to measure them. The number of impressions reported is cumulative over the course of the pilot campaign.

The number of impressions delivered by the ***Stay True to You*** pilot campaign increased in movie theaters and remained similar for radio and mobile video and display between mid-evaluation and evaluation end. However, across other campaign delivery channels (i.e., YouTube, TV, social media), the number of impressions decreased in 2017, and outdoor advertising ceased altogether.

At mid-evaluation, survey data show that most respondents (85%) in the pilot areas were exposed to the ***Stay True to You*** campaign ads, whereas a limited number of respondents (21%) in the comparison areas were exposed (see Exhibit 11). These numbers remained similar at evaluation end (83% and 23% for pilot and comparison areas, respectively).

Exhibit 11

Survey data show that a **high percentage of youth and young adults in the pilot areas were exposed to the campaign**. Campaign spillover into comparison areas was limited.

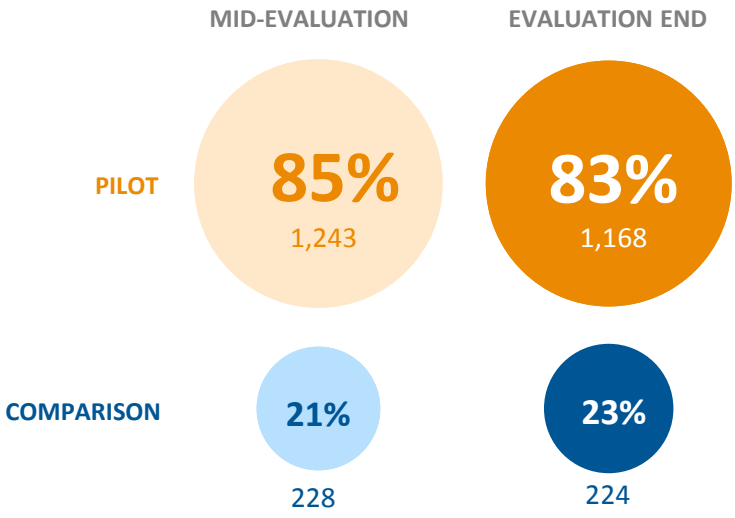
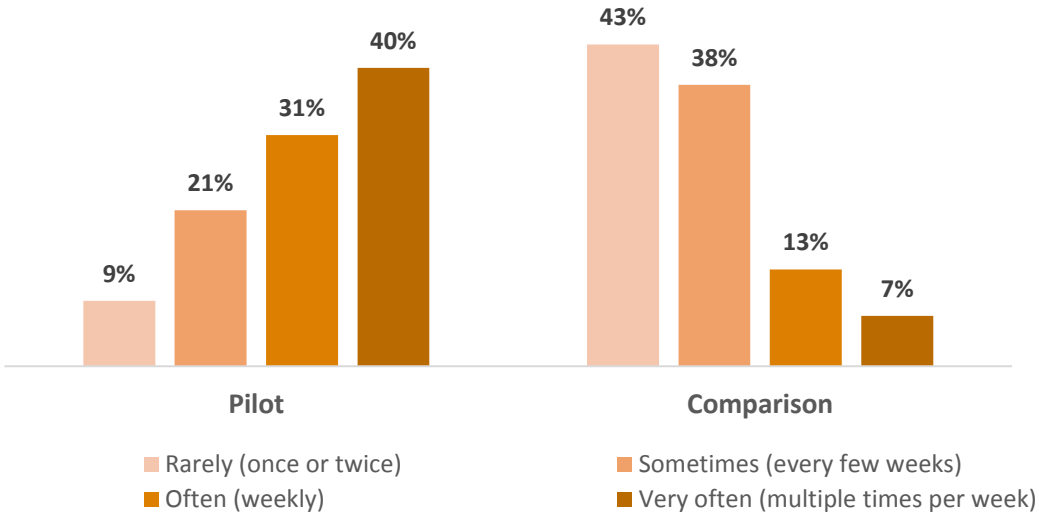


Exhibit 12 shows the frequency of exposure by area at the peak of the campaign (i.e., mid-evaluation). Among youth and young adults exposed to the ***Stay True to You*** campaign, individuals in pilot areas were exposed significantly more frequently than those in comparison areas ($p < .001$). At evaluation end, respondents were asked how often they were exposed to the campaign during the period when they were exposed the most. Results were similar to those at mid-campaign: the majority of respondents in pilot areas reported seeing the campaign *very often* (31%) or *often* (29%) whereas the majority of those in comparison areas saw it *rarely* (46%) or *sometimes* (32%).

Exhibit 12

Stay True to You campaign exposure was more frequent for youth and young adults in pilot areas than in comparison areas at the peak of the campaign.



Ad Recall

In all 6 youth focus groups and in 4 out of 6 parent focus groups, participants were able to recall specific ads from the ***Stay True to You*** campaign. Of those 10 focus groups,[18] parent and youth participants most often recalled ads that used statistics in their messaging (8 of 10) and testimonial ads (6 of 10).

> "[*STAY TRUE TO YOU*] KIND OF MADE ME FEEL NORMAL [FOR NOT USING MARIJUANA]."
>
> PORTLAND 13–14-YEAR-OLD

What do you remember? Youth and parent participants in 7 of 10 focus groups had positive reactions when asked what they remembered about the campaign. Youth participants recalled thinking that the ads were believable and realistic and appreciated that they were short and to the point. Youth in 5 of 6 focus groups reported liking the ***Stay True to You*** ads because the ads did not use condescending language and normalized non-use of marijuana, and youth could relate to them. Parent participants recalled liking that the ads acknowledged peer influence on marijuana use and used real-life situations to discuss youth marijuana use.

> "THEY SEEMED SO UNREALISTIC . . . IT'S NOT NECESSARILY THAT TEENAGERS WANT TO MAKE FUN OF EVERYTHING, WE JUST WANT SOMETHING THAT IS TRUE AND HONEST."
>
> MEDFORD 18–20-YEAR-OLD

Youth and parent participants also had some negative reactions when asked what they remembered about the ***Stay True to You*** campaign (5 of 10 focus groups). For example, youth participants reported that the ads were inaccurate or unrealistic and exaggerated the effects of marijuana use, and parent participants considered the ads to be ill-informed and shame oriented.

[18]Data are reported for the 10 groups in which participants were able to recall specific ads.

What worked? When asked what worked about ***Stay True to You***, youth participants believed the campaign was effective because it used neutral, informative language (3 of 6); was realistic, believable, or relatable (2 of 6); and encouraged people to talk about youth marijuana use (2 of 6). Youth participants reported that the lack of message diversity (3 of 6) was problematic. For example, youth participants suggested depicting functional marijuana use and targeting messages to marijuana users and non-users. Youth participants in 3 of 6 focus groups believed the messaging was too condescending and judgmental.

> "THE FACT [THE CAMPAIGN] CAN BE SO RELATABLE TO YOU AND TO PEOPLE YOU KNOW. I THINK THAT WORKS, BECAUSE IT'S NOT JUST AN ADULT SAYING, 'OH MY GOSH, DON'T DO THAT, THAT'S SO BAD,' RATHER PEOPLE YOUR OWN AGE."
>
> PORTLAND 15–17-YEAR-OLD

Message Awareness and Salience

What stood out in the ad examples? When focus group participants were shown sample ads from the ***Stay True to You*** campaign and asked what stood out, they had many positive and negative reactions. Participants in most focus groups (11 of 12) had positive reactions. **Youth** participants liked that they could relate to the examples (6 of 6) and the examples were informative (4 of 6) and realistic (3 of 6). **Parents** liked that they could relate to the examples (4 of 6) and the examples were realistic (5 of 6). In addition, they liked that the ads acknowledged the influence of peers on marijuana use (4 of 6). In contrast, in 10 of 12 focus groups participants had negative reactions to the sample ads. For example, youth thought the ads were too narrowly focused (4 of 6), unrealistic (4 of 6), unrelatable (4 of 6), or too negative (3 of 6). Some parents thought the ads shown were unrealistic (3 of 6) or boring (2 of 6); others disliked the messaging (2 of 6).

> "I JUST FEEL THAT [THE TESTIMONIALS ARE] RELATABLE BECAUSE THERE'S TENSION WHEN YOU BRING DRUGS INTO A SITUATION. I APPRECIATE THE FACT THAT SHE TALKS ABOUT HOW SHE WANTED TO BE CLOSER TO HER FATHER, SO THAT'S WHY SHE TALKED TO HER FATHER ABOUT THE ISSUE."
>
> MEDFORD 18–20-YEAR-OLD

Would these examples catch your attention? Participants in most youth focus groups (5 of 6) said that the examples would catch their attention because they could relate to them (2 of 6), marijuana is an interesting topic (3 of 6), and the stories were interesting (2 of 6). In 3 of 6 youth focus groups, participants thought the examples would not catch their attention because they were easy to ignore or forget (2 of 6) and bland (1 of 6).

> "THE [EXAMPLES] ALL CATCH MY ATTENTION. . . .I HOPE THAT THESE MESSAGES ARE OUT THERE MORE BECAUSE I FEEL LIKE THESE WOULD BE INFORMATIVE."
>
> PORTLAND 18–20-YEAR-OLD

What have you taken away from the campaign? The most prevalent takeaway reported by youth focus group participants was that the ***Stay True to You*** campaign reinforced participants' choice not to use marijuana (4 of 6 focus groups) or encouraged youth not to use marijuana (5 of 6). Youth participants also indicated that the campaign and provided information (i.e., messaging with statistics) to support them in their decision to not use marijuana (2 of 6). In 2 of 6 focus groups, youth said that the campaign had little to no effect on them or others because it did not resonate with them or with youth, including friends, who were already using marijuana.

> "I THINK THE [*STAY TRUE TO YOU*] CAMPAIGN REALLY ACTS TO EDUCATE PEOPLE ABOUT [MARIJUANA USE]. THOSE PUNCH LINES, THOSE SLOGANS THAT YOU CAN REALLY THROW OUT ARE HELPFUL IN AN ARGUMENT."
>
> MEDFORD 15–17-YEAR-OLD

What is the campaign trying to say? At mid-evaluation and evaluation end, all survey respondents were asked in an open-ended question what they thought the ***Stay True to You*** campaign was trying to convey about youth marijuana use. The most frequent response provided by all participants at both timepoints was that the campaign was trying to educate youth on the negative consequences of youth marijuana use (51% of youth and young adults at mid-evaluation and 39% at evaluation end; 40% of adults at mid-evaluation and 38% at evaluation end). For example, respondents identified campaign messages about youth marijuana use affecting brain development and memory, life and future goals, and legal consequences. Appendix K presents all coded responses for the open-ended questions by prevalence.

> "[THE CAMPAIGN IS] TRYING TO SAY THAT AT THE YOUNG AGE OF 15, I SHOULDN'T BE SMOKING MARIJUANA, BECAUSE THERE ARE SERIOUS CONSEQUENCES IN DOING SO, SUCH AS DOING POORLY IN SCHOOL, INFLUENCING THOSE WHO LOOK UP TO YOU. [IT IS] DANGEROUS WHEN DRIVING AND CAN HAVE DAMAGING EFFECTS ON YOUR DEVELOPING BRAIN."
>
> YOUTH SURVEY RESPONDENT

Talk With Them

The evidence provides support for a **moderate level of *Talk With Them* exposure** in pilot areas.

Media data from Coates Kokes show that ***Talk With Them*** cable television ads reached 52% of adults in the Portland metropolitan area and 42% of southern Oregon adults. Media data also show that the Spanish-speaking radio audience in the pilot areas has had a high level of exposure. At mid-evaluation, ***Talk With Them*** had reached 32% of Adult Survey respondents in the pilot areas and 8% of respondents in the comparison areas.

Ad Recall

In 4 of 6 parent focus groups, participants remembered seeing the ***Talk With Them*** ads but did not remember the specific content.

What do you remember? Parents had positive and negative reactions when asked what they remembered about the ***Talk With Them*** campaign. Parents in all 6 focus groups had positive reactions, including that the ads encouraged parents to discuss marijuana with their children and served as a reminder that marijuana is now legal in Oregon.

Some participants in 2 of the 6 parent focus groups reported negative reactions when asked what they remembered about the ***Talk With Them*** campaign, including remembering the ads as being ineffective, normalizing marijuana use, and making parents feel hopeless.

> "THE ADS ARE A WAKE-UP CALL FOR US AS PARENTS, AND IT IS VERY CLEAR THAT IT SAYS, 'TALK TO YOUR CHILDREN'"
>
> SPANISH-SPEAKING PARENT

Message Awareness and Salience

Did you download the parent guide? None of the parent focus group participants reported downloading the parent guide from the ***Talk With Them*** website. Participants reported not downloading the parent guide because they did not visit the website, did not know the guide existed, or could not find it on the website. Participants in 2 of 6 parent focus groups reported viewing the parent guide on the ***Talk With Them*** website but not downloading it.

What stood out in the ad examples? When focus group participants were shown an example from the ***Talk With Them*** campaign and asked what stood out, they had many positive and negative reactions. Participants in most (5 of 6) focus groups had positive reactions, such as appreciating that the ads encouraged parents to be role models and talk to their children about marijuana use and that the audience could relate to the ads, which depicted real-life situations. In 5 of 6 parent focus groups, participants said the example would be useful for talking to their children about marijuana use because it provided strategies to start the discussion, illustrated the importance of an open discussion and could serve as a catalyst to start the conversation.

> "IT IS SUPER IMPORTANT TO BE TALKING TO OUR KIDS ABOUT [MARIJUANA] AND ASKING THEIR OPINIONS."
>
> MEDFORD PARENT

After seeing the example, participants in 4 of 6 parent focus groups had negative reactions to the ad, such as feeling that it was unrealistic and inaccurate and too shame oriented.

What is the campaign trying to say? At mid-evaluation and evaluation end, Adult Survey respondents were asked in an open-ended question what they thought the ***Talk With Them*** campaign was trying to convey about youth marijuana use. At both survey timepoints adults most often responded that the campaign was trying to encourage parents to communicate with their children about marijuana use (36% of adults at mid-evaluation and 41% at evaluation end) and that youth should not use marijuana (27% of adults at mid-evaluation and 24% at evaluation end). Appendix G presents all coded responses for this open-ended question by prevalence.

> "OUR YOUTH ARE UNIQUELY VULNERABLE TO NEGATIVE EFFECTS OF MARIJUANA AND ADULTS MUST ADDRESS THE ISSUES OPENLY AND HONESTLY WITH THEM."
>
> ADULT SURVEY RESPONDENT

PERCEIVED RISK OF MARIJUANA USE

YS AS FG

Evaluation Question 2
Did the campaign affect the perceived risk of youth marijuana use among the target audiences in pilot areas relative to comparison areas?

The evidence provides **some support for a campaign effect** on youth and young adults' **perceived risk** of marijuana use.

At mid-evaluation and at evaluation end, significantly more pilot than comparison area survey respondents perceived moderate to great risk of harm from regular marijuana use. These results suggest a favorable campaign effect but should be interpreted with caution because change over time was not statistically significant for either group.

- At baseline, youth and young adults in pilot and comparison areas did not differ in their perceived risk of marijuana use.
- At both mid-evaluation and evaluation end, a significantly greater proportion of pilot area than comparison area youth and young adults perceived marijuana use to be moderate or high risk.

> "THE ADS TAUGHT ME THE BIGGER CONSEQUENCES; IF YOU GET CAUGHT DOING MARIJUANA UNDERAGE YOU CAN GET ARRESTED."
>
> PORTLAND 13–14-YEAR-OLD

Participants in the youth focus groups reported that the ***Stay True to You*** campaign affected their perceived risk of youth marijuana use. In 3 of 6 focus groups, youth said that some messages (e.g., testimonial ads) provided real-life examples about how marijuana use can have a detrimental effect on goals. In 2 of 6 youth focus groups, participants said the campaign informed them on how marijuana use can affect family members and others in their lives.

> "[THE EXAMPLES] MADE ME NOT WANT TO USE MARIJUANA . . . WITH ALL THE CONSEQUENCES. . . . [MARIJUANA] AFFECTS YOUR BRAIN, IT AFFECTS YOU, YOUR FAMILY, YOUR LIFE. IT AFFECTS EVERYTHING AND YOU DON'T GET ANYTHING FROM IT."
>
> PORTLAND 13–14-YEAR-OLD

When shown examples, youth participants in 4 of 6 focus groups reported that the ***Stay True to You*** examples made them think about the risks and side effects associated with personal marijuana use, including negatively affecting their family members, health, and future.

The evidence provides **no support for a campaign effect** on adults' **perceived risk** of youth and young adults' marijuana use.

Survey data showed no effect of the campaign on adults' perceived risk of youth marijuana use. Nevertheless, survey and focus group data suggest that a majority of parents understand the potential risk of underage marijuana use. At evaluation end, 64% of adults in pilot areas and 67% of adults in comparison areas reported a *moderate or great* risk for individuals under 21 who use marijuana regularly. Those percentages were similar across time points. Similarly, in an anonymous survey administered prior to the focus groups, parents were asked the extent to which they thought individuals under 21 risk harming themselves by using marijuana regularly (once or twice a week). The majority of parents (84%) in focus groups reported a *moderate or great* risk for such individuals.

KNOWLEDGE AND ATTITUDES ABOUT MARIJUANA USE

YS FG

> ***Evaluation Question 3***
> *Did the campaign messages affect youth and young adults' knowledge and attitudes about marijuana in the pilot areas relative to the comparison areas?*

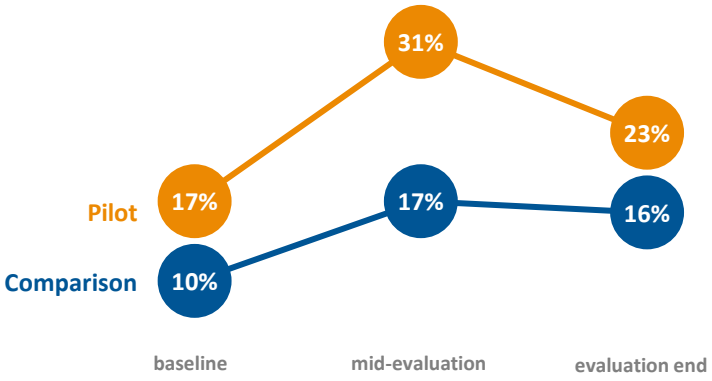
The evidence **strongly supports a positive campaign effect** on youth and young adults' **knowledge of the social norms** and **legal consequences of underage marijuana use**.

At both mid-evaluation and evaluation end, a statistically significantly higher proportion of youth and young adults in the pilot areas correctly identified that only 1 in 5 Oregon high school juniors use marijuana (see Exhibit 13). Although both the pilot and comparison areas demonstrated an increase in this knowledge from baseline to mid-evaluation, the increase was significantly greater in the pilot areas. This finding is important because the literature on social norms suggests that misperceptions of the

behavior of peers, a phenomenon called *pluralistic ignorance*, can cause individuals to change their own behavior to be more similar to the misperceived norm. Extensive research suggests that youth and young adults who overestimate alcohol and drug use among their peers are more likely to initiate substance use or exhibit greater use than they otherwise would have.[19] Increasing accurate perceptions of peer marijuana use is an important achievement for successful substance use prevention.

Exhibit 13

The survey data show **a significant campaign effect** on youth and young adults' **knowledge of social norms** related to youth marijuana use.



- At baseline, youth and young adults in pilot and comparison areas did not differ in correctly identifying social norms: only 1 in 5 Oregon high school juniors uses marijuana.
- Compared to baseline, at mid-evaluation and at evaluation end more youth and young adults in both areas correctly identified social norms.
- At mid- evaluation and evaluation end, significantly more youth and young adults in pilot areas than in comparison areas correctly identified social norms.

Youth focus group participants reported that the ***Stay True to You*** campaign affected their knowledge about marijuana use. For example, in 2 of 6 youth focus groups, participants said the statistics on non-use versus use helped support them in their decision to not use marijuana. Youth in 1 of 6 focus groups appreciated that the ads provided information about youth marijuana use rather than demonizing marijuana.

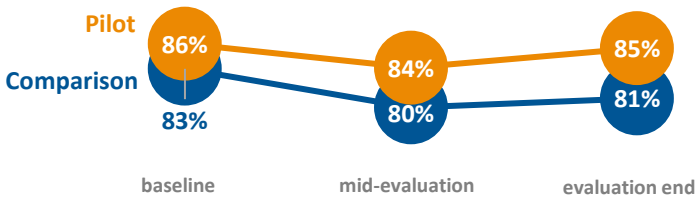
> "I HAD IT IN MY HEAD THAT THE MAJORITY OF PEOPLE SMOKED WEED IN SCHOOL BECAUSE IT'S A VERY LOUD CULTURE. AT THIS POINT, I KNOW THE STATISTICS."
>
> PORTLAND 18–20-YEAR-OLD

The campaign also addressed awareness of legal consequences of youth marijuana use. Survey findings showed a campaign effect on knowledge of legal consequences (see Exhibit 14). Specifically, at mid-evaluation and at evaluation end a significantly higher proportion of youth and young adults in the pilot areas correctly identified that being caught with marijuana under age 21 can result in a steep fine, community service, or court-ordered drug treatment. Youth and young adults in pilot areas showed slight, non-significant increases in knowledge of the legal consequences over time after controlling for differences in marijuana use and demographics between time points.

[19]Berkowitz, A.D. (2005). An overview of the social norms approach. In L.C. Lederman & L.P. Stewart, *Changing the culture of college drinking: A socially situated health communication campaign* (pp. 193–214). New York, NY: Hampton Press.

Exhibit 14

The survey data show **a significant campaign effect** on youth and young adults' **knowledge of the legal consequences** of underage marijuana use.



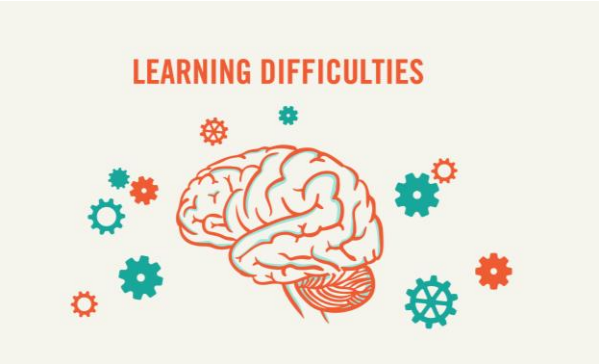
- At baseline, youth and young adults in pilot and comparison areas did not differ in their knowledge of legal consequences.
- Compared to baseline, at mid-evaluation and at evaluation end fewer comparison youth and young adults correctly identified the legal consequences of underage marijuana use.
- At mid-evaluation and evaluation end, significantly more youth and young adults in pilot areas than in comparison areas correctly identified the legal consequences of underage marijuana use.

The evidence provides **some support for a campaign effect** on youth and young adults' knowledge of the vulnerability of teenagers' brains to marijuana use.

At both mid-evaluation and evaluation end, a significantly greater proportion of pilot than comparison area youth and young adults agreed with the statement "Because teenagers' brains are still developing, they are vulnerable to the negative effects of marijuana." The 2 groups were not significantly different at baseline.

- At baseline, youth and young adults in pilot and comparison areas did not differ in their knowledge of the effects of marijuana use on teenagers' brains.
- At both mid-evaluation and evaluation end, a significantly greater proportion of pilot than comparison area youth and young adults correctly identified that teenagers' brains are vulnerable to the negative effects of marijuana.

Video: *Marijuana, Teens, and Driving*



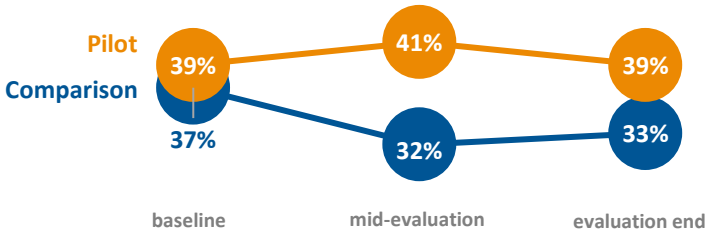
Video: *Weed Can Affect Teen Brain Development*

The evidence provides **some support for a campaign effect** on youth and young adult **attitudes**.

Significant differences between the pilot and comparison areas emerged for some attitudes toward marijuana use. Exhibit 15 shows that at mid-evaluation and at evaluation end, significantly more pilot than comparison Youth and Young Adult Survey respondents agreed with the statement "Using marijuana limits a person's ability to have memorable experiences." These results suggest a favorable campaign effect, but should be interpreted with caution because the change over time was not statistically significant for either group.

Exhibit 15

Survey data show **some support for a campaign effect** on youth and young adults' perceptions of the effects of marijuana use on a person's ability to have memorable experiences.

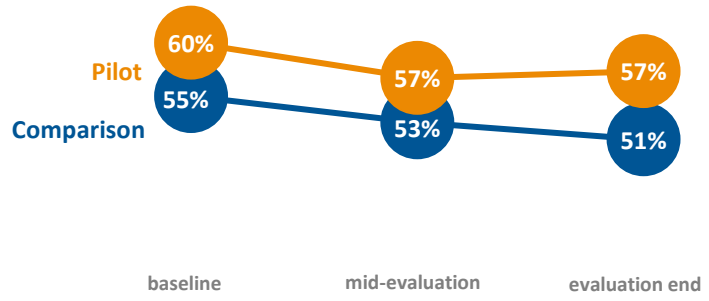


- At baseline, youth and young adults in pilot and comparison areas did not differ in their agreement that marijuana use limits a person's ability to have memorable experiences.
- At mid-campaign and at evaluation end, a significantly greater proportion of pilot area youth and young adults agreed with the statement "Using marijuana limits a person's ability to have memorable experiences."

Exhibit 16 shows that a significantly greater proportion of youth and young adults in the pilot areas at evaluation end agreed with the statement, "I worry that if I use marijuana, it may encourage those who look up to me to use marijuana (for example, a younger brother or sister)."

Exhibit 16

Survey data show **some support for a campaign effect** on youth and young adults' perception that their use of marijuana may encourage those who look up to them to use.



- At baseline and at mid-campaign, youth and young adults in pilot and comparison areas did not differ in their perception that their own use of marijuana could encourage those who look up to them to use.
- At evaluation end, significantly more youth and young adults in pilot areas than in comparison areas correctly perceived that their own use of marijuana could encourage use among those who look up to them.

The campaign showed no effect on several youth and young adult attitudes assessed by the following statements: "Using marijuana makes being a teenager easier and more fun" and "Using marijuana could make it harder to remember things I learn at school or work."

INTENT TO USE MARIJUANA

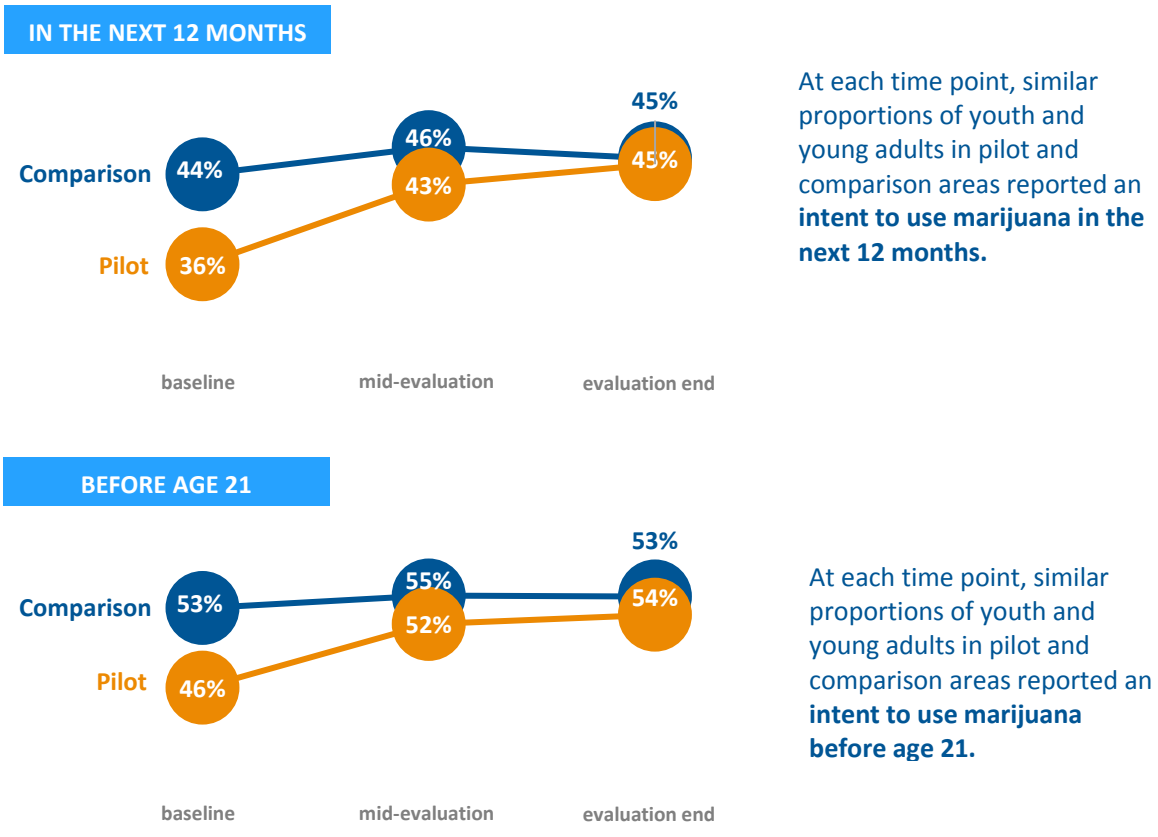
YS

Evaluation Question 4
Did the campaign reduce behavioral intentions to use marijuana among youth in the pilot areas relative to comparison areas?

The evidence **does not support a campaign effect** on youth and young adults' **intent to use** marijuana.

Both the pilot and comparison areas demonstrated slight (not statistically significant[20]) increases in the percentage of youth and young adults who intend to use marijuana in the next 12 months or before age 21 (see Exhibit 17). There was no significant change over time in the percentage of youth and young adults who said they would probably or definitely take marijuana if their best friend offered it.

Exhibit 17
Survey data show **no significant change in** youth and young adult **intent to use marijuana**.



At each time point, similar proportions of youth and young adults in pilot and comparison areas reported an **intent to use marijuana in the next 12 months.**

At each time point, similar proportions of youth and young adults in pilot and comparison areas reported an **intent to use marijuana before age 21.**

[20]Changes that appear statistically significant but are not may be due to the fact that statistical analyses controlled for differences in marijuana use between pilot and campaign regions and over time, while percentages in the exhibit do not control for these differences (adjusting percentages for marijuana use was not possible because US Census data on youth marijuana use is not available).

Youth focus group participants in 4 of 6 groups reported that the ***Stay True to You*** messages reinforced their decision to not use marijuana.

When shown examples of the ***Stay True to You*** campaign, youth participants in 3 of 6 focus groups said the examples made them feel that people should consider the potential consequences of marijuana use before using it. In 2 of 6 youth focus groups, the campaign examples made participants not want to use marijuana. In 3 of 6 youth focus groups, participants said that the ***Stay True to You*** examples did not affect their feelings about personal marijuana use.

> "THE FACT THAT IT AFFECTED [PEOPLE IN EXAMPLES] BADLY WITH IMPORTANT SITUATIONS MAKES ME NOT WANT TO [USE MARIJUANA], BECAUSE IT CAN AFFECT ME BADLY AS WELL, BASED ON WHAT HAPPENED. SO I WOULD NOT DO IT."
>
> MEDFORD 13–14-YEAR-OLD

ADULT KNOWLEDGE AND ATTITUDES ABOUT YOUTH MARIJUANA USE

AS FG

Evaluation Question 5

Did the campaign change knowledge and attitudes among parents of youth and youth-serving adults in the pilot areas relative to the comparison areas?

Exhibit 18 shows the percentage of Adult Survey respondents that reported having seen or heard either the ***Stay True to You*** or ***Talk With Them*** campaign. At evaluation end, 35% of Adult Survey respondents reported having seen or heard ***Stay True to You*** and 26% had seen or heard ***Talk With Them***. Almost half (46%) reported exposure to either campaign, compared to 19% in the comparison areas.

Exhibit 18

Campaign reach was higher in pilot areas than in comparison areas. The percentage of adults in pilot areas that reported **campaign exposure** decreased slightly from mid-evaluation to evaluation end.

	Mid-Evaluation		Evaluation End	
Campaign	**Pilot**	**Comparison**	**Pilot**	**Comparison**
Talk With Them	32%	14%	26%	13%
Stay True to You	43%	8%	35%	11%
Either	54%	17%	46%	19%

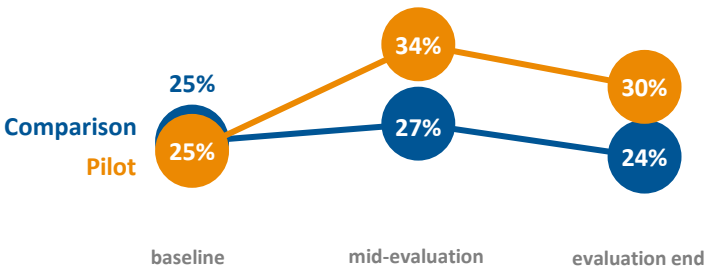
The evidence shows that **parents are talking to their children** about marijuana use.

More than three quarters of Adult Survey respondents had talked to their children about marijuana use. At baseline 79% and 77% of parents in the pilot and comparison areas, respectively, reported having talked to their children about marijuana use in the past 3 months. At mid-evaluation, the proportion of parents who reported talking to their children about marijuana in the past 3 months remained about the same (76% of parents in both areas). At evaluation end, the pilot and comparison areas diverged: a significantly greater proportion of parent survey respondents in comparison areas than pilot areas (87% and 80%, respectively) reported talking to their children about marijuana in the past 3 months. Among parents exposed to ***Talk With Them*** in pilot and comparison areas, at evaluation end 65% said that ***Talk With Them*** made them think about talking to their children about marijuana use (compared to 56% at mid-evaluation).

The evidence provides **some initial support for a campaign effect** on **adults' knowledge and attitudes** about youth marijuana use that was not sustained.

The pilot area demonstrated an increase in the percentage of adults that correctly identified social norms: only 1 in 5 Oregon high school juniors uses marijuana. At mid-evaluation, more adults in pilot areas than in comparison areas had accurate knowledge that only 1 in 5 Oregon high school juniors uses marijuana (see Exhibit 19). However, at evaluation end no significant differences existed in the percentage of adults correctly identifying social norms.

Exhibit 19
Survey data show **some initial support for a campaign effect** on adults' **knowledge of social norms** related to marijuana use that was not sustained.

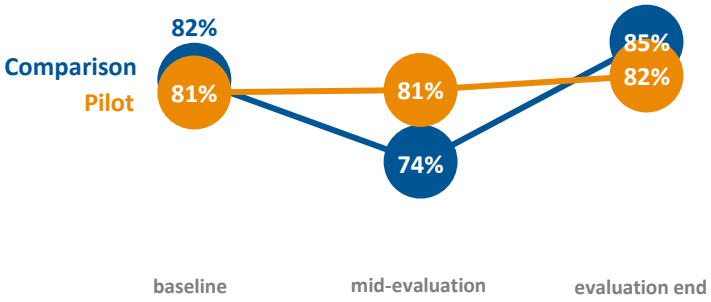


- At baseline adults in pilot and comparison areas did not differ in correctly identifying social norms: only 1 in 5 Oregon high school juniors uses marijuana
- At mid-evaluation **but not at evaluation end**, a significantly greater proportion of adults in pilot areas than in comparison areas correctly identified social norms.

At mid-evaluation, significantly more adults in pilot areas than in comparison areas had knowledge that teenagers' developing brains are vulnerable to the negative effects of marijuana (see Exhibit 20). However, at evaluation end no significant differences existed between pilot and comparison survey respondents in the percentage of adults correctly demonstrating knowledge of the vulnerability of teenagers' brains.

Exhibit 20

The survey data show **strong initial support for a campaign effect** on adults' **knowledge of the vulnerability of teenagers' developing brains** that was not sustained.



- At baseline adults in pilot and comparison areas did not differ in their knowledge of the vulnerability of teenagers' developing brains.
- Compared to baseline, at mid-campaign **but NOT at evaluation end**, fewer adults in comparison areas demonstrated knowledge of the vulnerability of teenagers' developing brains.
- At mid-evaluation **but NOT at evaluation end**, a significantly greater proportion of adults in pilot areas than in comparison areas demonstrated knowledge of the vulnerability of teenagers' developing brains.

The campaign showed no effect on adults' knowledge or attitudes in the following areas:

- Knowledge of the legal consequences of underage marijuana use.
- Concern about the negative effects of underage marijuana use on Oregon's youth.
- Belief that communities should engage in appropriate activities to reduce underage marijuana use.
- Concern that their own use of marijuana could encourage people who look up to them to use marijuana.
- Belief that using marijuana could make it more difficult for youth to remember things they learn at school or work.

www.talkwiththem.info (English)
www.hablaconellos.info (Spanish)

Note. Television and radio ads in English and Spanish.

Although the survey data showed no campaign effect on adults' attitudes toward youth marijuana use, focus groups with parents offered a deeper look into their attitudes. Parent focus group participants described the extent of their concern about the negative effects of underage marijuana use on Oregon's youth. The majority of parent focus group participants (68%) said they *agree or strongly agree* that they are concerned about the negative effects of underage marijuana use on Oregon's youth.

> "I THINK [MARIJUANA USE] IS GOING TO BE A HORRIBLE EPIDEMIC BECAUSE OF THE LAW NOW. [MARIJUANA] IS SO READILY AVAILABLE, SO MY ATTITUDE HAS CHANGED ABOUT IT."
>
> PORTLAND PARENT

Parent focus group participants were asked if their attitudes toward youth marijuana use had changed in the last few months. In 5 of 6 focus groups, parents said their attitude about youth marijuana use has changed in the past few months—they perceived greater urgency to talk to youth about marijuana use (4 of 6) and had grown concerned about the increase in marijuana use (3 of 6). In 2 of 6 focus groups, parents reported no change in their attitude about youth marijuana use in the past few months. In 1 of those 2 focus groups, the parents said their attitude has not changed because they have always been against youth marijuana use.

INFLUENCE OF LEVEL OF CAMPAIGN EXPOSURE ON OUTCOMES

YS AS

> ***Evaluation Question 6***
> *How did the level of exposure to the media campaign influence outcomes of youth and young adults and in Evaluation Questions 2–4?*

Youth and Young Adult Survey respondents rated ***Stay True to You*** on several campaign characteristics. At evaluation end, among **youth and young adults** exposed to the campaign in the pilot areas:

- The majority (60%) agreed that ***Stay True to You*** was attention getting.
- Almost half (46%) agreed that the campaign was believable.
- Approximately one third (35%) agreed that the campaign said something important to them.
- More than a quarter (30%) agreed that the campaign made them think twice about using marijuana at this time in their life.

In general, attitudes toward the campaign were more favorable among younger youth. For instance, 49% of youth aged 13–14 compared to 33% of youth aged 15–17 agreed that the campaign made them think twice about using marijuana. Current (past 30-day) marijuana users viewed the campaign less favorably: only 11% agreed that it made them think twice about using marijuana (compared to 39% of current non-users).

Adult survey respondents were asked to rate ***Talk With Them*** on similar dimensions, and most rated the campaign favorably. Among **adults** in the pilot areas exposed to the campaign, at both mid-evaluation and evaluation end approximately two thirds agreed that *Talk With Them* was:

- Attention getting.
- Believable.
- Important in terms of message.

At baseline, mid-evaluation, and evaluation end, a majority of adults reported concerns about the negative effects of underage marijuana use on Oregon's youth and young adults. At evaluation end, 23% of adults that saw either ***Stay True to You*** or ***Talk With Them*** said the campaign had changed their attitudes toward youth marijuana use (up from 10% at mid-evaluation). In general, current marijuana users rated ***Talk With Them*** significantly less favorably than adults who were not current users.

In addition to exposure and attitudes toward the campaign, RMC Research examined youth outcomes in relation to frequency of exposure to the ***Stay True to You*** campaign. To assess frequency, respondents who reported that they were exposed to the campaign were asked how often they were exposed during the time that they saw the campaign the most: *very often* (multiple times per week), *often* (weekly), *sometimes* (every few weeks), or *rarely* (once or twice).

The evidence provides **strong support for an influence of campaign exposure on** youth and young adults' **knowledge** about marijuana use.

At evaluation end, youth and young adults who reported more exposure to ***Stay True to You*** were significantly more likely to correctly identify that only 1 in 5 Oregon high school juniors use marijuana ($p < .001$). They also were more likely to recognize the legal consequences of underage marijuana use and that teenagers' developing brains are sensitive to the effects of marijuana ($p < .05$).

The evidence provides **some support for an influence of campaign exposure on** youth and young adults' **attitudes** toward marijuana.

Compared to those with less campaign exposure, at evaluation end, youth and young adults who reported more exposure to the campaign were significantly more likely to agree that using marijuana could make it harder to remember things at school or at work ($p < .05$). Greater exposure to the campaign was not associated with other youth and young adults' attitudes.

The evidence provides **no support for an influence of campaign exposure on** youth and young adults' **perceived risk** of marijuana use or their **intent to use**.

Survey findings revealed no relationship between level of exposure to the campaign and youth and young adults' perceived risk of marijuana use, their intent to use in the next 12 months or before age 21, or the likelihood that they would take marijuana from a friend if offered.

POLICY RECOMMENDATIONS

Between baseline and evaluation end, there were no significant changes in youth and young adults' intent to use marijuana. However, the pilot prevention campaign had a positive effect on youth and young adults' knowledge about marijuana, including perceptions of the social norms of youth marijuana use and knowledge of the legal consequences of marijuana use before age 21. The data also show some support for a campaign effect on youth and young adults' perceived risk of marijuana use and attitudes about marijuana use. These findings are striking given the limited campaign duration prior to evaluation.

To more fully address youth marijuana prevention, OHA-PHD recommends the following policies:

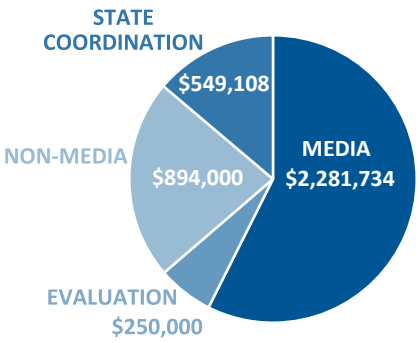
- **Provide support in every community in Oregon to youth, young adults, and parents.** Preventing youth from using marijuana requires a comprehensive public health response that includes support in every community for all families and for youth, whether or not they already use marijuana. The ***Stay True to You*** campaign has had a positive effect among youth and young adults in the pilot areas and is ready to be implemented statewide. Oregon's investment in the campaign will be enhanced by strategic collaboration across public health and health care systems to reach every community in Oregon.
- **Require marijuana businesses to disclose their expenditures on marketing and promotion.** Marijuana legalization has increased the visibility of cannabis throughout Oregon. Understanding the amount spent to advertise and promote marijuana products and the types of adverting will allow better enforcement of existing advertising regulations and help determine additional regulations needed to protect youth from marijuana use.
- **Establish a maximum size and number for signs at retail marijuana stores.** Multiple forms of storefront advertising including signs and sandwich boards are ubiquitous at marijuana businesses. To protect youth from exposure to marijuana marketing and promotion Washington State has, for example, adopted a commonsense law that allows one sign per retail marijuana establishment and limits its size to 1,600 square inches.
- **Prohibit the sale of flavored cannabis products.** The FDA recognizes that tobacco products "containing flavors like vanilla, orange, chocolate, cherry and coffee are especially attractive to youth" and "are widely considered to be 'starter' products, establishing smoking habits that can lead to a lifetime of addiction" (see www.fda.gov/syn/html/ucm183198). Flavored marijuana products could have a similar appeal to youth and increase youth marijuana use.
- **Protect local control.** One of the best protections for youth from the harm of marijuana use is robust local engagement across sectors. By protecting the ability of local authorities to make decisions about marijuana businesses, youth, families, and communities can receive the local support and services they need to prevent youth marijuana use.

CAMPAIGN BUDGET

Exhibit 21 presents the overall campaign budget for Oregon's youth marijuana prevention campaign.

Exhibit 21
OHA-PHD was within budget on campaign implementation and evaluation expenditures.

CAMPAIGN **BUDGET: $3,974,842**



State coordination. Costs related to state coordination of the contractors and the strategy for the campaign design, implementation, and evaluation.

Non-media costs. OHA-PHD contracted with Coates Kokes, a Portland-based communications firm, to design and implement the ***Stay True to You*** and ***Talk With Them*** campaigns.

Media costs. OHA-PHD's media contractor purchases media for campaign implementation on behalf of OHA-PHD.

Oregon Health Authority

PUBLIC HEALTH DIVISION

800 NE Oregon Street, Suite 730
Portland, Oregon 97232

This document can be provided in an alternate format for individuals with disabilities or in a language other than English. To request this publication in another format or language, contact the OHA-PHD at 971-673-1222, 971-673-0372 for TTY.

Appendix A
Social Norms Research Summary

Social norms refer to rules of behavior that are considered acceptable in a group or society. Social Norms Theory provides a theoretical framework regarding the impact of misperceptions of social norms on behavior and has implications for health issues—particularly substance use. The social norms approach originated as an intervention for alcohol use on college campuses but is increasingly used to influence behavior in other domains such as drinking and driving (Perkins, Linkenbach, Lewis, & Neighbors, 2010), tobacco consumption (Hancock, Abhold, Gascoigne, & Altekruse, 2002), sexual violence (Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003), energy consumption (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007), and conservation of environmental resources (Goldstein, Cialdini, & Griskevicius, 2008). This section provides an overview of the social norms approach and evidence regarding its effectiveness in reducing substance use.

Assumptions of Social Norms Theory

Social Norms Theory was first described by Alan Berkowitz and H. Wesley Perkins based on research conducted on college student alcohol consumption at Hobart and William Smith Colleges in the 1980s (Berkowitz & Perkins, 1987) which discovered that students tended to have strong misperceptions of social norms related to alcohol use, believing that their peers were using alcohol at higher rates than they actually were, and these misperceptions were influencing the students' alcohol use behavior. Social Norms Theory has several assumptions:

- Actions are often based on misinformation about or misperceptions of others' attitudes or behavior or both.
- When misperceptions are defined or perceived as real, they have real consequences.
- Individuals passively accept misperceptions rather than actively intervene to change them, hiding from others their true perceptions, feelings, or beliefs.
- The effects of misperceptions are self-perpetuating because they discourage the expression of opinions and actions that are falsely believed to be nonconforming while encouraging problem behaviors that are falsely believed to be normative.
- Appropriate information about the actual norm will encourage individuals to express those beliefs that are consistent with the true, healthier norm and inhibit problem behaviors that are inconsistent with it.
- Individuals who do not personally engage in the problematic behavior may contribute to the problem by the way in which they talk about the behavior. Misperceptions thus function to strengthen beliefs and values that the so-called "carriers of the misperception" do not themselves hold and contribute to the climate that encourages problem behavior.
- For a norm to be perpetuated it is not necessary for the majority to believe it, but only for the majority to believe that the majority believes it.

Types of Social Norms Misperceptions

Two commonly discussed social norm misperceptions are pluralistic ignorance and false consensus. **Pluralistic ignorance**, the most common social norms misperception (Berkowitz, 2004), occurs when individuals perceive the attitudes or behaviors of peers to be different from their own when in fact they

are not (Berkowitz, 2004). Although the research on marijuana is limited, studies suggest that pluralistic ignorance regarding marijuana is strong: the Spring 2015 National College Health Assessment survey found that although 60% of college students reported never using marijuana, the perception among those same college students was that only 4% of their peers had never used marijuana. Social norms misperceptions are not limited to students; parents and teachers also overestimate youth use, further reinforcing pluralistic ignorance (Haines, Barker, & Rice, 2003).

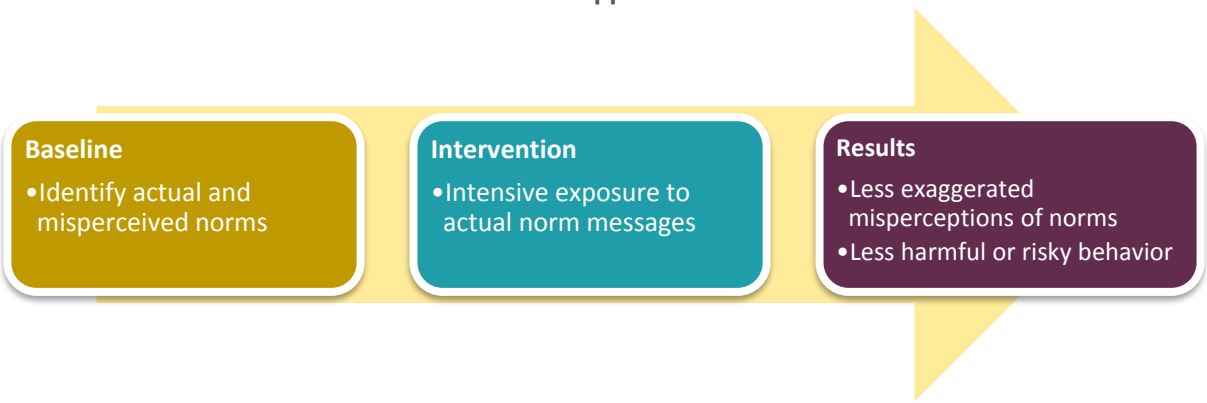
Related to pluralistic ignorance, **false consensus** is when individuals falsely believe that others are similar to them when they are not. Research has shown that smokers and heavy drinkers tend to overestimate the extent to which others smoke and drink heavily (e.g., Kypri & Langley, 2003; Sussman et al, 1988). Studies have also shown that false consensus is associated with personal use. For instance, the more an individual perceives others as drinking heavily, the higher their personal consumption (Borsari & Carey, 2001). The false consensus misperception may allow individuals to deny that their substance-using behavior is problematic by normalizing it (Berkowitz, 2004).

These social norms misperceptions are reinforcing: the majority is silent because it thinks it is a minority (pluralistic ignorance) and the minority is vocal because it believes it represents the majority (false consensus).

Social Norms Marketing

Social norms theory has been used to develop interventions that attempt to correct norms misperceptions with the ultimate goal of reducing substance use. One such intervention is **social norms marketing**, which is a universal prevention strategy that aims to correct social norms misperceptions among the target population (Berkowitz, 2005). Social norms marketing aims to apply standard social marketing techniques to present the actual healthy norms to a target population through specially designed media. The logic of this intervention (see Exhibit A1) is that a media campaign that educates individuals about the actual social norms will correct misperceptions and lead to reductions in substance-using behavior.

Exhibit A1. Model of Social Norms Approach to Substance Use Prevention

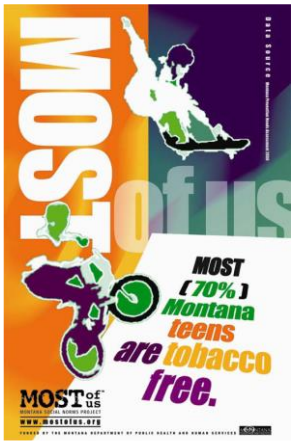


Note. Adapted from Perkins (2003).

The effectiveness of the social marketing norms approach rests on several theoretical assumptions (Perkins, 2003). The first is that that people tend to overestimate substance use among their peers, which is well supported by many sources including the Spring 2015 National College Health Assessment survey described previously (for a review see Berkowitz, 2004). The second is that social norm misperceptions are associated with increased substance use. This theoretical assumption is supported by extensive research demonstrating that youth and young adults who overestimate alcohol and drug

use among their peers are more likely to initiate substance use or exhibit greater use than they otherwise would have (e.g., Borsari & Carey, 2003; Perkins, Haines, & Rice, 2005; for a review see Berkowitz, 2005). The final assumption is that correction of social norm misperceptions through education results in a reduction in substance use. Given that social norms marketing began as an intervention to reduce alcohol consumption among students on college campuses, much of the evidence supporting this assumption comes from campus-based media campaigns. In one of the most rigorously designed studies, DeJong et al. (2006) conducted an 18-site randomized trial in which college campuses were randomly assigned to receive a social norms media campaign. They found that receiving the campaign was associated with lower perceptions of peer drinking levels and lower alcohol consumption. Normative perceptions were found to mediate the effect of the campaign on alcohol consumption and higher dosages of the campaign were associated with better outcomes. The results could not, however, be replicated in a subsequent study (De Jong et al., 2009). Numerous other studies have found that social norms marketing successfully reduced substance use (Haines & Christensen, 2003; Haines et al., 2003; Linkenbach & Perkins, 2003; Mattern & Neighbors, 2004; Perkins & Craig, 2002; Perkins & Craig, 2006; Turner, Perkins, & Bauerle, 2008). One potential factor that may explain the mixed results is the environment in which the campaign takes place; Scribner et al. (2011) found that alcohol outlet densities moderated the impact of social norms marketing such that intervention effects were eliminated on campuses with higher alcohol outlet densities. This research may have implications for marijuana social norms media campaigns that take place in areas with a high concentration of marijuana dispensaries.

Exhibit A2. Montana's Most of Us Are Tobacco Free Campaign



Although most research on social norms marketing has been conducted on college campuses, research suggests that a social norms media campaign can also successfully reduce substance use in other settings such as high schools (e.g., Haines & Christensen, 2003; Haines et al., 2003) and community-based settings. An example of the latter is the Most of Us Are Tobacco Free campaign conducted in Montana, which sought to reduce the initiation of tobacco use among youth aged 12–17 in 7 western Montana counties during an 8-month period in 2000–2001 (Linkenbach & Perkins, 2003). Normative messages regarding tobacco non-use were delivered via a wide variety of media channels including slides for movie theater screens, billboards, local newspaper ads, and promotional material distributed to schools and other locations (see Exhibit A2). Six 30-second radio and television ads were also aired during the campaign. Although baseline data suggested no significant differences between the intervention and comparison counties in tobacco use or perceived norms of tobacco use, post-campaign data found that the percentage of youth who had initiated tobacco use was only 10% in the intervention counties versus 17% in the comparison counties. Only the intervention counties showed a significant reduction in the percentage of youth who misperceived the tobacco norm.

In summary, social norms marketing is a promising approach to universal substance use prevention. Although it has been primarily used with college students to reduce alcohol use, the basic principles of social norms theory have been successfully applied to other substance use behaviors and other settings and populations outside of college campuses, including youth in high schools and in the community. Marijuana use may be a prime target for social norms marketing given the high prevalence of social norms misperceptions among youth and the presence of a vocal minority of marijuana users. However, the strategy may be less effective in areas with very high densities of marijuana dispensaries.

References

Berkowitz, A.D. (2004). *The social norms approach: Theory, research, and annotated bibliography*. Retrieved January 27, 2017 from http://www.alanberkowitz.com/articles/social_norms.pdf

Berkowitz, A.D. (2005). An overview of the social norms approach. In L. Lederman, L. Stewart, F. Goodhart, & L. Laitman, *Changing the culture of college drinking: A socially situated health communication campaign*, (pp. 193–214). Retrieved January 27, 2017 from http://www.alanberkowitz.com/articles/social%20norms%20approach-short.pdf

Berkowitz, A.D. & Perkins, H.W. (1987). Recent research on gender differences in collegiate alcohol use. *Journal of American College Health, 36*(2), 123–129.

Borsari, B. & Carey, K.B. (2001). Peer influences on college drinking: A review of the research. *Journal of Substance Abuse*, *13*(4), 391–424.

Borsari, B. & Carey, K.B. (2003). Descriptive and injunctive norms in college drinking: a meta-analytic integration. *Journal of Studies on Alcohol, 64*(3), 331–341.

DeJong, W., Schneider, S.K., Towvim, L.G., Murphy, M.J., Doerr, E.E., Simonsen, N.R., . . . & Scribner, R.A. (2006). A multisite randomized trial of social norms marketing campaigns to reduce college student drinking. *Journal of Studies on Alcohol, 67*(6), 868–879.

DeJong, W., Schneider, S.K., Towvim, L.G., Murphy, M.J., Doerr, E.E., Simonsen, N.R., . . . & Scribner, R.A. (2009). A multisite randomized trial of social norms marketing campaigns to reduce college student drinking: a replication failure. *Substance Abuse, 30*(2), 127–140.

Fabiano, P.M., Perkins, H.W., Berkowitz, A., Linkenbach, J., & Stark, C. (2003). Engaging men as social justice allies in ending violence against women: Evidence for a social norms approach. *Journal of American College Health, 52*(3), 105–112.

Goldstein, N.J., Cialdini, R.B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research, 35*(3), 472–482.

Haines, M. & Christensen, S. (2003, July). *Communities use a social norms approach to reduce teen alcohol and tobacco use: Two case studies*. Presented at the National Conference on the Social Norms Model, Boston, MA.

Haines, M.P., Barker, G.P., & Rice, R. (2003). Using social norms to reduce alcohol and tobacco use in two Midwestern high schools. *The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians* (pp. 235–244). San Francisco, CA: Jossey-Bass.

Hancock, L., Abhold, J., Gascoigne, J., & Altekruse, M. (2002). Applying social norms marketing to tobacco cessation and prevention: Lessons learned from three campaigns. *The Report on Social Norms: Working Paper #6*. Little Falls, NJ: PaperClip Communications. Retrieved January 27, 2017 from http://socialnorms.org/wp-content/uploads/2015/05/WP6.pdf

Kypri, K. & Langley, J.D. (2003). Perceived social norms and their relation to university student drinking. *Journal of Studies on Alcohol, 64*(6), 829–834.

Linkenbach, J.W. & Perkins, H.W. (2003). Most of us are tobacco free: An eight-month social norms campaign reducing youth initiation of smoking in Montana. In H.W. Perkins (Ed.), *The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians* (pp. 224–234). San Francisco, CA: Jossey-Bass.

Mattern, J.L. & Neighbors, C. (2004). Social norms campaigns: Examining the relationship between changes in perceived norms and changes in drinking levels. *Journal of Studies on Alcohol, 65*(4), 489–493.

Perkins, H.W. (2003). The emergence and evolution of the social norms approach to substance abuse prevention. In H.W. Perkins (Ed.), *The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians* (pp. 3–17). San Francisco, CA: Jossey-Bass.

Perkins, H.W. & Craig, D.A. (2002). *A multifaceted social norms approach to reduce high-risk drinking: Lessons from Hobart and William Smith Colleges*. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention. Retrieved January 27, 2017 from http://alcohol.hws.edu/hws.pdf

Perkins, H.W. & Craig, D.W. (2006). A successful social norms campaign to reduce alcohol misuse among college student-athletes. *Journal of Studies on Alcohol, 67*(6), 880–889.

Perkins, H.W., Haines, M.P., & Rice, R. (2005). Misperceiving the college drinking norm and related problems: A nationwide study of exposure to prevention information, perceived norms and student alcohol misuse. *Journal of Studies on Alcohol, 66*(4), 470–478.

Perkins, H.W., Linkenbach, J.W., Lewis, M.A., & Neighbors, C. (2010). Effectiveness of social norms media marketing in reducing drinking and driving: A statewide campaign. *Addictive Behaviors, 35*(10), 866–874.

Schultz, P.W., Nolan, J.M., Cialdini, R.B., Goldstein, N.J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science, 18*(5), 429–434.

Scribner, R.A., Theall, K.P., Mason, K., Simonsen, N., Schneider, S.K., Towvim, L.G., & DeJong, W. (2011). Alcohol prevention on college campuses: The moderating effect of the alcohol environment on the effectiveness of social norms marketing campaigns. *Journal of Studies on Alcohol and Drugs, 72*(2), 232–239.

Sussman, S., Dent, C.W., Mestel-Rauch, J., Johnson, C.A., Hansen, W.B., & Flay, B.R. (1988). Adolescent nonsmokers, triers and regular smokers' estimates of cigarette smoking and prevalence: When do overestimations occur and by whom? *Journal of Applied Social Psychology. 18*(7), 537–551.

Turner, J., Perkins, H.W., & Bauerle, J. (2008). Declining negative consequences related to alcohol misuse among students exposed to a social norms marketing intervention on a college campus. *Journal of American College Health, 57*(1), 85–94.

Appendix B
U.S. Census Demographic Characteristics of Pilot and Comparison Areas

Exhibit B1 presents key population demographic characteristics of the pilot and comparison areas, and Exhibit B2 shows selected marijuana indicators for the pilot and comparison areas on the 2014 Oregon State Student Wellness Survey. Although pilot and comparison areas differ in population size, they are relatively similar in the percentage of the population that is female and the percentage that is age 13–20.

Exhibit B1. U.S. Census Demographic Characteristics of Pilot and Comparison Areas

Item	Pilot Areas	Comparison Areas
Total Population (#)[a]	2,063,447	533,701
Female	50.8%	50.8%
Youth aged 13–20[b]	9.3%	10.8%
Race: White	84.3%	90.5%
Hispanic or Latino (of any race)	12.1%	7.6%

Note. Data retrieved from U.S. Census Bureau: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

[a]Total population, sex, age, race, and ethnicity information calculated using the 2010–2014 American Community Survey. [b]Total youth aged 13–20 calculated using 2010 U.S. Census data: single years of age and sex.

Exhibit B2. Marijuana Use Indicators Among Youth in Pilot and Comparison Areas From the 2016 Oregon Student Wellness Survey

Item	Grade Level	Pilot Areas	Comparison Areas
Past 30-Day Marijuana Use	6	2.5%	1.7%
(Percentage of students who used marijuana in the past 30 days)	8	6.9%	10.5%
	11	20.7%	18.6%
Perceived Risk of Harm	6	66.8%	63.4%
(Percentage of students who think there is *great risk* or *moderate risk* of harm if they smoke marijuana once or twice a week)	8	69.0%	49.9%
	11	39.9%	35.7%
Perceived ease of availability	6	6.2%	11.2%
(Percentage of students who said it would be *very easy* or *sort of easy* to get some marijuana)	8	29.6%	39.2%
	11	68.0%	70.1%

(exhibit continues)

Exhibit B2 (continued)

Item	Grade Level	Pilot Areas	Comparison Areas
Parental Disapproval	6	98.7%	97.1%
(Percentage of students who said their parents feel it would be *very wrong* or *wrong* for them to smoke marijuana)	8	95.2%	91.4%
	11	87.3%	84.0%
Peer Disapproval	6	96.0%	91.9%
(Percentage of students who said their friends feel it would be *very wrong* or *wrong* for them to smoke marijuana)	8	77.6%	69.2%
	11	50.0%	47.4%

Note. Oregon Student Wellness Survey results are reported by county, but pilot and comparison regions each contain multiple counties. To obtain regional estimates, the evaluation team calculated weighted averages that account for population size differences between the counties within pilot and comparison regions.

Appendix C
Survey and Focus Group Recruitment

RMC Research recruited youth, young adults, and adults by developing a Facebook page and advertising the survey using ads that appeared in the users' Facebook thread, Instagram feed, and Audience Network (i.e., on other mobile applications and websites that collaborate with Facebook). Separate recruitment ads were developed to target 4 audiences:

- 13[21]–17-year-olds.
- 18–20-year-olds.
- Parents.
- Youth-serving adults.

RMC Research developed engaging ads directed at potential participants in the desired age range and geographic location (see Exhibit C1 for a sample Facebook recruitment ad). Using zip codes, the ads targeted potential participants in the pilot areas in which the media campaign was implemented and in the comparison communities. Participants who clicked on the ads were directed to RMC Research's survey in Survey Monkey. After completing the survey, participants were also encouraged to share the survey link with their friends.

RMC Research monitored survey response rates throughout the data collection periods. The targeted sampling goal for each data collection period was 600 participants per region. During baseline data collection, RMC Research removed the ads from that region once the sampling goal was reached to ensure a relatively equal sample size across regions. To achieve relatively similar sample sizes across data collection periods, RMC Research employed additional strategies during the mid-evaluation and evaluation end data collection periods. For example, RMC Research boosted[22] several Facebook page posts to increase sample sizes in certain regions. In addition, to help increase Adult Survey sample sizes,[23] RMC Research extended the timeframe from 2 weeks to 3 weeks (mid-evaluation) and to 3.5 weeks (evaluation end).

RMC Research recruited focus group participants via multiple methods. At the baseline administration of the Youth and Young Adult Survey and Adult Survey, respondents indicated whether they were interested in being contacted about participating in a focus group. The survey directed interested respondents to a separate form to provide their name and contact information. In September 2016, RMC Research sent interested respondents an email with a link to focus group screening and demographic questions. Potential participants needed to reside in one of the pilot regions, be a 13–20-year-old, and report being exposed to the campaign in order to be selected to participate in the focus groups. RMC Research contacted eligible respondents by phone to sign them up for the appropriate focus group until target participation numbers in each focus group were reached or eligible

[21]Youth must be 13 years old to set up Instagram and Facebook accounts.
[22]Boosted Facebook posts are similar to Facebook ads in delivery (i.e., they appear in the users' Facebook thread, Instagram feed, and Audience Network) but the format is slightly different (e.g., there is not a character limit for boosted posts and boosted posts are located on the Facebook page). Boosted posts are generally used to achieve audience engagement within Facebook (e.g., page likes, shares, comments), but it was successful for these efforts as well, possibly because the boosted-post format caught the attention of different users.
[23]Mid-campaign Adult Survey samples were lower across all regions than expected compared to baseline sample sizes. The timing of the November survey administration (post-election and during Thanksgiving week) are potentially explanations for lower than expected response rates at mid-campaign.

respondents were all contacted. Because there were so few eligible 13–14-year-olds, RMC Research set up a Facebook ad to target that age group only, which resulted in a couple of more eligible respondents. RMC Research sent an email reminder to individuals who agreed to participate in the focus groups immediately after signing up a participant. A parental consent form was also sent with the email reminder to potential focus group participants aged 13–17.

Exhibit C1. Sample Social Media Recruitment Ad

In addition, RMC Research contacted youth organizations in each pilot area to help recruit youth in the 12–17 age range. In Jackson and Josephine counties, RMC Research contacted 5 youth organizations and 4 agreed to pass information along to their program participants. In Clackamas, Multnomah, and Washington counties, RMC Research contacted 10 youth organizations and 3 community centers. Four youth organizations agreed to pass information along, 2 youth organizations confirmed that they were not a good match for this effort, and the remaining 4 did not respond. The 3 community centers posted the focus group flyer.

To conduct the focus groups with Spanish speakers, RMC Research subcontracted with People-Places-Things, a Portland-based organization that specializes in teaching English to and building relationships with immigrants and refugees. People-Places-Things translated all of the focus groups' materials from English to Spanish, including the recruitment screening questions, consent form, and focus group guide, and coordinated all recruitment efforts for the 2 focus groups with Spanish speakers that were held in the Portland metropolitan area. People-Places-Things recruited participants by phone and in person.

Appendix D
Data Collection Instruments

FINAL Spring Oregon Youth and Young Adult Survey

[Text that will appear on first page of the Oregon Survey.]

The Oregon Survey collects information on Oregon youth and young adults' experience with and attitudes toward marijuana.

- The survey will take **5 to 10 minutes**.
- Your participation is **voluntary**.
- You may start the survey and then decide to **stop at any time**.
- There are possible privacy concerns if, for example, someone is watching while you answer the survey.
- There are **no risks** of consequences based on how you answer.
- Your answers are only used for the **purposes of the study**. Your answers will be put together with other youth and young adults' responses to create one report.
- The Public Health Division of the Oregon Health Authority will use your answers to help **improve the health of Oregonians**.
- You will be given the option to provide your email address to be entered in a drawing to win a $25 or $100 gift card. Your email address will be stored separately from your survey responses and cannot be tied to your responses.

Please contact Erin Stack at RMC Research Corporation at OregonSurvey@rmcres.com if you have questions or concerns about the survey.

❑ Yes, I agree to participate. ❑ No, I do not agree to participate.

Question	Response Options	Construct
Survey Qualifying Questions		
1. Where do you live?	▶ Portland Metro (includes Multnomah, Clackamas, or Washington County) ▶ City of Eugene or Springfield ▶ Lane County but not Eugene or Springfield (cities in this county include Cottage Grove, Florence, or Junction City) ▶ Jackson or Josephine County (cities in these counties include Medford and Grant's Pass) ▶ Douglas or Coos County (cities in these counties include Roseburg and Coos Bay) ▶ Another area not listed	'Another area not listed' goes to "Thank You" page

Question	Response Options	Construct
2. What is your age?	▶ 13 ▶ 14 ▶ 15 ▶ 16 ▶ 17 ▶ 18 ▶ 19 ▶ 20 ▶ Other	'Other' goes to "Thank You" page
Demographics		
3. How do you identify?	▶ Female ▶ Male ▶ Transgender ▶ Other	OSWS
4. Are you Hispanic or Latino?	▶ Yes ▶ No	OHT
5. What is your race? (Select one or more options)	▶ American Indian or Alaska Native ▶ Asian ▶ Black or African American ▶ Native Hawaiian or Other Pacific Islander ▶ White	OHT
Youth Survey		
6. How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?	▶ No risk ▶ Slight risk ▶ Moderate risk ▶ Great risk	▶ Perceived Risk of Use ▶ OHT
7. If one of your best friends were to offer you marijuana, would you use it?	▶ Definitely not ▶ Probably not ▶ Probably yes ▶ Definitely yes	▶ Susceptibility to Experimentation ▶ OHT, YTS (adapted to mj)
8. How likely is it that you will use marijuana, at least once or twice, over the next 12 months?	▶ I definitely will not use. ▶ I probably will not use. ▶ I probably will use. ▶ I definitely will use.	▶ Behavioral Intentions to Use ▶ NSPY
9. How likely is it that you will use marijuana before you are age 21?	▶ I definitely will not use. ▶ I probably will not use. ▶ I probably will use. ▶ I definitely will use.	▶ Behavioral Intentions to Delay ▶ RMC modified q14

Question	Response Options	Construct
10. During your life, how many times have you used marijuana?	▶ 0 times ▶ 1 or 2 times ▶ 3 to 9 times ▶ 10 to 19 times ▶ 20 to 39 times ▶ 40 or more times	▶ Lifetime Use ▶ Identifies "those who have not initiated" use ▶ OSWS
11. During the past 30 days, on how many days did you use marijuana or hashish (weed, hash, pot)?	▶ 0 days ▶ 1 to 2 days ▶ 3 to 5 days ▶ 6 to 9 days ▶ 10 to 19 days ▶ 20 to 29 days ▶ All 30 days	▶ Current Use ▶ Identifies "movable middle" of youth users ▶ Question from OHT, Response Options from OSWS
12. Using marijuana limits a person's ability to have memorable experiences.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Attitudes ▶ RMC created from Coates Kokes campaign materials
13. Using marijuana makes being a teenager easier and more fun.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Attitudes ▶ RMC created from Coates Kokes campaign materials
14. I worry that if I use marijuana, it may encourage those who look up to me to use marijuana (for example, a younger brother or sister).	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Attitudes ▶ RMC created from Coates Kokes campaign materials
15. Using marijuana could make it harder to remember things I learn at school or work.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Attitudes ▶ RMC created from Coates Kokes campaign materials
16. About what percent of Oregon high school juniors do you think currently smoke marijuana?	▶ 20% (1 in 5) ▶ 40% (2 in 5) ▶ 60% (3 in 5) ▶ 80% (4 in 5)	▶ Knowledge ▶ Based on campaign master script
17. Because teenagers' brains are still developing, they are vulnerable to the negative effects of marijuana.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree	▶ Knowledge ▶ Based on campaign master script

Question	Response Options	Construct
	▶ Strongly agree	
18. If you're under age 21 and caught with marijuana, you could face a pretty steep fine, community service or even court-ordered drug treatment.	▶ Disagree ▶ Agree	▶ Knowledge ▶ Based on campaign master script
19. Have you seen or heard any ads, videos, posters, or radio about the negative effects of marijuana use on youth in the past 9 months (since August 2016)?	▶ No ▶ Yes ▶ Don't know/not sure	▶ General youth marijuana awareness campaign exposure, over time frame of *Stay True to You* campaign
20. Below are some messages associated with a recent youth marijuana awareness campaign called *Stay True to You*. In the past 9 months (since August 2016), have you seen or heard any of the messages or seen the logo? ▪ Marijuana affects everyone differently. ▪ Give this up? No way. Driving high could mean losing my license. ▪ Why don't I smoke marijuana? Because of this little copycat. ▪ If you're not using pot, you're not alone. ▪ Fewer than 20 percent of high school juniors smoke pot. ▪ Pot passes the time. I'd rather make memories. ▪ I've worked hard to keep this job. Weed might mess that up. ▪ Some kids smoke pot and get decent grades. Not me.  	▶ No (skip to end, survey complete) ▶ Yes ▶ Don't know/Not sure (skip to end, survey complete)	▶ *Stay True to You* campaign "ever" exposure/recall

Question	Response Options	Construct
		
21. During the period when you saw or heard the *Stay True to You* messages **the most**, about how often did you see or hear the messages?	▶ Never ▶ Rarely (once or twice) ▶ Sometimes (Every few weeks) ▶ Often (Weekly) ▶ Very Often (Multiple times per week)	▶ *Stay True to You* peak campaign exposure
22. In the **past 3 months** (since December), about how often have you seen or hear the *Stay True to You* messages?	▶ Never ▶ Rarely (once or twice) ▶ Sometimes (Every few weeks) ▶ Often (Weekly) ▶ Very Often (Multiple times per week)	▶ *Stay True to You* "3 month" campaign exposure
23. Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . .		
a) Got my attention	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Message salience
b) Was believable	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Message salience
c) Said something important to me	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Message salience
d) Made me think twice about using marijuana at this time in my life.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	▶ Message salience
e) Taught me something new.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree	▶ Message salience

Question	Response Options	Construct
	▶ Strongly agree	
24. What do you think the *Stay True to You* campaign is trying to say about youth marijuana use? (open-ended)	▶ n/a (open-ended)	▶ Message awareness

[Text that appears on final page of the Oregon Survey.]

Thank you for completing the Oregon Survey. **If you want to be entered into a drawing for a chance to win a $25 or $100 gift card**, please click here: https://www.surveymonkey.com/r/OregonSurveyContactInfo.

Pass along the survey link to your friends! https://www.surveymonkey.com/r/OregonSurvey

Oregon Survey Contact Information Survey

After participants complete the Oregon Survey, there will be a link to this survey to collect contact information for the survey lottery and for mid-campaign focus group participation.

You are eligible to enter a drawing for a $25 or $100 gift card. One $25 winner will be drawn every 75 surveys, and two $100 gift card winners will be drawn when the survey is over later this month. Duplicate entries will be discarded. **Your contact information for the drawing will be saved in a separate location and can never be linked to your survey data.** We will never send you spam or sell your name to anyone else.

Question	Response Options
1. What is your email address?	[Open text field]
2. If you win a gift card, what kind of gift card would you like to receive?	▶ Target gift card ▶ Amazon gift card

[Text that appears on final page of the Contact Information Survey.]

Thank you again for completing the Oregon Survey. An RMC Research Corporation staff member will email you if you win a $25 or $100 gift card.

As a reminder, your participation in the Oregon survey is confidential. Your name or contact information will not be linked to your survey answers in any way. Your name and contact information will only be used if you win the drawing. If you have any questions or concerns about the survey, please contact Erin Stack at RMC Research Corporation at OregonSurvey@rmcres.com.

Pass along the survey link to your friends! https://www.surveymonkey.com/r/OregonSurvey

Final Spring Oregon Adult Survey

[Text that appears on first page of the Oregon Parent/Health Survey.]

The Oregon Survey administered by RMC Research collects information on Oregon adults' attitudes toward **youth** marijuana use.

- Your responses are **anonymous** and cannot be linked to your name or Facebook profile.
- The survey will take **5 to 10 minutes**.
- Your participation is **voluntary**.
- You may start the survey and then decide to **stop at any time**.
- Other than a loss of time, there are **no anticipated risks** for participating in this survey.
- Your answers are only used for the **purposes of the study**. Your answers will be put together with other adults' responses to create one report.
- The Public Health Division of the Oregon Health Authority will use RMC Research's summary report to help **improve the health of children and families in Oregon**.
- You will be given the option to provide your email address to be entered in a drawing to win a $50 or $100 gift card. Your email address will be stored separately from your survey responses and cannot be tied to your responses.

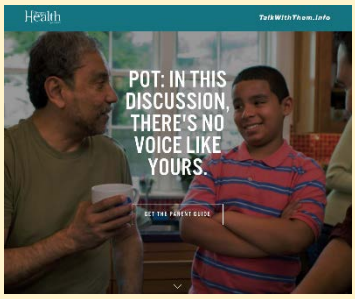
Please contact Erin Stack at RMC Research Corporation at OregonSurvey@rmcres.com if you have questions or concerns about the survey.

❑ Yes, I agree to participate. ❑ No, I do not agree to participate.

Question	Response Options	Comments
1. What is your age?	▸ Under 21 ▸ 21 - 29 ▸ 30 - 39 ▸ 40 - 49 ▸ 50 - 59 ▸ 60 - 69 ▸ 70 - 79 ▸ 80 or older	If "Under 21" then ineligible. Link to "Disqualification" exit page that says "Unfortunately, you do not meet the qualification criteria to complete the survey. Thank you for your interest in the Oregon Adult Survey."

Question	Response Options	Comments
2. Where do you live?	▶ Portland Metro (includes Multnomah, Clackamas, or Washington County) ▶ City of Eugene or Springfield ▶ Lane County but not Eugene or Springfield (cities in this county include Cottage Grove, Florence, or Junction City) ▶ Jackson or Josephine County (cities in these counties include Medford and Grant's Pass) ▶ Douglas or Coos County (cities in these counties include Roseburg and Coos Bay) ▶ Another area not listed	If "Another area not listed" then ineligible. Link to "Disqualification" exit page that says "Unfortunately, you do not meet the qualification criteria to complete the survey. Thank you for your interest in the Oregon Adult Survey."
3. Are you a parent of a child between the ages of 12 - 20 or do you work directly with youth between the ages of 12 - 20? (for example, as a teacher, school staff, coach, health professional, faith-based professional, etc.) *Select all that apply*	▶ Yes, I am a parent of a child between the ages of 12 - 20. ▶ Yes, I work directly with youth between the ages of 12 - 20. ▶ No, I am not a parent of a child between the ages of 12 - 20 nor do I work directly with youth between the ages of 12 - 20.	
4. (If yes to #3). How old are your children that are between the ages of 12 - 20? (Check all that apply)	▶ 12, 13, 14, 15, 16, 17, 18, 19, 20	
5. How do you identify?	▶ Female ▶ Male ▶ Transgender ▶ Other	
6. Are you Hispanic or Latino?	▶ No ▶ Yes	
7. What is your race? (Select one or more options)	▶ American Indian or Alaska Native ▶ Asian ▶ Black or African American ▶ Native Hawaiian or Other Pacific Islander ▶ White	
8. How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?	▶ No risk ▶ Slight risk ▶ Moderate risk ▶ Great risk	

Question	Response Options	Comments
9. I am concerned about the negative impact of underage marijuana use on Oregon's youth.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
10. Oregon communities should engage in appropriate activities to reduce underage marijuana use.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
11. In the last 3 months (since December 2016), have you talked with your child about the risks of marijuana use?	▶ I don't have a child between the ages of 12 - 20. ▶ No ▶ Yes	
12. I worry that if I use marijuana, it may encourage those who look up to me to use marijuana (for example, my child or children I work with).	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
13. How long has it been since you last used recreational marijuana?	▶ Never used ▶ More than 12 months ago ▶ More than 30 days but within the last 12 months ▶ During the last 30 days	
14. Using marijuana could make it harder for youth to remember things they learn at school or work.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
15. About what percent of Oregon high school juniors do you think currently smoke marijuana?	▶ 20% (1 in 5) ▶ 40% (2 in 5) ▶ 60% (3 in 5) ▶ 80% (4 in 5)	
16. Because teenagers' brains are still developing, they are vulnerable to the negative effects of marijuana.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	

Question	Response Options	Comments
17. If youth under age 21 are caught with marijuana, they could face a pretty steep fine, community service or even court-ordered drug treatment.	▶ Disagree ▶ Agree	
18. Have you seen or heard any ads, videos, posters, or radio about the negative effects of marijuana use on youth in the past 9 months (since August 2016)?	▶ No ▶ Yes ▶ Don't know/not sure	
19. Below are some examples from a recent youth marijuana awareness campaign called *Talk with Them*. In the past 9 months (since August 2016), have you seen or heard any of the *Talk with Them* messages?  	▶ No [SKIPS TO Q23] ▶ Yes ▶ Don't know/not sure [SKIPS TO Q23]	▶ Ever seen/heard *Talk with Them* messages
20. During the period when you saw or heard the *Talk with Them* messages **the most**, about how often did you see or hear the messages?	▶ Never ▶ Rarely (once or twice) ▶ Sometimes (every few weeks) ▶ Often (weekly) ▶ Very Often (multiple times per week)	*Talk with Them* peak campaign exposure
21. Please say how much you disagree or agree with the following statements about the *Talk with Them* campaign:		
a. Got my attention	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
b. Was believable	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	

Question	Response Options	Comments
c. Said something important to me	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
d. Made me think about talking with my child about marijuana use	▶ Not applicable, I don't have a child aged 12 - 20. ▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
22. What do you think the *Talk with Them* campaign is trying to say about youth marijuana use?	▶ (open-ended)	
23. Below are some examples from a recent youth marijuana awareness campaign for youth and young adults, called *Stay True to You*. In the past 9 months (since August 2016), have you seen or heard any of the *Stay True to You* messages?    	▶ No [SKIPS TO END OF SURVEY] ▶ Yes ▶ Don't know/not sure [SKIPS TO END OF SURVEY]	*Stay True to You* campaign "ever" exposure/recall

Question	Response Options	Comments
24. During the period when you saw or heard the *Stay True to You* messages **the most**, about how often did you see or hear the messages?	▶ Never ▶ Rarely (once or twice) ▶ Sometimes (every few weeks) ▶ Often (weekly) ▶ Very Often (multiple times per week)	*Stay True to You* peak campaign exposure
25. In the **past 3 months** (since December 2016), about how often have you seen or hear the *Stay True to You* messages?	▶ Never ▶ Rarely (once or twice) ▶ Sometimes (Every few weeks) ▶ Often (Weekly) ▶ Very Often (Multiple times per week)	▶ *Stay True to You* "3 month" campaign exposure
26. Did you hear about the *Stay True to You* campaign through news reporting (e.g., online news articles, TV or radio news reporting)?	▶ No ▶ Yes ▶ Don't know/not sure	
27. Please say how much you disagree or agree with the following statements about the *Stay True to You* campaign:		
a. Got my attention.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
b. Was believable.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
c. Said something important to me.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
d. Changed my perspective on youth marijuana use.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	

Question	Response Options	Comments
e. Made me think about talking with my child about marijuana use.	▶ Not applicable, I don't have a child aged 12 - 20. ▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
f. Taught me something new.	▶ Strongly disagree ▶ Somewhat disagree ▶ Neither disagree or agree ▶ Somewhat agree ▶ Strongly agree	
28. What do you think the *Stay True to You* campaign is trying to say about youth marijuana use?	▶ (open-ended)	

[Text that appears on final page of the Oregon Health/Parent Survey.]

Thank you for completing the Oregon Survey. **If you want to be entered into a drawing for a chance to win a $50 or $100 gift card**, please click here: https://www.surveymonkey.com/r/OregonAdultSurveyContactInfo.

Pass along the survey link to other parents or youth-serving adults! https://www.surveymonkey.com/r/OregonAdultSurvey

Oregon Survey Contact Information Survey

After participants complete the Oregon Survey, there is a link to this survey to collect contact information for the survey lottery.

You are eligible to enter a drawing for a $50 or $100 gift card. One $50 winner will be drawn every 50 surveys, and five $100 gift card winners will be drawn when the survey is over in a couple of weeks. Duplicate entries will be discarded. **Your contact information for the drawing will be saved in a separate location and can never be linked to your survey data.** We will never send you spam or sell your name to anyone else.

Question	Response Options
1. What is your email address?	[Open text field]
2. If you win a gift card, what kind of gift card would you like to receive?	▶ Target gift card ▶ Amazon gift card

[Text that appears on final page of the Contact Information Survey.]

Thank you again for completing the Oregon Survey. An RMC Research Corporation staff member will email you if you win a $50 or $100 gift card.

As a reminder, your participation in the Oregon survey is confidential. Your name or contact information will not be linked to your survey answers in any way. Your name and contact information will only be used if you win the drawing. If you have any questions or concerns about the survey, please contact Erin Stack at RMC Research Corporation at OregonSurvey@rmcres.com.

Pass along the survey link to other parents or youth-serving adults!
https://www.surveymonkey.com/r/OregonAdultSurvey

Before the group interview starts, please answer the following questions and return this sheet. Your response is voluntary, and no one will know how you answer. Your answers will only be used for the purposes of this study. Your answers will be put together with other participants in the group interview to describe the group. There is no risk of consequences based on how you answer.

1. During the past 30 days, on how many days did you use marijuana or hashish (weed, hash, pot)?	☐ 0 days ☐ 1 to 2 days ☐ 3 to 5 days ☐ 6 to 9 days	☐ 10 to 19 days ☐ 20 to 29 days ☐ All 30 days
2. How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?	☐ No risk ☐ Slight risk ☐ Moderate risk ☐ Great risk	

(These questions will be printed on half sheets of paper)

Youth and Young Adult Focus Group Guide

As participants enter, the facilitator and/or co-facilitator should:

- Confirm participants' ages and exposure to the *Stay True To You* campaign.
- Check participants in and collect parental consent forms from participants (if parents did not email).
- Ask participants to fill out a nametag using a fake name for confidentiality purposes.
- Orient participants to the refreshments and restrooms.
- Ask participants to read and sign the assent/consent form.
- Encourage participants to let you know if they have any questions before getting started.
- Ask participants to complete the short anonymous questionnaire about their marijuana use.

Notes for facilitators:

- Focus group purpose - Examine what components of the *Stay True To You* campaign are and are not resonating with youth and why.
- Campaign's overarching message - Marijuana can get in the way of youths' plans.
- Some participants may be medical marijuana users. If this comes up, steer the conversation back to recreational marijuana use.
- Be sure to emphasize the main question. Only ask probes if the group is not responding or not directly answering the question according to the question purpose.
- If more than 8 participants show up, split into 2 groups.

Introduction **5 minutes**

Good afternoon. Thank you for coming. My name is [Facilitator's name] and this is [other RMC Research staff person's name]. We are both from a research company in Portland called RMC Research.

We are working with the Public Health Division of the Oregon Health Authority to gather information about youth and young adults' impressions of the *Stay True To You* media campaign that started this past summer. The Oregon Health Authority or OHA is part of Oregon's government and they work to improve the health of Oregon's children and families. We plan to talk with you for 1 hour, so we should be finished by about [time].

Before we move on, do you have any questions?

As you saw in the assent/consent form you signed, your participation in this discussion is voluntary. You can decide to stop participating at any time, and you can choose to not answer a question if you do not want to answer it.

During the session, we may call you by the name on your nametag and [other RMC Research staff person's name] will be taking notes. We will also audio record the discussion to help us accurately report the ideas and opinions expressed. Your names will not be included in any notes including those made from the recording. Is everyone OK with the use of audio recording here? [*If a participant does not want to be recorded, then it will not be used.*]

The information from today will be included in a report we give to OHA, but no individual comments will be reported in such a way that someone could identify who said them. If you say something today that later you want to change or take out, you can contact us to let us know.

We are interested in what each of you has to say. There are no right or wrong answers. Because we understand that talking in a group setting can be uncomfortable sometimes, we will be encouraging the use of CHAT guidelines to help make you feel safe and welcome. [*CHAT acronym with words is written on a flip chart or white board.*]

- **Confidentiality**—What is said in this room should stay in this room. Please do not refer to today's discussion as a place where you heard certain information (even if you think the person who said it would not mind).
- **Honor**—If someone says something that you disagree with, we ask that you respond respectfully. We are very interested in what everyone has to say, so please try and find a way to express yourself respectfully.
- **Anonymity**—If you choose to talk about actual experiences, it is important not to name people or include any information that could be used to identify who you may be speaking about.
- **Team Trust**—We ask that you give each other the opportunity to speak. It is important that we let one person finish their thoughts before someone else speaks.

If at any time during the discussion you need a break, please let us know. Does anyone have questions before we begin?

Icebreaker **5 minutes**

Let's get started by introducing ourselves. Tell us your first name. Then please describe, if you could learn any skill, what would you like to learn? I'll start.

Community Context **5 minutes**

1. Let me ask you first to talk about what changes in your community or school have you noticed related to marijuana in the last year?

> **Question purpose:** Identify changes in the local community related to marijuana that the participants have observed.

Section 1: Recall of Campaign Ads **15 minutes**

Everyone here is between [depending on group: 13 - 14; 15 - 17; 18 - 20] years old and you all have seen the *Stay True To You* campaign. Let's talk more about the *Stay True To You* campaign video and audio messages you have seen and heard.

2. What do you remember about the *Stay True To You* campaign?
   Probes (*only ask if answers do not address*): What stuck with you?
   What kinds of messages did you see or hear?

> **Question purpose:** Identify the salience of the ad messages.

3. How do you feel when you hear or see the *Stay True To You* campaign?
   Probe: What does the slogan *Stay True To You* mean to you?

   Question purpose: Identify general feelings about the *Stay True To You* ads.

4. What have been your friends' and your reactions to the *Stay True To You* campaign?
   Probes: Have you talked with friends about the videos, radio messages, or posters (or other)?
   What did your friends and you say or talk about?

   Question purpose: Identify youth and young adults' reactions to the ads. Were the ads positively received? Were they connecting with the ad messages or mocking the messages? What stood out about the campaign?

5. What, if anything, did you take away from the *Stay True To You* campaign you saw or heard?
   ***Probes: *What did you take away about being a **role model** or about how your behavior may affect those younger than you?
   *What did you take away about **what might happen** if you use marijuana?
   *What is the campaign trying to say about possible health effects/effects on your brain?

   Question purpose: Identify what youth and young adults learned from the ads - health effects, risks, possible consequences, role modeling.

Section 2: Reactions to *Stay True To You* Campaign — 20 minutes

Now we are going to play you a few examples from the *Stay True To You* campaign and ask you specific questions about them. You may have already seen or heard these and they may be the ones you were just talking about. If that is the case, feel free to share any reactions you have after seeing or hearing them again now. [Show or play first 2 examples. Ask the following questions after showing them.]

- First 2 examples: 1) Nick and 2) Molly

6. What stood out to you about these examples?
   Probes: How did they make you feel?
   What did you like about them? What did you not like about them?

   Question purpose: Identify reactions about specific ads.

7. How did those messages make you feel about using or not using marijuana yourself?
   Probes: Why would you feel motivated to use or not use marijuana?
   What about the messages was believable and not believable?

   Question purpose: Identify youth and young adults' feelings toward marijuana use after watching the ads. What were reactions to the testimonial video(s)?

Show or play the remaining 2 examples. Ask the following questions again after showing.

- Second 2 examples: 1) Don't copy me and 2) Pandora radio ad

8. What stood out to you about these examples?
   Probes: How did they make you feel?
   What did you like about them? What did you not like about them?

   Question purpose: Identify reactions about specific ads.

9. How did those messages make you feel about using or not using marijuana yourself?
   Probes: Why would you feel motivated to use or not use marijuana?
   What about the messages was believable and not believable?

   Question purpose: Identify youth and young adults' feelings toward marijuana use after watching the ads.

10. OPTIONAL (check time; need at least 15 minutes for rest of Guide): How much would these examples catch your attention if you saw them online, in a mall, on a billboard or heard the audio on the radio?
    Probes: Would you watch them completely, until the end, if you saw them online?
    Why or why not?

    Question purpose: Identify what behaviors participants might engage in if they saw the ads.

Section 3: Feedback on the *Stay True To You* Campaign — 10 minutes

Think of the examples you just saw and heard **and the *Stay True To You* examples you saw and/or heard before you came here today**. We would like to get some feedback on what you think works and does not work about the *Stay True To You* campaign as a whole.

11. What, if anything, works for you about the campaign?
    Probe: What, if anything, do you like about the *Stay True To You* campaign?
    What parts stuck with you?

> **Question purpose:** Identify what participants like or feel is the most effective about the campaign.

12. What, if anything, didn't work for you about the *Stay True To You* campaign?
    Probe: What, if anything, do you not like about the campaign?
    What, if anything, would you change about the campaign?

> **Question purpose:** Identify what participants dislike or feel is the least effective about the campaign.

Closing — 5 minutes

13. Is there anything else we have not yet discussed that you would like to say, related to the *Stay True To You* campaign?

Thank you for participating in the discussion today. As a reminder, your participation and responses are confidential. If you have any questions or concerns about the discussion after you leave here today, please feel free to contact us at any time. [Hand out business cards.]

Because we really appreciate your help today, we have a gift card for each of you. [Give out incentives and have participants sign incentive receipt.]

Before the group interview starts, please answer the following questions and return this sheet. Your responses are voluntary. No one will know how you answer. Your answers will only be used for the purposes of this study. Your answers will be combined with other participants in the group interview. There is no risk of consequences based on how you answer.

1. How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?	☐ No risk ☐ Slight risk ☐ Moderate risk ☐ Great risk
2. To what extent do you agree or disagree with the following statement: ▪ **I am concerned about the negative impact of underage marijuana use on Oregon's youth.**	☐ Strongly Agree ☐ Agree ☐ Neither agree or disagree ☐ Disagree ☐ Strongly disagree
3. How long has it been since you last used recreational marijuana?	☐ More than 12 months ago ☐ More than 30 days but within the last 12 months ☐ During the last 30 days ☐ Never used

Adult Focus Group Guide

As participants enter, the facilitator and/or co-facilitator should:

- Confirm parent of child(ren) ages 12 - 20 and exposure to the *Talk With Them* or *Stay True to You* campaign.
- Orient participants to the refreshments and restrooms.
- Ask participants to fill out a nametag using a fake name for confidentiality purposes.
- Ask participants to read and sign the consent forms.
- Encourage participants to let you know if they have any questions before getting started.
- After signing the consent form, ask participants to complete the short anonymous questionnaire about their attitudes toward marijuana use.

Notes for facilitators:

- Focus group purpose - Examine what components of the *Talk With Them* and *Stay True to You* campaigns are and are not resonating with adults and why.
- *Stay True to You* campaign's overarching message for youth - Marijuana can get in the way of youths' plans.
- *Talk With Them* campaign's overarching message for parents - Talk to your children about marijuana use.
- Some participants may be medical marijuana users. If this comes up, steer the conversation back to recreational marijuana use.
- Participants may talk about adult marijuana use. If so, remind them the topic is about marijuana use by youth and young adults.
- Be sure to emphasize the main question. Only ask probes if the group is not responding or not directly answering the question according to the question purpose.
- If more than 8 participants show up, split into 2 groups.
- Bring 1 copy of Parent Guide in English, 1 copy in Spanish.

Introduction **5 minutes**

Good afternoon. Thank you for coming. My name is [Facilitator's name] and this is [other RMC Research staff person's name]. We are both from a research company in Portland called RMC Research.

We are working with the Public Health Division of the Oregon Health Authority to gather information about parents' impressions of youth marijuana use and the *Talk With Them* and *Stay True to You* media campaigns that started this past summer. The Oregon Health Authority or OHA is part of Oregon's government and they work to improve the health of Oregon's children and families. We plan to talk with you for 1 hour, so we should be finished by about [time].

Before we move on, do you have any questions?

As you saw in the consent form you signed, your participation in this discussion is voluntary. You can decide to stop participating at any time, and you can choose to not answer a question if you do not want to answer it.

Today we may call you by the name on your nametag and [other RMC Research staff person's name] will be taking notes. We will also audio record the discussion to help us accurately report the ideas and opinions expressed. However your name will not be included in any notes including those made from

the audio file. Is everyone OK with the use of audio recording here? [*If a participant does not want to be recorded, then it will not be used. Turn off audiotape.*]

The information from today will be included in a report we give to OHA, but no individual comments will be reported in such a way that someone could identify who said them. If you say something today that later you want to change or take out, you can contact us to let us know.

We are interested in what each of you has to say. There are no right or wrong answers. Because we understand that talking in a group setting can be uncomfortable sometimes, we will be encouraging the use of CHAT guidelines to help make you feel safe and welcome. [*CHAT acronym with words is written on a flip chart or white board.*]

- **Confidentiality**—What is said in this room should stay in this room. Please do not refer to today's discussion as a place where you heard certain information (even if you think the person who said it would not mind).
- **Honor**—If someone says something that you disagree with, we ask that you respond respectfully. We are very interested in what everyone has to say, so please try and find a way to express yourself respectfully.
- **Anonymity**—If you choose to talk about actual experiences, it is important not to name people or include any information that could be used to identify who you may be speaking about.
- **Team Trust**—We ask that you give each other the opportunity to speak. It is important that we let one person finish their thoughts before someone else speaks.

If at any time during the discussion you need a break, please let us know. Does anyone have questions before we begin?

Icebreaker **5 minutes**

Let's get started by introducing ourselves. Tell us your first name. Then please describe, if you could learn any skill, what would you like to learn? I'll start.

Community Context **5 minutes**

1. Let me start by asking you to talk about what changes in your community you have noticed related to marijuana in the last year?

Question purpose: Identify changes in the local community related to marijuana that the participants have observed.

Section 1: Recall of Campaign Ads **20 minutes**

Everyone here is a parent of at least one child between 12 - 20 years old. You also all have seen or heard the *Talk With Them* or *Stay True to You* campaigns. Let's talk more about the campaign videos and audio messages you have seen and heard.

2. What do you remember about the *Talk With Them* campaign?
   Probes (*only ask if answers do not address*): What stuck with you?
   What kinds of messages did you see or hear?
   What kind of messages do you remember that were directed at you as parents?

   Question purpose: Identify the salience of the ad messages.

3. What do you remember about the *Stay True to You* campaign?
   Probes (*only ask if answers do not address*): What stuck with you?
   What kinds of messages did you see or hear?

   Question purpose: Identify the salience of the ad messages.

4. In the last 3 months, have you talked with your child or children ages 12 - 20 about youth marijuana use?
   Probes: What prompted you to discuss youth marijuana use? What did you discuss? Did you discuss the risks of youth marijuana use?

   Question purpose: Identify whether parent have recently discussed youth marijuana use with their children. Identify if the campaign was a catalyst for parent-child marijuana discussions.

5. If you haven't talked to your child about youth marijuana use recently or at all, what were the reasons?

6. How many of you went to the *Talk with Them* website and downloaded or read through the Parent Guide? [Show Guide]

Question purpose: Identify parent use of website and Parent Guide.

Section 2: Reactions to *Talk With Them* and *Stay True to You* Campaigns

20 minutes

Now I am going to show you an example from the *Talk With Them* campaign and ask you specific questions about them. You may have already seen or heard this one. If that is the case, feel free to share any reactions you have after seeing or hearing it again now. [Play the *Talk with Them* example. Then ask the *Talk with Them* questions #7 and 8].

- *Talk with Them*: Dad driving TV spot

7. What stood out to you about this example?
   Probes: How did it make you feel?
   What did you like about it? What did you not like about it?

Question purpose: Identify reactions to specific ads.

8. How did this example make you feel about talking or not talking to your child or children about using marijuana?
   Probes: Did the example motivate you to talk or not talk to your children about youth marijuana use? Why or why not?

Question purpose: Identify parents' feelings toward talking about marijuana use with their children after watching the example.

Now I am going to play you a few examples from the *Stay True to You* campaign which were designed for youth and young adults specifically. I will ask you questions about them. You may have already seen

these examples. If that is the case, feel free to share any reactions you have after seeing them again now. [Play all 3 *Stay True to You* examples. Then ask questions #9 and 10].

- "Don't copy me"
- Not Alone
- Molly testimonial

9. What stood out to you about these examples?
   Probes: How did it make you feel?
   What did you like about it? What did you not like about it?

10. What about the messages was believable or unbelievable?

Question purpose: One purpose is to elicit reactions to the testimonial video "Molly"

Section 3: Feedback on the *Talk With Them* and *Stay True to You* Campaigns

5 minutes

11. Please think back to one of the written questions you answered at the beginning, about your attitude toward youth using marijuana. Has your attitude about youth marijuana use changed in the last few months?
    Probes (If yes): How have your thoughts about youth marijuana use changed?
    What changed your thinking?
    Probe: In general, what are your thoughts about youth using marijuana?

Closing

5 minutes

12. Is there anything else we have not yet discussed that you would like to mention related to either of the campaigns, or about youth using marijuana?

Thank you for participating in the discussion today. As a reminder, your participation and responses are confidential. If you have any questions or concerns about the discussion after you leave here today, please feel free to contact us at any time. [Hand out business cards. Give out incentives and have participants sign incentive receipt.]

Spanish-Speaking Adult Focus Group Guide

As participants enter, the facilitator and/or co-facilitator should:

- Confirm parent of child(ren) ages 12 - 20 and exposure to the *Talk With Them* or *Stay True To You* campaign.
- Orient participants to the refreshments and restrooms.
- Ask participants to fill out a nametag using a fake name for confidentiality purposes.
- Ask participants to read and sign the consent forms.
- Encourage participants to let you know if they have any questions before getting started.
- After signing the consent form, ask participants to complete the short anonymous questionnaire about their attitudes toward marijuana use.

Notes for facilitators:

- Focus group purpose - Examine what components of the *Talk With Them* or *Stay True To You* campaigns are and are not resonating with adults and why.
- *Stay True To You* campaign's overarching message for youth - Marijuana can get in the way of youths' plans.
- *Talk With Them* campaign's overarching message for parents - Talk to your children about marijuana use.
- Some participants may be medical marijuana users. If this comes up, steer the conversation back to recreational marijuana use.
- Participants may talk about adult marijuana use. If so, remind them the topic is about marijuana use by youth and young adults.
- Be sure to emphasize the main question. Only ask probes if the group is not responding or not directly answering the question according to the question purpose.
- If more than 8 participants show up, split into 2 groups.
- Bring 1 copy of Parent Guide in English, 1 copy in Spanish.

Introduction **5 minutes**

Good afternoon. Thank you for coming. My name is [Facilitator's name] and this is [other staff person's name]. We are both from [add PTT information].

We are working with the Public Health Division of the Oregon Health Authority to gather information about parents' impressions of the *Talk With Them* and *Stay True to You* media campaigns that started this past summer. The Oregon Health Authority or OHA is part of Oregon's government and they work to improve the health of Oregon's children and families. We plan to talk with you for 1 hour, so we should be finished by about [time].

Before we move on, do you have any questions?

As you saw in the consent form you signed, your participation in this discussion is voluntary. You can decide to stop participating at any time, and you can choose to not answer a question if you do not want to answer it.

During the session, we may call you by the name on your nametag and [other PPT staff person's name] will be taking notes. We will also audio record the discussion to help us accurately report the ideas and opinions expressed. However your name will not be included in any notes including those made from

the recording. Is everyone OK with the use of audio recording here? [*If a participant does not want to be recorded, then it will not be used.*]

The information from today will be included in a report we give to OHA, but no individual comments will be reported in such a way that someone could identify who said them. If you say something today that later you want to change or take out, you can contact us to let us know.

We are interested in what each of you has to say. There are no right or wrong answers. Because we understand that talking in a group setting can be uncomfortable sometimes, we will be encouraging the use of CHAT guidelines to help make you feel safe and welcome. [*CHAT acronym with words is written on a flip chart or white board.*]

- **Confidentiality**—What is said in this room should stay in this room. Please do not refer to today's discussion as a place where you heard certain information (even if you think the person who said it would not mind).
- **Honor**—If someone says something that you disagree with, we ask that you respond respectfully. We are very interested in what everyone has to say, so please try and find a way to express yourself respectfully.
- **Anonymity**—If you choose to talk about actual experiences, it is important not to name people or include any information that could be used to identify who you may be speaking about.
- **Team Trust**—We ask that you give each other the opportunity to speak. It is important that we let one person finish their thoughts before someone else speaks.

If at any time during the discussion you need a break, please let us know. Does anyone have questions before we begin?

Icebreaker **5 minutes**

Let's get started by introducing ourselves. Tell us your first name. Then please describe, if you could learn any skill, what would you like to learn? I'll start.

Community Context **5 minutes**

1. Let me start by asking you to talk about what changes in your community you have noticed related to marijuana in the last year?

Question purpose: Identify changes in the local community related to marijuana that the participants have observed.

Section 1: Recall of Campaign Ads **20 minutes**

Everyone here is a parent of at least one child between 12 - 20 years old. You also all have seen or heard the *Talk With Them* or *Stay True to You* campaigns. Let's talk more about the campaign videos and audio messages you have seen and heard.

2. What do you remember about the *Talk With Them* campaign?
   Probes (*only ask if answers do not address*): What stuck with you?
   What kinds of messages did you see or hear?
   What kind of messages do you remember that were directed at you as parents?

   Question purpose: Identify the salience of the ad messages.

3. What do you remember about the *Stay True to You* campaign?
   Probes (*only ask if answers do not address*): What stuck with you?
   What kinds of messages did you see or hear?

   Question purpose: Identify the salience of the ad messages.

4. In the last 3 months, have you talked with your child or children ages 12 - 20 about youth marijuana use?
   Probes: What prompted you to discuss youth marijuana use? What did you discuss? Did you discuss the risks of youth marijuana use?

   Question purpose: Identify whether parent have recently discussed youth marijuana use with their children. Identify if the campaign was a catalyst for parent-child marijuana discussions.

5. If you haven't talked to your child about youth marijuana use recently or at all, what were the reasons?

6. How many of you went to the *Talk with Them* website and downloaded or read through the Parent Guide? [Show Guide]

Question purpose: Identify parent use of website and Parent Guide.

Section 2: Reactions to *Talk With Them* and *Stay True to You* Campaigns

20 minutes

Now I am going to play you 2 examples from the *Talk With Them* campaign and ask you questions about them. You may have already seen or heard these. If that is the case, feel free to share any reactions you have after seeing or hearing it again now. [Play 2 examples. Then ask the *Talk with Them* questions #7 and 8].

- *Talk with Them*: Dad driving TV spot
- *Talk with Them*: Spanish radio example

7. What stood out to you about these examples?
   Probes: How did they make you feel?
   What did you like about them? What did you not like about them?

Question purpose: Identify reactions to specific ads.

8. How did these examples make you feel about talking or not talking to your child or children about using marijuana?
   Probes: Did the examples motivate you to talk or not talk to your children about youth marijuana use? Why or why not?

Question purpose: Identify parents' feelings toward talking about marijuana use with their children after watching the examples.

Now I am going to play you a few examples from the *Stay True to You* campaign which are in English. These were designed for youth and young adults specifically. I will ask you questions about them. You may have already heard or seen these examples. If so, feel free to share any reactions you have after seeing them again now. [Play 2 *Stay True to You* examples. Then ask questions #9 and 10].

- *Stay True to You*: "Don't copy me"
- *Stay True to You*: Laura testimonial

9. What stood out to you about these examples?
   Probes: How did it make you feel?
   What did you like about it? What did you not like about it?

10. What about the messages was believable or unbelievable?

Question purpose: One purpose is to elicit reactions to the testimonial video, "Laura."

Section 3: Feedback on the *Talk With Them* and *Stay True to You* Campaigns

10 minutes

11. Please think back to one of the written questions you answered at the beginning, about your attitude toward youth using marijuana. Has your attitude about youth marijuana use changed in the last few months?
    Probes (If yes): How have your thoughts about youth marijuana use changed?
    What changed your thinking?
    Probe: In general, what are your thoughts about youth using marijuana?

12. As a Hispanic parent in your community, what do you think are the important messages for youth to hear about marijuana? What do you think is the best way to communicate those messages to your child?

Question purpose: Elicit context or issues as Hispanic parent that inform parents' thinking about youth marijuana use, talking with their children about topic, etc.

Closing

3 minutes

13. Is there anything else we have not yet discussed that you would like to mention related to either of the campaigns, or about youth using marijuana?

Thank you for participating in the discussion today. As a reminder, your participation and responses are confidential. If you have any questions or concerns about the discussion after you leave here today, please feel free to contact us at any time. [Hand out business cards. Give out incentives and have participants sign incentive receipt.]

Appendix E
Youth and Young Adult Survey Item Responses

How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?

	Pilot			Comparison		
Risk Level	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
No risk	20.4%	22.6%	23.5%	29.9%	34.0%	32.8%
Slight risk	35.1%	36.5%	37.7%	37.3%	34.1%	34.2%
Moderate risk	29.9%	26.3%	24.9%	22.8%	21.0%	22.5%
Great risk	14.5%	14.6%	14.0%	10.0%	10.9%	10.4%

Note. Baseline pilot *n* = 1,461; Baseline comparison *n* = 1,013; Mid-evaluation pilot *n* = 1,460; Mid-evaluation comparison *n* = 1,089; Evaluation end pilot *n* = 1,404; Evaluation end comparison *n* = 967.

If one of your best friends were to offer you marijuana, would you use it?

	Pilot			Comparison		
Likelihood of Use	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Definitely not	40.6%	37.0%	35.3%	33.5%	33.3%	32.1%
Probably not	23.2%	18.7%	20.8%	22.6%	20.6%	22.9%
Probably yes	19.5%	21.5%	21.5%	21.8%	20.1%	22.3%
Definitely yes	16.7%	22.8%	22.4%	22.2%	26.0%	22.8%

Note. Baseline pilot *n* = 1,460; Baseline comparison *n* = 1,012; Mid-evaluation pilot *n* = 1,461; Mid-evaluation comparison *n* = 1,087; Evaluation end pilot *n* = 1,403; Evaluation end comparison *n* = 967.

How likely is it that you will use marijuana, at least once or twice, over the next 12 months?

	Pilot			Comparison		
Likelihood of Use	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
I definitely will not use	43.9%	42.5%	38.0%	37.4%	36.2%	36.7%
I probably will not use	20.4%	14.8%	17.4%	19.0%	17.9%	18.3%
I probably will use	12.5%	13.6%	15.6%	16.1%	13.6%	15.8%
I definitely will use	23.2%	29.1%	29.0%	27.5%	32.4%	29.2%

Note. Baseline pilot *n* = 1,462; Baseline comparison *n* = 1,013; Mid-evaluation pilot *n* = 1,461; Mid-evaluation comparison *n* = 1,086; Evaluation end pilot *n* = 1,401; Evaluation end comparison *n* = 967.

How likely is it that you will use marijuana before you are age 21?

	Pilot			Comparison		
Likelihood of Use	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
I definitely will not use	32.6%	31.2%	30.1%	27.6%	29.8%	28.1%
I probably will not use	21.0%	16.8%	17.1%	19.0%	15.6%	17.5%
I probably will use	15.3%	13.4%	14.6%	16.2%	15.3%	16.3%
I definitely will use	31.1%	38.6%	38.2%	37.2%	39.2%	38.1%

Note. Baseline pilot *n* = 1,457; Baseline comparison *n* = 1,010; Mid-evaluation pilot *n* = 1,457; Mid-evaluation comparison *n* = 1,084; Evaluation end pilot *n* = 1,404; Evaluation end comparison *n* = 964.

During the past 30 days, on how many days did you use marijuana or hashish (weed, hash, pot)?

	Pilot			Comparison		
Use	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
0 days	71.0%	64.5%	65.4%	62.8%	59.4%	62.1%
1 or 2 days	8.1%	8.4%	7.8%	8.5%	6.8%	7.9%
3 to 5 days	3.5%	4.4%	3.4%	4.6%	5.3%	5.4%
6 to 9 days	3.0%	3.2%	4.1%	2.8%	3.5%	3.0%
10 to 19 days	4.6%	4.2%	6.7%	5.4%	5.5%	6.4%
20 to 29 days	5.0%	7.3%	5.8%	6.9%	7.5%	6.2%
All 30 days	4.8%	8.1%	6.8%	8.9%	12.2%	9.0%

Note. Baseline pilot *n* = 1,458; Baseline comparison *n* = 1,007; Mid-evaluation pilot *n* = 1,461; Mid-evaluation comparison *n* = 1,088; Evaluation end pilot *n* = 1,400; Evaluation end comparison *n* = 966.

Using marijuana limits a person's ability to have memorable experiences.

	Pilot			Comparison		
Level of Agreement	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	19.6%	22.4%	21.0%	24.5%	28.6%	26.1%
Disagree	20.4%	18.9%	22.6%	18.8%	20.4%	21.4%
Neither agree or disagree	20.8%	17.7%	17.7%	20.0%	19.1%	19.5%
Agree	23.8%	26.6%	23.4%	24.5%	19.8%	20.9%
Strongly agree	15.3%	14.3%	15.3%	12.1%	12.1%	12.1%

Note. Baseline pilot *n* = 1,462; Baseline comparison *n* = 1,014; Mid-evaluation pilot *n* = 1,461; Mid-evaluation comparison *n* = 1,088; Evaluation end pilot *n* = 1,403; Evaluation end comparison *n* = 967.

Using marijuana makes being a teenager easier and more fun.

	Pilot			Comparison		
Level of Agreement	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	34.4%	29.2%	28.8%	30.0%	29.0%	27.5%
Disagree	18.3%	18.3%	18.7%	17.0%	14.8%	17.6%
Neither agree or disagree	28.8%	30.4%	31.7%	31.8%	32.7%	30.8%
Agree	14.2%	16.7%	15.6%	15.0%	16.3%	16.5%
Strongly agree	4.4%	5.5%	5.3%	6.2%	7.2%	7.5%

Note. Baseline pilot *n* = 1,458; Baseline comparison *n* = 1,011; Mid-evaluation pilot *n* = 1,461; Mid-evaluation comparison *n* = 1,086; Evaluation end pilot *n* = 1,404; Evaluation end comparison *n* = 967.

I worry that if I use marijuana, it may encourage those who look up to me to use marijuana (for example, a younger brother or sister).

	Pilot			Comparison		
Level of Agreement	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	14.0%	15.6%	14.3%	13.2%	14.0%	12.2%
Disagree	9.1%	10.6%	10.5%	12.4%	13.0%	11.2%
Neither agree or disagree	17.0%	17.0%	17.8%	19.2%	20.0%	25.2%
Agree	29.9%	25.8%	27.0%	27.1%	30.4%	26.3%
Strongly agree	30.0%	31.0%	30.5%	28.1%	22.6%	25.2%

Note. Baseline pilot *n* = 1,461; Baseline comparison *n* = 1,010; Mid-evaluation pilot *n* = 1,462; Mid-evaluation comparison *n* = 1,088; Evaluation end pilot *n* = 1,402; Evaluation end comparison *n* = 966.

Using marijuana could make it harder to remember things I learn at school or work.

	Pilot			Comparison		
Level of Agreement	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	10.8%	12.9%	12.8%	15.8%	18.5%	16.3%
Disagree	11.9%	14.3%	14.1%	13.8%	15.2%	16.0%
Neither agree or disagree	14.5%	14.3%	15.3%	18.3%	17.0%	16.2%
Agree	31.2%	28.7%	26.6%	27.3%	25.9%	26.5%
Strongly agree	31.6%	29.7%	31.3%	24.9%	23.4%	24.9%

Note. Baseline pilot *n* = 1,454; Baseline comparison *n* = 1,011; Mid-evaluation pilot *n* = 1,461; Mid-evaluation comparison *n* = 1,088; Evaluation end pilot *n* = 1,401; Evaluation end comparison *n* = 967.

About what percent of Oregon high school juniors do you think currently smoke marijuana?

Perceived % Use by Youth	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
20% (1 in 5)	16.9%	31.1%	23.4%	10.3%	16.6%	16.1%
40% (2 in 5)	41.2%	36.3%	38.9%	41.0%	41.8%	38.9%
60% (3 in 5)	34.1%	25.8%	30.9%	39.1%	33.3%	34.9%
80% (4 in 5)	7.8%	6.8%	6.7%	9.6%	8.3%	10.1%

Note. Baseline pilot *n* = 1,454; Baseline comparison *n* = 1,012; Mid-evaluation pilot *n* = 1,462; Mid-evaluation comparison *n* = 1,089; Evaluation end pilot *n* = 1,403; Evaluation end comparison *n* = 967.

Because teenagers' brains are still developing, they are vulnerable to the negative effects of marijuana.

Level of Agreement	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	4.3%	4.8%	5.4%	6.2%	8.8%	6.0%
Disagree	7.2%	5.8%	8.0%	10.3%	9.6%	9.9%
Neither agree or disagree	12.7%	15.9%	13.3%	16.5%	15.0%	16.3%
Agree	33.5%	34.0%	32.8%	32.2%	34.7%	33.2%
Strongly agree	42.2%	39.4%	40.5%	34.8%	32.0%	34.6%

Note. Baseline pilot *n* = 1,454; Baseline comparison *n* = 1,012; Mid-evaluation pilot *n* = 1,457; Mid-evaluation comparison *n* = 1,088; Evaluation end pilot *n* = 1,404; Evaluation end comparison *n* = 966.

If you're under age 21 and caught with marijuana, you could face a pretty steep fine, community service or even court-ordered drug treatment.

Agreement	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Disagree	14.4%	16.5%	14.8%	16.6%	20.0%	19.2%
Agree	85.6%	83.5%	85.2%	83.4%	80.0%	80.8%

Note. Baseline pilot *n* = 1,451; Baseline comparison *n* = 1,009; Mid-evaluation pilot *n* = 1,457; Mid-evaluation comparison *n* = 1,080; Evaluation end pilot *n* = 1,401; Evaluation end comparison *n* = 966.

Since August 2016, have you seen or heard any ads, videos, posters, or radio about the negative effects of marijuana use on youth?

	Pilot			Comparison		
Viewed Ads	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
No	—	10.4%	13.6%	—	41.2%	39.8%
Yes	—	81.6%	78.3%	—	37.4%	39.3%
Don't know/Not sure	—	7.9%	8.1%	—	21.5%	20.9%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,459; Mid-evaluation comparison *n* = 1,089; Evaluation end pilot *n* = 1,403; Evaluation end comparison *n* = 967.

Since August 2016, have you seen or heard any of the *Stay True to You* messages or seen the logo?

	Pilot			Comparison		
Viewed Ads	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
No	—	11.5%	12.8%	—	65.6%	62.6%
Yes	—	84.9%	83.2%	—	20.8%	23.2%
Don't know/Not sure	—	3.6%	4.0%	—	13.6%	14.3%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,462; Mid-evaluation comparison *n* = 1,089; Evaluation end pilot *n* = 1,404; Evaluation end comparison *n* = 967.

In the past 3 months, about how often have you seen or heard the *Stay True to You* messages?

	Pilot			Comparison		
Frequency Viewed *Stay True to You*	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Never	—	0.9%	3.6%	—	6.0%	13.1%
Rarely (once or twice)	—	9.6%	19.2%	—	37.9%	45.1%
Sometimes (Every few weeks)	—	22.6%	33.0%	—	35.4%	27.2%
Often (Weekly)	—	30.4%	25.9%	—	14.9%	9.4%
Very Often (Multiple times per week)	—	36.6%	18.4%	—	5.8%	5.2%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation time frame covered August to November 2016; Evaluation end time frame covered December 2016 to March 2017. Mid-evaluation pilot *n* = 1,212; Mid-evaluation comparison *n* = 224; Evaluation end pilot *n* = 1,121; Evaluation end comparison *n* = 213.

During the period when you saw or heard the *Stay True to You* messages the most, about how often did you see or hear the messages?

Frequency Viewed *Stay True to You*	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Never	—	—	0.6%	—	—	7.4%
Rarely (once or twice)	—	—	12.4%	—	—	42.8%
Sometimes (Every few weeks)	—	—	27.8%	—	—	29.8%
Often (Weekly)	—	—	28.5%	—	—	10.7%
Very Often (Multiple times per week)	—	—	30.7%	—	—	9.3%

Note. Dashes indicate data was not collected at this time point. Evaluation end pilot *n* = 1,121; Evaluation end comparison *n* = 215.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Got my attention.

Level of Agreement	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	—	6.9%	8.8%	—	12.3%	15.4%
Disagree	—	11.0%	11.4%	—	13.2%	14.0%
Neither agree or disagree	—	16.7%	20.1%	—	23.5%	24.8%
Agree	—	44.7%	43.0%	—	38.4%	31.3%
Strongly agree	—	20.7%	16.6%	—	12.7%	14.5%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,218; Mid-evaluation comparison *n* = 240; Evaluation end pilot *n* = 1,122; Evaluation end comparison *n* = 214.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Was believable.

Level of Agreement	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	—	19.8%	20.2%	—	14.7%	17.8%
Disagree	—	19.6%	18.4%	—	21.4%	17.3%
Neither agree or disagree	—	15.8%	15.2%	—	18.5%	18.7%
Agree	—	28.8%	29.8%	—	27.5%	30.8%
Strongly agree	—	16.1%	16.5%	—	17.9%	15.4%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,216; Mid-evaluation comparison *n* = 240; Evaluation end pilot *n* = 1,122; Evaluation end comparison *n* = 214.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Said something important to me.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	25.1%	25.1%	—	24.0%	28.5%
Disagree	—	16.8%	19.4%	—	15.8%	13.1%
Neither agree or disagree	—	22.1%	20.5%	—	21.1%	26.6%
Agree	—	17.4%	20.5%	—	24.0%	17.3%
Strongly agree	—	18.6%	14.5%	—	15.2%	14.5%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,214; Mid-evaluation comparison *n* = 239; Evaluation end pilot *n* = 1,121; Evaluation end comparison *n* = 214.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Made me think twice about using marijuana at this time in my life.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	35.6%	33.8%	—	38.3%	34.6%
Disagree	—	13.7%	14.1%	—	11.5%	14.5%
Neither agree or disagree	—	19.2%	22.6%	—	20.8%	22.4%
Agree	—	13.2%	15.2%	—	13.9%	13.6%
Strongly agree	—	18.2%	14.3%	—	15.4%	15.0%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,216; Mid-evaluation comparison *n* = 240; Evaluation end pilot *n* = 1,122; Evaluation end comparison *n* = 214.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Taught me something new.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	—	35.6%	—	—	36.4%
Disagree	—	—	15.1%	—	—	15.9%
Neither agree or disagree	—	—	18.9%	—	—	20.1%
Agree	—	—	20.0%	—	—	15.4%
Strongly agree	—	—	10.4%	—	—	12.1%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 1,216; Mid-evaluation comparison *n* = 240; Evaluation end pilot *n* = 1,121; Evaluation end comparison *n* = 214.

Please say how much you disagree or agree with the following statements.
The *Stay True to You* campaign . . . Made me think twice about using marijuana at my age.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	33.0%	—	—	37.5%	—
Disagree	—	11.8%	—	—	12.3%	—
Neither agree or disagree	—	19.6%	—	—	14.7%	—
Agree	—	15.0%	—	—	19.1%	—
Strongly agree	—	20.6%	—	—	16.5%	—

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot n = 1,216; Mid-evaluation comparison n = 240.

Appendix F
Adult Survey Item Responses

How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?

	Pilot			Comparison		
Risk Level	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
No risk	10.4%	12.6%	11.0%	15.7%	12.7%	12.0%
Slight risk	23.8%	26.9%	24.6%	27.6%	30.0%	20.7%
Moderate risk	34.7%	32.4%	32.3%	29.8%	34.2%	36.4%
Great risk	31.0%	28.1%	32.1%	27.0%	23.2%	30.9%

Note. Baseline pilot *n* = 738; Baseline comparison *n* = 319; Mid-evaluation pilot *n* = 633; Mid-evaluation comparison *n* = 237; Evaluation end pilot *n* = 480; Evaluation end comparison *n* = 401.

I am concerned about the negative impact of underage marijuana use on Oregon's youth.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	7.5%	9.2%	7.9%	9.4%	11.0%	6.2%
Disagree	11.0%	13.0%	9.8%	11.0%	13.9%	9.5%
Neither agree or disagree	11.3%	11.8%	10.0%	10.3%	16.0%	8.5%
Agree	24.6%	25.9%	27.1%	22.3%	20.7%	31.1%
Strongly agree	45.7%	40.1%	45.2%	47.0%	38.4%	44.8%

Note. Baseline pilot *n* = 737; Baseline comparison *n* = 319; Mid-evaluation pilot *n* = 633; Mid-evaluation comparison *n* = 237; Evaluation end pilot *n* = 480; Evaluation end comparison *n* = 402.

Oregon communities should engage in appropriate activities to reduce underage marijuana use.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	5.3%	6.2%	6.7%	5.6%	8.0%	5.0%
Disagree	4.2%	8.6%	4.8%	5.3%	7.2%	5.3%
Neither agree or disagree	10.9%	11.3%	11.5%	11.3%	17.3%	10.0%
Agree	24.1%	27.6%	25.4%	29.2%	25.3%	27.8%
Strongly agree	55.4%	46.4%	51.7%	48.6%	42.2%	51.9%

Note. Baseline pilot *n* = 734; Baseline comparison *n* = 319; Mid-evaluation pilot *n* = 631; Mid-evaluation comparison *n* = 237; Evaluation end pilot *n* = 480; Evaluation end comparison *n* = 399.

In the last 3 months, have you talked with your child about the risks of marijuana use?

	Pilot			Comparison		
Talked With Child	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
I do not have a child between the ages of 12–20.	18.0%	22.2%	16.0%	14.4%	16.8%	12.9%
No	16.9%	18.3%	17.3%	19.4%	19.7%	11.7%
Yes	65.1%	59.5%	66.7%	66.1%	63.4%	75.4%

Note. Baseline pilot *n* = 733; Baseline comparison *n* = 319; Mid-evaluation pilot *n* = 630; Mid-evaluation comparison *n* = 238; Evaluation end pilot *n* = 481; Evaluation end comparison *n* = 402.

I worry that if I use marijuana, it may encourage those who look up to me to use marijuana (for example, my child or children I work with).

	Pilot			Comparison		
Level of Agreement	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	15.1%	14.8%	14.6%	15.1%	19.5%	10.2%
Disagree	9.2%	14.4%	9.0%	9.4%	12.3%	8.0%
Neither agree or disagree	13.1%	11.3%	12.3%	12.9%	15.7%	15.0%
Agree	17.9%	16.5%	14.0%	19.5%	16.1%	19.7%
Strongly agree	44.7%	43.0%	50.0%	43.1%	36.4%	47.1%

Note. Baseline pilot *n* = 727; Baseline comparison *n* = 318; Mid-evaluation pilot *n* = 630; Mid-evaluation comparison *n* = 236; Evaluation end pilot *n* = 478; Evaluation end comparison *n* = 401.

How long has it been since you last used recreational marijuana?

	Pilot			Comparison		
Time Since Last Use	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Never used	37.9%	35.0%	46.5%	31.9%	33.6%	42.7%
More than 12 months ago	32.5%	28.0%	27.6%	34.9%	27.5%	35.5%
More than 30 days but within the last 12 months	5.9%	11.8%	6.6%	5.2%	10.0%	5.1%
During the last 30 days	23.7%	25.2%	19.3%	28.0%	28.8%	16.6%

Note. Baseline pilot *n* = 726; Baseline comparison *n* = 307; Mid-evaluation pilot *n* = 611; Mid-evaluation comparison *n* = 229; Evaluation end pilot *n* = 456; Evaluation end comparison *n* = 391.

Using marijuana could make it harder for youth to remember things they learn at school or work.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	5.4%	5.5%	4.6%	8.1%	7.4%	4.6%
Disagree	8.0%	9.4%	7.0%	7.8%	6.1%	4.1%
Neither agree or disagree	10.3%	10.9%	11.8%	12.9%	15.7%	10.5%
Agree	28.5%	27.3%	23.8%	20.1%	26.2%	35.5%
Strongly agree	47.9%	46.8%	52.8%	51.1%	44.5%	45.4%

Note. Baseline pilot *n* = 727; Baseline comparison *n* = 309; Mid-evaluation pilot *n* = 615; Mid-evaluation comparison *n* = 229; Evaluation end pilot *n* = 458; Evaluation end comparison *n* = 392.

About what percent of Oregon high school juniors do you think currently smoke marijuana?

	Pilot			Comparison		
Perceived % Use By Youth	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
20% (1 in 5)	24.8%	34.2%	30.6%	25.6%	27.3%	23.9%
40% (2 in 5)	41.3%	42.3%	39.1%	43.8%	42.9%	46.1%
60% (3 in 5)	28.7%	19.8%	25.3%	25.0%	23.8%	24.7%
80% (4 in 5)	5.2%	3.8%	5.0%	5.5%	6.1%	5.3%

Note. Baseline pilot *n* = 726; Baseline comparison *n* = 308; Mid-evaluation pilot *n* = 612; Mid-evaluation comparison *n* = 231; Evaluation end pilot *n* = 458; Evaluation end comparison *n* = 393.

Because teenagers' brains are still developing, they are vulnerable to the negative effects of marijuana.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	4.3%	5.9%	3.7%	3.9%	6.1%	5.1%
Disagree	5.3%	4.4%	7.3%	6.8%	5.2%	2.0%
Neither agree or disagree	10.0%	8.8%	7.7%	7.4%	15.6%	7.1%
Agree	23.7%	23.7%	20.7%	26.2%	22.5%	27.0%
Strongly agree	56.7%	57.2%	60.7%	55.7%	50.6%	58.7%

Note. Baseline pilot *n* = 729; Baseline comparison *n* = 309; Mid-evaluation pilot *n* = 612; Mid-evaluation comparison *n* = 231; Evaluation end pilot *n* = 455; Evaluation end comparison *n* = 392.

If youth under age 21 are caught with marijuana, they could face a pretty steep fine, community service or even court-ordered drug treatment.

	Pilot			Comparison		
Agreement	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Disagree	28.3%	29.4%	26.0%	25.0%	31.3%	25.8%
Agree	71.7%	70.6%	74.0%	75.0%	68.7%	74.2%

Note. Baseline pilot *n* = 720; Baseline comparison *n* = 308; Mid-evaluation pilot *n* = 608; Mid-evaluation comparison *n* = 230; Evaluation end pilot *n* = 454; Evaluation end comparison *n* = 387.

Since August 2016, have you seen or heard any ads, videos, posters, or radio about the negative effects of marijuana use on youth?

	Pilot			Comparison		
Viewed Ads	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
No	—	33.7%	39.3%	—	65.4%	57.8%
Yes	—	56.5%	46.9%	—	24.2%	26.7%
Don't know/Not sure	—	9.8%	13.8%	—	10.4%	15.5%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 611; Mid-evaluation comparison *n* = 231; Evaluation end pilot *n* = 458; Evaluation end comparison *n* = 393.

To the right and below are some examples from a recent youth marijuana awareness campaign called *Talk With Them*. Since August 2016, have you seen or heard any of the *Talk With Them* messages?

	Pilot			Comparison		
Viewed Ads	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
No	—	54.1%	58.5%	—	76.2%	75.6%
Yes	—	32.3%	26.2%	—	14.3%	13.0%
Don't know/Not sure	—	13.6%	15.3%	—	9.5%	11.5%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 616; Mid-evaluation comparison *n* = 231; Evaluation end pilot *n* = 458; Evaluation end comparison *n* = 393.

In the past 3 months (since August 2016), about how often have you seen or heard the *Talk With Them* messages?

Frequency Viewed *Talk With Them*	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Never	—	2.6%	—	—	6.5%	—
Rarely (once or twice)	—	39.3%	—	—	54.8%	—
Sometimes (every few weeks)	—	33.5%	—	—	22.6%	—
Often (weekly)	—	21.5%	—	—	16.1%	—
Very often (multiple times per week)	—	3.1%	—	—	0.0%	—

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 191; Mid-evaluation comparison *n* = 31.

During the period when you saw or heard the *Talk With Them* messages the most, about how often did you see or hear the messages?

Frequency Viewed *Talk With Them*	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Never	—	—	3.4%	—	—	0.0%
Rarely (once or twice)	—	—	33.6%	—	—	51.0%
Sometimes (every few weeks)	—	—	35.3%	—	—	30.6%
Often (weekly)	—	—	23.5%	—	—	16.3%
Very often (multiple times per week)	—	—	4.2%	—	—	2.0%

Note. Dashes indicate data was not collected at this time point. Evaluation end pilot *n* = 119; Evaluation end comparison *n* = 49.

Please say how much you disagree or agree with the following statements about the *Talk With Them* campaign: Got my attention.

Level of Agreement	Pilot			Comparison		
	Baseline	Mid-Evaluation	Evaluation End	Baseline	Mid-Evaluation	Evaluation End
Strongly disagree	—	3.8%	3.4%	—	3.3%	2.1%
Disagree	—	7.0%	10.3%	—	6.7%	8.3%
Neither agree or disagree	—	17.3%	17.1%	—	33.3%	18.8%
Agree	—	44.9%	44.4%	—	43.3%	45.8%
Strongly agree	—	27.0%	24.8%	—	13.3%	25.0%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 185; Mid-evaluation comparison *n* = 30; Evaluation end pilot *n* = 117; Evaluation end comparison *n* = 48.

Please say how much you disagree or agree with the following statements about the *Talk With Them* campaign: Was believable.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	9.6%	9.7%	—	3.3%	2.1%
Disagree	—	11.2%	14.2%	—	13.3%	10.6%
Neither agree or disagree	—	14.9%	10.6%	—	33.3%	19.1%
Agree	—	39.4%	32.7%	—	40.0%	46.8%
Strongly agree	—	25.0%	32.7%	—	10.0%	21.3%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 188; Mid-evaluation comparison *n* = 30; Evaluation end pilot *n* = 113; Evaluation end comparison *n* = 47.

Please say how much you disagree or agree with the following statements about the *Talk With Them* campaign: Said something important to me.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	9.7%	7.0%	—	13.3%	6.4%
Disagree	—	11.4%	10.5%	—	10.0%	6.4%
Neither agree or disagree	—	21.1%	19.3%	—	26.7%	25.5%
Agree	—	34.6%	33.3%	—	26.7%	29.8%
Strongly agree	—	23.2%	29.8%	—	23.3%	31.9%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 185; Mid-evaluation comparison *n* = 30; Evaluation end pilot *n* = 114; Evaluation end comparison *n* = 47.

Please say how much you disagree or agree with the following statements about the *Talk With Them* campaign: Made me think about talking with my child about marijuana use

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	8.5%	9.4%	—	11.1%	0.0%
Disagree	—	9.1%	5.7%	—	3.7%	12.5%
Neither agree or disagree	—	26.8%	19.8%	—	25.9%	20.0%
Agree	—	30.5%	34.9%	—	33.3%	35.0%
Strongly agree	—	25.0%	30.2%	—	25.9%	32.5%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 164; Mid-evaluation comparison *n* = 27; Evaluation end pilot *n* = 106; Evaluation end comparison *n* = 40.

To the right and below are some examples from a recent youth marijuana awareness campaign for youth and young adults, called *Stay True to You*. Since August 2016, have you seen or heard any of the *Stay True to You* messages?

	Pilot			Comparison		
Viewed Ads	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
No	—	46.3%	51.7%	—	78.9%	75.6%
Yes	—	42.7%	34.5%	—	7.6%	10.5%
Don't know/Not sure	—	11.0%	13.8%	—	13.5%	13.8%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 602; Mid-evaluation comparison *n* = 223; Evaluation end pilot *n* = 449; Evaluation end comparison *n* = 390.

In the past 3 months, about how often have you seen or heard the *Stay True to You* messages?

	Pilot			Comparison		
Frequency Viewed *Stay True to You*	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Never	—	—	10.7%	—	—	7.5%
Rarely (once or twice)	—	30.2%	45.3%	—	64.7%	55.0%
Sometimes (every few weeks)	—	33.1%	25.3%	—	29.4%	22.5%
Often (weekly)	—	28.6%	14.0%	—	5.9%	15.0%
Very Often (multiple times per week)	—	8.1%	4.7%	—	0.0%	0.0%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation time frame covered August to November 2016; Evaluation end time frame covered December 2016 to March 2017. Mid-evaluation pilot *n* = 248; Mid-evaluation comparison *n* = 17; Evaluation end pilot *n* = 150; Evaluation end comparison *n* = 40.

During the period when you saw or heard the *Stay True to You* messages the most, about how often did you see or hear the messages?

	Pilot			Comparison		
Frequency Viewed *Stay True to You*	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Never	—	—	0.0%	—	—	2.5%
Rarely (once or twice)	—	—	43.7%	—	—	50.0%
Sometimes (every few weeks)	—	—	31.1%	—	—	35.0%
Often (weekly)	—	—	17.9%	—	—	12.5%
Very often (multiple times per week)	—	—	7.3%	—	—	0.0%

Note. Dashes indicate data was not collected at this time point. Evaluation end pilot *n* = 151; Evaluation end comparison *n* = 40.

Did you hear about the *Stay True to You* campaign through news reporting (e.g., online news articles, TV or radio news reporting)?

	Pilot			Comparison		
Viewed Ads	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
No	—	55.6%	44.0%	—	21.1%	35.9%
Yes	—	34.1%	33.3%	—	31.6%	38.5%
Don't know/Not sure	—	10.3%	22.7%	—	47.4%	25.6%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 252; Mid-evaluation comparison *n* = 19; Evaluation end pilot *n* = 150; Evaluation end comparison *n* = 39.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Got my attention.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	4.1%	2.6%	—	0.0%	5.0%
Disagree	—	7.7%	5.9%	—	5.3%	10.0%
Neither agree or disagree	—	12.6%	13.2%	—	26.3%	15.0%
Agree	—	45.1%	46.1%	—	47.4%	42.5%
Strongly agree	—	30.5%	32.2%	—	21.1%	27.5%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 246; Mid-evaluation comparison *n* = 19; Evaluation end pilot *n* = 152; Evaluation end comparison *n* = 40.

Please say how much you disagree or agree with the following statements. The *Stay True to You* campaign . . . Was believable.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	8.5%	6.6%	—	5.3%	7.5%
Disagree	—	11.3%	10.6%	—	5.3%	5.0%
Neither agree or disagree	—	13.7%	16.6%	—	21.1%	12.5%
Agree	—	37.5%	32.5%	—	52.6%	50.0%
Strongly agree	—	29.0%	33.8%	—	15.8%	25.0%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 248; Mid-evaluation comparison *n* = 19; Evaluation end pilot *n* = 151; Evaluation end comparison *n* = 40.

Please say how much you disagree or agree with the following statements.
The *Stay True to You* campaign . . . Said something important to me.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	10.9%	6.6%	—	5.3%	5.3%
Disagree	—	10.0%	6.0%	—	5.3%	7.9%
Neither agree or disagree	—	19.2%	22.5%	—	31.6%	18.4%
Agree	—	29.3%	28.5%	—	15.8%	44.7%
Strongly agree	—	30.5%	36.4%	—	42.1%	23.7%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 239; Mid-evaluation comparison *n* = 19; Evaluation end pilot *n* = 151; Evaluation end comparison *n* = 38.

Please say how much you disagree or agree with the following statements.
The *Stay True to You* campaign . . . Changed my perspective on youth marijuana use.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	33.6%	24.0%	—	10.5%	21.6%
Disagree	—	24.9%	14.4%	—	15.8%	16.2%
Neither agree or disagree	—	31.0%	39.7%	—	63.2%	45.9%
Agree	—	7.0%	13.0%	—	5.3%	10.8%
Strongly agree	—	3.5%	8.9%	—	5.3%	5.4%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 229; Mid-evaluation comparison *n* = 19; Evaluation end pilot *n* = 146; Evaluation end comparison *n* = 37.

Please say how much you disagree or agree with the following statements.
The *Stay True to You* campaign . . . Made me think about talking with my child about marijuana use.

	Pilot			Comparison		
Level of Agreement	**Baseline**	**Mid-Evaluation**	**Evaluation End**	**Baseline**	**Mid-Evaluation**	**Evaluation End**
Strongly disagree	—	10.0%	8.0%	—	5.9%	11.8%
Somewhat disagree	—	10.5%	6.6%	—	0.0%	5.9%
Neither disagree or agree	—	31.1%	30.7%	—	35.3%	29.4%
Somewhat agree	—	31.1%	31.4%	—	47.1%	38.2%
Strongly agree		17.2%	23.4%		11.8%	14.7%

Note. Dashes indicate data was not collected at this time point. Mid-evaluation pilot *n* = 209; Mid-evaluation comparison *n* = 17; Evaluation end pilot *n* = 137; Evaluation end comparison *n* = 34.

Appendix G
Youth Focus Group Analyses

Youth Focus Group Findings

WHAT CHANGES IN YOUR COMMUNITY OR SCHOOL HAVE YOU NOTICED RELATED TO MARIJUANA IN THE LAST YEAR?

In 4 of 6 (67%) youth focus groups, participants reported noticing increased consumption of marijuana in public within their communities.

- In 3 of 6 (50%) youth focus groups, participants reported an increase in marijuana odor in public spaces.
- In 1 of 6 (17%) youth focus groups, participants reported witnessing people driving while actively smoking marijuana or appearing under the influence of marijuana.

> Ever since [marijuana] was legalized in July a lot of people are a lot more open and willing to do it more in a public manner. They were more privately doing it before. (Medford 18–20-year-old youth)

In 3 of 6 (50%) youth focus groups, participants reported an increase in the visibility of dispensaries and marijuana-related products in the past year.

- In 2 of 6 (33%) youth focus groups, participants discussed the appearance of new marijuana stores in their community.
- In 1 of 6 (17%) youth focus groups, participants reported an increase in marijuana advertising.
- In 1 of 6 (17%) youth focus groups, participants discussed noticing an increase in marijuana insignia on items of clothing.

> If there's not a dispensary, there's a billboard advertising one. (Portland 18–20-year-old youth)

Numerous focus group participants reported changes in communication and/or attitudes related to marijuana in the past year.

- In 3 of 6 (50%) youth focus groups, participants reported an increase in marijuana-related discussions on social media.
- In 1 of 6 (17%) youth focus groups, participants reported that youth had been less secretive about marijuana use in the past year.

> I've noticed there are more social media posts about drugs and marijuana. (Medford 13–14-year-old youth)

In 2 of 6 (33%) youth focus groups, participants reported an increase in school-related issues associated with marijuana use.

- In 1 of 6 (17%) youth focus groups, participants reported noticing a decrease in student attendance.
- In 1 of 6 (17%) youth focus groups, participants reported an increase in marijuana-related school disciplinary incidents.

They can get [marijuana] easier . . . because of that, I've seen a decrease in people coming to their classes.
(Portland 15–17-year-old youth)

In 3 of 6 (50%) youth focus groups, participants reported an increase in marijuana use in the past year.

- Participants in 2 of 6 (33%) youth focus groups reported an increase in youth use of marijuana in the past year.
- In 2 of 6 (33%) youth focus groups, participants reported an increase in adult use of marijuana in the past year.
- In 1 of 6 (17%) youth focus groups, participants discussed the increased use of medicinal marijuana.

Now that it's legal, I see my high school-age [neighbor] riding by on his long board smoking his joint.
(Medford 18–20-year-old youth)

In 2 of 6 (33%) youth focus groups, participants reported an increase in visibility of the marijuana growth industry in the past year.

- Participants in 1 of 6 (17%) youth focus groups in Medford reported an increase in growth industry visibility as indicated by grow fences in the area.

There's a lot more pot farms; there's a lot more green fences. Now there's at least 5 and one going up to be a sixth.
(Medford 15–17-year-old youth)

In 5 of 6 (83%) youth focus groups, participants reported little to no changes related to marijuana in their communities in the past year.

- In 1 youth focus group, participants reported that marijuana use has always occurred in the community.

People still smoke weed. It just feels like they always have. It doesn't feel like anything new.
(Portland 15–17-year-old youth)

WHAT DO YOU REMEMBER ABOUT THE *STAY TRUE TO YOU* CAMPAIGN?

In 3 of 6 (50%) youth focus groups, participants had positive reactions when asked what they remembered of the *Stay True To You* campaign.

- In 3 of 6 (50%) youth focus groups, participants recalled thinking the ads were believable and realistic.
- In 2 of 6 (33%) youth focus groups, participants recalled liking the short length of the *Stay True To You* ads.

> This is someone talking about the effects and how it affected them and why they changed. I think those are the most effective commercials. (Portland 15–17-year-old youth)

In 4 of 6 (67%) youth focus groups, participants had negative reactions when asked what they remembered of the *Stay True To You* campaign.

- Youth focus group participants identified inaccuracies and/or unrealistic portrayals within the ads as the primary reasons for having negative reactions to the campaign.
- Youth focus group participants also discussed thinking the ads were too condescending or exaggerated the impacts of marijuana.

> They seemed so unrealistic . . . It's not necessarily that teenagers want to make fun of everything, we just want something that is true and honest. (Medford 18–20-year-old youth)

In 6 of 6 (100%) youth focus groups, participants were able to recall specific ads from the campaign.

- In 5 of 6 (83%) youth focus groups, participants remembered the ads that used statistics in their messaging.
- In 4 of 6 (67%) youth focus groups, participants recalled the testimonial ads.
- In 2 of 6 (33%) youth focus groups, participants recalled the *Stay True To You* logo.
- In 2 of 6 (33%) youth focus groups, participants remembered the ads involving role modeling messaging.

> I do really well with remembering numbers, so I remember the one that said 80% of high school juniors don't smoke marijuana. (Portland 18–20-year-old youth)

> I like the [ads] that [say] be a role model for your younger siblings. (Portland 15–17-year-old youth)

HOW DO YOU FEEL WHEN YOU HEAR OR SEE THE *STAY TRUE TO YOU* ADS?

In 5 of 6 (83%) youth focus groups, participants had positive reactions when asked how they remember feeling when they saw or heard the campaign *Stay True To You* ads.

- Participants in 2 of 6 (33%) focus groups liked the *Stay True To You* ads because they did not use condescending language.
- Participants in 2 of 6 (33%) focus groups reported feeling that the campaign ads normalized nonuse of marijuana among youth.
- In 2 of 6 (33%) youth focus groups, participants reported feeling the ads were relatable.

> Part of the reason why I don't skip [*Stay True To You* ads] is that they're not accusatory or interrogatory. They're just informative. They're really friendly. (Portland 18–20-year-old youth)

> [*Stay True To You*] kind of made me feel normal [for not using marijuana]. (Portland 13–14-year-old youth)

In 1 of 6 (17%) youth focus groups, participants had negative reactions when asked how they remember feeling when they saw or heard the *Stay True To You* campaign ads.

- Youth participants in the 1 focus group that reported negative reactions indicated feeling annoyed by the *Stay True To You* ads and felt the ads were inaccurate and/or unrealistic.

> I get kind of annoyed when I hear the ads, but I think that's more because what I thought was the dramatization of the numbers or the way the statistics seem manipulated to me. (Medford 15–17-year-old youth)

WHAT HAVE BEEN YOUR FRIENDS' AND YOUR REACTIONS TO THE *STAY TRUE TO YOU* CAMPAIGN?

In 3 of 6 (50%) youth focus groups, participants reported positive reactions among friends and/or for themselves related to the campaign ads.

- In 1 of 6 (17%) focus groups, youth participants reported liking that the *Stay True To You* ads did not use condescending or exaggerated language.
- In 1 of 6 (17%) focus groups, participants said that campaign messaging was shared on social media.

> I have heard more positive than negative reviews on this campaign [from my friends], because it's not necessarily bashing marijuana. I myself see it as a good campaign. (Medford 15–17-year-old youth)

In 3 or 6 (50%) youth focus groups, participants reported negative reactions among friends and/or for themselves related to the campaign ads.

- In 2 of 6 (33%) youth focus groups, participants reported that the ads were cheesy or relied on scare tactics.

> People have been making fun of [the *Stay True To You* campaign] because it went everywhere so fast and got in your face so quickly. It was somewhat shocking and some of them are a little silly.
> (Medford 15–17-year-old youth)

- In 1 of 6 (17%) youth focus groups, participants said they found the ads annoying.

> [My friends] that smoke avidly see [Stay Ture To You] as an annoyance. [The ads] are so annoying. They exaggerate things so much.
> (Medford 15–17-year-old youth)

In 3 of 6 (50%) youth focus groups, participants said that have not discussed the campaign with friends.

> I personally haven't heard anyone talking about the campaign.
> (Medford 15–17-year-old youth).

WHAT HAVE YOU TAKEN AWAY FROM THE *STAY TRUE TO YOU* CAMPAIGN?

The most prevalent takeaway from the *Stay True To You* campaign among youth focus group participants was that it reinforced participants' choice not to use marijuana and/or encouraged youth not to use.

- In 5 of 6 (83%) youth focus groups, participants said that the campaign encouraged youth not to use marijuana.
- In 4 of 6 (67%) youth focus groups, participants said that seeing the ads reinforced their decision not to use marijuana.
- In 2 of 6 (33%) youth focus groups, participants said that the statistics around nonuse versus use supported their decision not to smoke.

> I feel like it's backed up my choice of not [using marijuana]. The [*Stay True To You*] campaign has really given me examples of why I don't do [use marijuana anymore.
> (Medford 15–17-year-old youth)

> I think the [*Stay True To You*] campaign really acts to educate people about [marijuana use]. Those punch lines, those slogans that you can really throw out are helpful in an argument.
> (Medford 15–17-year-old youth)

- In 3 of 6 (50%) youth focus groups, participants discussed the testimonial ads that showed how marijuana use can have a detrimental impact on goals.
- In 2 of 6 (33%) youth focus groups, participants said the campaign informed them how marijuana use can impact family and others in life.

> [In one testimonial] a musician started smoking pot and it became more of a priority than his music. For musicians, artists, painters, writers that guy's speech could be powerful because it talks about how [smoking marijuana] can actually take away something.
> (Medford 15–17-year-old youth)

In 2 of 6 (33%) youth focus groups, participants said that the campaign had little to no impact on themselves or others.

- In 2 of 6 (33%) youth focus groups, participants said that the campaign did not resonate with them.
- In 2 of 6 (33%) youth focus groups, participants questioned whether the campaign had had an impact on youth already using marijuana.

> [*Stay True To You* ads] didn't change my views at all or affect me in any way. It's just another ad on TV, radio, or social media.
> (Medford 15–17-year-old youth)

> [*Stay True To You*] resonates with me, but I don't know if it resonates with people who are already smoking.
> (Portland 15–17-year-old youth)

WHAT STOOD OUT TO YOU ABOUT THESE *STAY TRUE TO YOU* EXAMPLES?

In 6 of 6 (100%) youth focus groups, some participants reacted positively to the *Stay True To You* examples they were shown.

- In 6 of 6 (100%) youth focus groups, participants said they found the examples relatable.
- In 4 of 6 (67%) youth focus groups, participants reported that the examples were informative.
- In 3 of 6 (50%) youth focus groups, participants said the examples were believable and realistic.

> I just feel that [the testimonials are] relatable because there's tension when you bring drugs into a situation. I appreciate the fact that she talks about how she wanted to be closer to her father, so that's why she talked to her father about the issue.
> (Medford 18–20-year-old youth)

> I liked the statistics a lot. It said eighty percent don't use it, that's good. The majority don't use it, which I think is a good message to get across.
> (Portland 15–17-year-old youth)

In 5 or more of 6 (83%) youth focus groups, participants discussed how the examples illustrated the impacts that youth marijuana use on family, friends, themselves, and their futures.

- In 5 of 6 (83%) youth focus groups, participants talked about the examples depicting the impacts that marijuana use can have on a user's family and friends.

> These videos remind me about affecting others, and I really don't want to affect others in a bad way, because that just sets up a bad influence about me to other people. (Medford 13–14-year-old youth)

- In 3 of 6 (50%) youth focus groups, participants discussed how the examples illustrated the impacts that marijuana use can have on an individual's future.
- In 4 of 6 (67%) youth focus groups, participants talked about the commercials discussing how marijuana can affect various users differently.

> [The example] focuses so much on how [marijuana use] can be different for people, which for me I would consider it to be the most important message that they should be trying to get out. You should be careful, because it can react with different people so differently, not only emotionally, but neurologically, physically, all these things. (Portland 15–17-year-old youth)

In 5 of 6 (83%) youth focus groups, some participants reacted negatively to the *Stay True To You* examples they were shown.

- In 4 of 6 (67%) youth focus groups, participants said that the focus of the ads was too narrow.
- In 4 of 6 (67%) youth focus groups, participants said that the examples were unrealistic or not believable.
- In 4 of 6 (67%) focus groups, participants said the examples were not relatable.

> When I see [the examples], I think weed affects everyone differently, right? So, I think I'd like to see more examples of people's experiences. (Portland 18–20-year-old youth)

- In 3 of 6 (50%) youth focus groups, participants said that the messaging in the ads was too negative.

> [The examples] looked kind of gloomy. This is a very important situation, but it's kind of gloomy. (Medford 13–14-year-old youth)

HOW DID THE EXAMPLES MAKE YOU FEEL ABOUT USING OR NOT USING MARIJUANA YOURSELF?

In 4 of 6 (67%) youth focus groups, participants reported that the *Stay True To You* examples made them think about the risks and side effects associated with personal marijuana use.

- In 2 of 6 (33%) youth focus groups, participants discussed how the examples made them think about how personal marijuana use can negatively impact family members, such as younger siblings.
- In 3 of 6 (50%) youth focus groups, participants talked about how the examples made them consider the various ways in which marijuana use could have a negative impact on their health and/or future.
- In 3 of 6 (50%) youth focus groups, participants discussed how the examples made them feel that people should consider the potential consequences of marijuana use before trying it.

> You're on the edge of a cliff, and it's not to say that marijuana is going to push you over, but it brings you to a spot where it can be used or abused, and I think, people are afraid for their younger siblings because it affects everybody differently. . . . It's a risk. (Medford 18–20-year-old youth)

> It just makes me think about other people's stances on it more. (Medford 18–20-year-old youth)

In 2 of 6 (33%) youth focus groups, participants reacted positively to the *Stay True To You* examples in relation to how they felt about personal marijuana use.

- In 2 of 6 (33%) youth focus groups, participants said they appreciated that the examples reflected peer influences related to marijuana use.

> It made me not want to use marijuana . . . With all the consequences, like you don't benefit anything . . . It affects your brain, it affects you, your family, your life, it affects everything and you don't get anything from it. (Portland 13–14-year-old youth)

- In 2 of 6 (33%) youth focus groups, participants reported that the campaign examples made them not want to use marijuana.

> The fact that it affected them badly with important situations makes me not want to [use marijuana], because it can affect me badly, as well, based on what happened. So I would not do it. (Medford 13–14-year-old youth)

In 3 of 6 (50%) youth focus groups, participants said that the *Stay True To You* examples did not have an impact on their feelings about personal marijuana use.

- In 3 of 6 (50%) focus groups, participants reported that the ads did not impact them and/or they felt indifferent toward them.
- In 1 of 6 (17%) focus groups, participants reported that the ads did not impact them because they were not planning on using marijuana in the immediate future.
- In 3 of 6 (50%) youth focus groups, participants said that they felt the examples were not realistic or believable.

> It hasn't changed my perspective at all, but it really is nice to know if I ever decide to go down this road I know what to expect and what to expect is that I can't expect what to expect. (Portland 18–20-year-old youth)

> I thought the fifty percent of juniors like not smoking weed was unrealistic. (Portland 13–14-year-old youth)

HOW MUCH WOULD THESE EXAMPLES CATCH YOUR ATTENTION IF YOU SAW THEM ONLINE, IN A MALL, OR ON A BILLBOARD OR HEARD THE AUDIO ON THE RADIO?

In 5 of 6 (83%) youth focus groups, participants said that the *Stay True To You* examples would catch their attention.

- In 2 of 6 (33%) youth focus groups, participants said that the examples caught their attention because the examples were relatable and resonated with them.
- Youth participants in 3 of 6 (50%) focus groups reported that the examples caught their attention because they were interested in the topic of youth marijuana use.
- In 2 of 6 (33%) youth focus groups, participants said that the examples caught their attention because the stories were interesting.

> The [examples] all catch my attention. . .I hope that these messages are out there more, because I feel like these would be informative. (Portland 18–20-year-old youth)

> I remember getting kind of interested in it and I watched it through because I wanted to watch it through, it seemed interesting. (Medford 13–14-year-old youth)

In 3 of 6 (50%) youth focus groups, participants reported that the *Stay True To You* examples would not catch their attention.

- In 2 of 6 (33%) focus groups, participants said that the examples were easy to ignore and/or forget.
- In 1 of 6 (17%) focus groups, participants said that the campaign examples were bland.

> I usually will mute it or something. Not that it's a waste of money to put it into stuff like that, but Spotify ads, Pandora ads, I think most people don't listen at all, or they might even get like irritated.
> (Portland 15–17-year-old youth)

> The first time [I saw an ad], I don't remember what it was, but it was kind of bland and forgettable, so I forgot it and the next time I saw it I just skipped it.
> (Medford 13–14-year-old youth)

WHAT WORKS FOR YOU ABOUT THE CAMPAIGN?

In 3 of 6 (50%) youth focus groups, participants said that the neutral, informative language used in the *Stay True To You* campaign was effective.

- Youth participants in 3 of 6 (50%) focus groups reported that they appreciated the neutral language used in the campaign ads.
- Youth participants in 1 of 6 (17%) focus groups liked that the ads provided information about youth marijuana use rather than strictly demonizing marijuana.
- In 2 of 6 (33%) youth focus groups, participants said they liked the use of statistics in the ads.

> They're not trying to sell you anything or tell you what to do, they're just saying this is some information we can provide you with, do what you will with it. But just so you know, here's effects, here's statistics, here's a situation that could happen.
> (Portland 15–17-year-old youth)

In 2 of 6 (33%) youth focus groups, participants reported that they felt the *Stay True To You* ads were realistic, believable, and/or relatable.

- Youth participants in 1 of 6 (17%) focus groups discussed liking that their peers were represented in the ads rather adults only.
- Youth participants in 3 of 6 (50%) focus groups said they liked that the ads included real-life examples.

> The fact that [the campaign] can be so relatable to you and to people you know. I think that works, because it's not just like an adult saying, 'oh my gosh, don't do that, that's so bad,' rather than people your own age.
> (Medford 15–17-year-old youth)

In 2 of 6 (33%) youth focus groups, participants said they liked that the *Stay True To You* ads encourage people to talk about youth marijuana use.

- Youth participants in 2 of 6 (33%) focus groups said the ads made them more likely to talk to their friends or peers about marijuana use.
- Youth participants in 1 of 6 (17%) focus groups said that the ads aided in starting a dialogue between youth and their parents about marijuana use.

> I bet [now] if I saw one of my friends having pot, I'd be like' hey, you probably shouldn't do that'.
> (Medford 13–14-year-old youth)

> I'm sure parents are more open to being like 'hey, that commercial just came on, have you ever smoked weed before' . . .I definitely know people who it's opened a lot more conversations and broken down a lot less worries.
> (Medford 18–20-year-old youth)

WHAT DID NOT WORK FOR YOU ABOUT THE CAMPAIGN?

In 3 of 6 (50%) youth focus groups, participants said thought the campaign should diversify the messaging in the ads.

- Youth participants in 1 of 6 (17%) focus groups expressed interest in ads that depicted functional marijuana users educating youth about possible effects.
- Youth participants in 1 of 6 (17%) focus groups wanted the messages to target both youth that do not and youth that do currently use marijuana.

> [In the] testimonials, have people who are like 'I used marijuana. It has been beneficial for me; however, it can be beneficial or bad for you. You should talk to your doctor about it and realize it affects everyone differently.'
> (Portland 18–20-year-old youth)

In 3 of 6 (50%) youth focus groups, participants reported that they felt the *Stay True To You* ads were too condescending and/or judgmental.

- Youth participants in 1 of 6 (17%) focus groups said that they felt the messaging was too negative around youth marijuana use.
- Youth participants in 2 of 6 (33%) focus groups reported that they felt that some of the ads were too authoritative.

> If [the ads showed] people's personal experience, without bashing it, it would have more impact.
> (Medford 15–17-year-old youth)

> [The ad] just sounds way too authoritative to me, because as teenagers, you don't always want to listen to that. You don't want to follow someone's orders. So it's very authoritative. It doesn't work for me.
> (Medford 18–20-year-old youth)

In 2 of 6 (33%) youth focus groups, participants said they felt that the *Stay True To You* ads were unrealistic, unbelievable, or not relatable.

- Youth participants reported that the ads did not reflect what they had experienced or observed.
- Youth participants said that the "cheesy" language in the ads made them harder to relate to.

> Most of the people I knew in high school smoked weed because it was hard being a teenager, so they're going to find something to make that a little less difficult, so it's kind of contradictory to me.
> (Portland 18–20-year-old youth)

IS THERE ANYTHING ELSE YOU WOULD LIKE TO SAY ABOUT THE *STAY TRUE TO YOU* CAMPAIGN?

In 3 of 6 (50%) youth focus groups, participants said the campaign should have a broader reach.

- Youth participants in 2 of 6 (33%) focus groups discussed the importance of distributing the campaign message through a variety of venues, including school assemblies.
- Youth participants in 2 of 6 (33%) focus groups said the campaign should be more broadly distributed in the community.

> The campaign should be shown to bigger, wider communities. It can't be just a few people here and there see it. You need a little bit more people to see it.
> (Medford 13–14-year-old youth)

In 3 of 6 (50%) youth focus groups, participants discussed the importance of neutral language in the campaign.

- Participants in 3 of 6 (50%) focus groups discussed liking the use of neutral language in the campaign.

> The words *Stay True To You* are so neutral and so open-ended . . . That's why I really like how it's *Stay True To You*, as opposed to hashtag 1000 chemicals on the cigarettes.
> (Portland 18–20-year-old youth)

In 1 of 6 (17%) youth focus groups, participants said they wanted the campaign to continue.

IS THERE ANYTHING ELSE YOU WOULD LIKE TO SAY ABOUT THE *STAY TRUE TO YOU* CAMPAIGN?

In 3 of 6 (50%) youth focus groups, participants said the campaign should have a broader reach.

- Participants in 2 of 6 (33%) focus groups discussed the importance of distributing the campaign message through a variety of venues, including school assemblies.
- Participants in 2 of 6 (33%) focus groups said the campaign should be more broadly distributed in the community.

> The campaign should be shown to bigger, wider communities. It can't be just a few people here and there see it. You need a little bit more people to see it.
> (Medford 13–14-year-old youth)

In 3 of 6 (50%) youth focus groups, participants discussed the importance of neutral language in the campaign.

- Participants in 3 of 6 (50%) focus groups discussed liking the use of neutral language in the campaign.

> The words *Stay True To You* are so neutral and so open-ended . . . That's why I really like how it's *Stay True To You*, as opposed to hashtag 1000 chemicals on the cigarettes.
> (Portland 18–20-year-old youth)

In 1 of 6 (17%) youth focus groups, participants wanted the campaign to continue.

Appendix H
Parent Focus Group Analyses

Parent Focus Group Findings

WHAT CHANGES IN YOUR COMMUNITY OR SCHOOL HAVE YOU NOTICED RELATED TO MARIJUANA IN THE LAST YEAR?

In 6 of 6 (100%) parent focus groups, participants reported noticing increased consumption of marijuana in public within their communities.

- In 6 of 6 (100%) parent focus groups, participants reported an increase in marijuana odor in public spaces.
- In 3 of 6 (50%) parent focus groups, participants reported witnessing people driving while actively using marijuana or appearing under the influence of marijuana.

> Now it's out there, it's in your face. You go to a bar, you go outside where the cigarette smoking is taking place, instead of cigarette smoke, it's cannabis now. You see people walking down the street smoking cannabis. (Medford parent)

In 5 of 6 (83%) parent focus groups, participants reported an increase in the visibility of dispensaries and marijuana-related products in the past year.

- In 4 of 6 (67%) parent focus groups, participants reported new marijuana stores in their communities.
- In 3 of 6 (50%) parent focus groups, participants reported an increase in marijuana-related advertising.
- In all 3 focus groups that discussed an increase in advertising related to marijuana sales, billboards were mentioned.

> What I see right now is that there are many shops selling marijuana. It's easier to find a marijuana store right now than a gallon of milk. (Spanish-speaking parent)

> There they are with a big sign saying 'Marijuana $5,' and my son sees it, and the young children notice. (Spanish-speaking parent)

In 5 of 6 (83%) parent focus groups, participants reported changes in communication and discussion related to marijuana in the past year.

- In 4 of 6 (67%) parent focus groups, participants reported that marijuana use was more openly discussed in the community, including with youth.
- In 1 of 6 (17%) parent focus groups, participants said that talking with youth about marijuana use had become harder in the past year.

> So much is said about this subject that my 10-year-old son who is in fifth grade, even he talks to me about marijuana. (Spanish-speaking parent)

In 3 of 6 (50%) parent focus groups, participants reported an increase in marijuana use in the past year.

- In 2 of 6 (33%) parent focus groups, participants reported an increase in medical marijuana use in the past year.
- In 1 of 6 (17%) parent focus groups, participants said that youth marijuana use had increased in the past year.

> Now that they have legalized marijuana, in the summer the youngsters are smoking [marijuana] . . .My neighbors are also smoking, and they didn't do it before when it was not legal. Now that they have legalized it, they act like it's completely normal for them, like a cigarette.
> (Spanish-speaking parent)

In 5 of 6 (83%) parent focus groups, participants reported an increase in visibility of the marijuana growth industry in the past year.

- In 2 of 6 (33%) parent focus groups, participants reported an increase in the visibility of the marijuana growth industry related to the devaluing of homes near grow sites.
- In 2 of 6 (33%) parent focus groups, participants discussed an increase in crime related to the marijuana growth industry.
- In 1 of 6 (17%) parent focus groups, participants reported an increase in news and television coverage related to the marijuana growth industry.
- Participants in both parent focus groups in Medford reported an increase in growth industry visibility as indicated by grow fences in the area.

> There's discussions happening how grow sites are affecting property values. As a landowner, what do you do if your neighbors all around you are growing, and you're in the middle of it.
> (Medford parent)

In 1 of 6 (17%) parent focus groups, participants reported little to no changes related to marijuana in their communities in the past year.

WHAT DO YOU REMEMBER ABOUT THE *TALK WITH THEM* CAMPAIGN?

In 6 of 6 (100%) parent focus groups, participants had positive reactions when asked what they remembered about the *Talk With Them* campaign.

- In 5 of 6 (83%) parent focus groups, participants said that they recalled the *Talk With Them* ads either prompting conversations with their children about youth marijuana use.
- Parent participants recalled the ads encouraging parents to discuss marijuana with their children before they learn about it elsewhere.
- In 3 of 6 (50%) parent focus groups, participants reported that the *Talk With Them* ads acted as a reminder of the reality that marijuana is legal in Oregon.

> The ads are a wakeup call for us as parents, and it is very clear that it says, "Talk to your children." It doesn´t say "scold your children", or "prohibit your children," it says talk to them. So for me as a parent what I try to do is read up on this because we have to talk to [our children] by referring to the consequences of use, the consequences of becoming addicted, and how it can affect them.
> (Spanish-speaking parent)

In 2 of 6 (33%) parent focus groups, participants had negative reactions when asked what they remembered about the *Talk With Them* campaign.

- Participants reported remembering the *Talk With Them* ads as ineffective.

> [The *Talk With Them*] ads don´t work because what counts are the values you teach when they are young.
> (Spanish-speaking parent)

- Parent focus group participants recalled feeling that the *Talk With Them* ads normalized marijuana use and made them feel helpless about talking to their children about youth marijuana use.

> The ads say "talk to them," but . . . the tools I had to talk to them are gone for now, and my words are not enough. For them this is normal.
> (Spanish-speaking parent)

In 4 of 6 (67%) parent focus groups, participants remembered seeing the Talk To Them ads, but did not remember the specific content of the ads.

WHAT DO YOU REMEMBER ABOUT THE *STAY TRUE TO YOU* CAMPAIGN?

In 4 of 6 (67%) parent focus groups, participants had positive reactions when asked what they remembered of the *Stay True To You* campaign.

- In 3 of 6 (50%) parent focus groups, participants recalled liking the peer pressure messaging in the ads.

> They just look like regular kids. They didn't look too much like actors or anything, and it was real life situations. So those were pretty cool.
> (Portland parent)

- In 3 of 6 (50%) parent focus groups, participants remembered the depictions of real-life situations and the use of "real kids" as positive attributes of the ads.

In 1 of 6 (17%) parent focus groups, participants had negative reactions when asked what they remembered of the campaign.

- Participants in the 1 focus group reported feeling the *Stay True To You* ads were ill informed and shame oriented.

> For me there's a little smacking of shame in that actually nobody is saying stay true to yourself about alcohol, and alcohol is broadly accepted, and we lose children all the time because they see their parents drinking.
> (Portland parent)

In 4 of 6 (67%) parent focus groups, participants were able to recall specific ads from the campaign.

- In 3 of 6 (50%) parent focus groups, participants remembered the ads that used statistics in their messaging.
- In 2 of 6 (33%) parent focus groups, participants recalled the testimonial ads.
- In 2 of 6 (33%) parent focus groups, participants recalled messaging around marijuana impacting youth brain development.

> There was [an ad with] the statistic that not everybody is [using marijuana]. You may think everybody in high school is doing it, but in reality it's such a very small portion of people.
> (Medford parent)

> [I remember the ad] talking about the impact [marijuana] can have on a developing brain on the radio.
> (Portland parent)

HAVE YOU TALKED WITH YOUR CHILD IN THE LAST 3 MONTHS ABOUT YOUTH MARIJUANA USE?

In 6 of 6 (100%) parent focus groups, participants reported speaking to their children in the last 3 months about youth marijuana use.

- In 4 of 6 (67%) parent focus groups, participants said they talked with their children about marijuana because of their children's exposure to it, such as friends' marijuana use and marijuana being grown in friends' homes.
- In 3 of 6 (50%) parent focus groups, participants reported discussing marijuana in relation to adult use and the difference between adult and youth marijuana use.
- In 3 of 6 (50%) parent focus groups, participants reported talking to their children regardin g use by their children or peers of their children.

> Every time they want to go out to a friend's house, [I say] 'they don't grow do they? Because I don't want you to be going to a grow.'
> (Medford parent)

> I talk to my kids about [marijuana] a lot. [Marijuana is] part of their life, and I just try to make it very adamant that it's not something that they need. [Marijuana] affects your brain. My biggest thing is make sure your brain is done growing before you start experimenting.
> (Medford parent)

> We have a daughter that drives and has friends that drive . . . [We tell her] if you're going to get in a car, if they're going somewhere and partaking [in marijuana], then you need to find an alternative [ride].
> (Medford parent)

In 2 of 6 (33%) parent focus groups, participants reported talking to their children in the past 3 months about potential impacts of youth marijuana use.

- In 2 of 6 (33%) parent focus groups, parents said they had talked to their children about the impact of marijuana use on their future.
- In 2 of 6 (33%) parent focus groups, participants reported speaking to their children about potential physical impacts of marijuana youth use, including impacts on brain development.
- In 2 of 6 (33%) parent focus groups, participants said they discussed the impacts that youth marijuana use can have on family.

> My husband and I always tell him "[Marijuana use] does not lead you anywhere. If you [use] marijuana, where you are going to end up? In the hospital or dead because it is something that damages not just you but the whole family.
> (Spanish-speaking parent)

> [My son] has told me that they tried to give him some [marijuana], but he always tells me that he remembers what I said. At that moment I remember what you told me, that my body is going to get damaged, my brain.
> (Spanish-speaking parent)

In 5 of 6 parent focus groups, participants discussed why they chose to talk with their children about youth marijuana use.

- In 4 of 6 (67%) parent focus groups, participants said that conversation around youth marijuana use was instigated by what the children had seen in their community or on television.

> If there's a situation on TV or any example, [I] say 'what do you think about that? What do you think could happen? What would you do if that was you?'. I try to make them aware that [marijuana] is out there, they'll be exposed to it, and what the potential impacts could be. (Medford parent)

- In 3 of 6 (50%) parent focus groups, participants reported that the billboards around their children's schools instigated conversations about youth marijuana use.

> The big posters, the billboards- that's great putting them by the school, because I'm driving her to school, and it's like, wow, 4 out of 5 don't use it. I didn't know. That makes it very comfortable to start talking because we're in the car with our kids a lot more, and that's a good place to talk with them. (Portland parent)

IF YOU HAVEN'T TALKED TO YOUR CHILD RECENTLY, WHAT WERE THE REASONS?

In 1 of 6 (17%) parent focus groups, participants reported not speaking to their child recently or at all about youth marijuana usage.

- Parent focus group participants cited their children's lack of marijuana use as a reason for not discussing it with their child and not wanting to expose their children to marijuana unnecessarily.
- Parents said they avoided having a conversation with their children about marijuana use and believed that schools were better equipped to explain it to their children.

> I don't see that my child is using it. I do not want to bring up this topic, because he doesn't use it. Better to explain it at school, because they are already more prepared to explain it. I have never used marijuana; I don't know what are the effects. (Spanish-speaking parent)

DID YOU VISIT THE *TALK WITH THEM* WEBSITE AND DOWNLOAD THE PARENT GUIDE?

None of the parent focus group participants reported downloading the parent guide from the *Talk With Them* website.

- In 3 of 6 (50%) parent focus groups, the participants had not visited the *Talk With Them* website.
- In 2 of 6 (33%) parent focus groups, participants reported visiting the *Talk With Them* website and/or viewing the parent guide, but not downloading it.
- Parent focus group participants also reported that they did not know of the parent guide or had looked but not found it on the *Talk With Them* website.

> I didn't download [the guide]. I was on my phone, but I read the whole thing and actually we were talking about it, and we kind of went through the steps. So I had it in front of me. (Portland parent)

WHAT STOOD OUT TO YOU ABOUT THIS *TALK WITH THEM* EXAMPLE?

In 5 of 6 (83%) parent focus groups, participants had positive reactions to the *Talk With Them* example they were shown.

- In 5 of 6 (83%) parent focus groups, the participants said the example illustrated the importance of parents acting like role models and discussing marijuana use with their children.
- In 4 of 6 (67%) parent focus groups, participants reported that the example resonated with them in terms of frustrations around the prevalence of marijuana and marijuana advertising in the community.
- In 2 of 6 (33%) parent focus groups, participant s said that they liked that the example depicted a real-life situation.

> I like [the example has] a lot of focus on communication with the children. How they are thinking, how they feel inside about the marijuana that is everywhere. This is what I liked the most, we need to have more communication with the children. (Spanish-Speaking parent)

> I feel like [this example] is exactly what we were just talking about. [Marijuana] is in the newspaper, and then there's a billboard about it, and then there's the blaring advertisement on the shop, and then on the radio they're talking about it. (Medford parent)

In 4 of 6 (67%) parent focus groups, participants had negative reactions to the *Talk With Them* example they were shown.

- In 2 of 6 (33%) parent focus groups, the participants reported that the examples were not realistic or accurate.
- In 1 of 6 (17%) parent focus groups, participants reported that the messaging was too late because they had already talked with their children about marijuana use or their children were already exposed to marijuana.
- In 1 of 6 (17%) parent focus groups, participants also said that the example was too shaming around marijuana use.

> We talked to them when they were like 10 years old, especially in Portland . . . there's the playground, and then there's the people sitting there smoking pot. They're like, what are they doing? We've definitely had that conversation all the time.
> (Portland parent)

> [In the ad], why be sighing about 'oh, there's another dispensary in the neighborhood?' If there's an adult video store in my neighborhood, I'd be a little disgusted, but these are just businesses. They're not doing anybody any harm.
> (Portland parent)

HOW DID THIS *TALK WITH THEM* EXAMPLE MAKE YOU FEEL ABOUT TALKING OR NOT TALKING TO YOUR CHILD(REN) ABOUT USING MARIJUANA?

In 5 of 6 (83%) parent focus groups, participants thought that the *Talk With Them* examples were useful for talking to their children about marijuana use.

- In 4 of 6 (67%) parent focus groups, the participants said they thought the examples provided strategies for talking with their children about youth marijuana use.
- In 4 of 6 parent focus groups, participants said that the examples illustrated how to have an open discussion with youth using neutral, nonjudgmental language.
- In 3 of 6 (50%) parent focus groups, participants said that the examples could be a catalyst for opening a dialogue with their children.

> *It is giving us resources about how to talk to our children because sometimes we do not have the ability to speak directly to them. The [examples] are telling us go to a webpage to see how we can explain it to the children.*
> (Spanish-speaking parent)

> What I took from that little bit was that you don't really have to lecture them about [marijuana use]. Get their input, what are they seeing, how do they feel about it.
> (Medford parent)

In 3 of 6 (50%) parent focus groups, participants thought the *Talk With Them* example was not useful for talking to their children about marijuana use.

- Parent participants in 1 of 6 (17%) focus groups said that the messaging in the example was too judgmental about marijuana use.

> Start the conversation [about marijuana use with] younger [children] and have it be more neutral. Have that conversation when [children are] 8 or 9.
> (Portland parent)

- Parent participants in 1 of 6 (17%) focus groups said that the messaging in the example should be directed toward younger children.

> I'm sorry, [the father in the ad] is not telling you, "I'm coming from a neutral place." That's telling you, now you're going to talk to them about how disgusting the whole matter is. (Portland parent)

WHAT STOOD OUT TO YOU ABOUT THESE *STAY TRUE TO YOU* EXAMPLES?

In 5 of 6 (83%) parent focus groups, participants had positive reactions to the *Stay True To You* examples they were shown.

- In 5 of 6 (83%) parent focus groups, participants said the messaging and depictions in the ads were realistic.
- In 4 of 6 (67%) parent focus groups, participants found the examples to be relatable.
- In 4 of 6 (67%) of parent focus groups, participants said they liked that the ads acknowledged peer pressure and/or peer influence related to youth marijuana use.

> They're really real. They're real people talking about their real experiences. (Medford parent)

> This ad I like actually. Everybody is not doing it. That, to me, feels really fine for the kids who aren't and don't want to. (Portland parent)

In 5 of 6 (83%) parent focus groups, participants had negative reactions to the *Stay True To You* examples they were shown.

- In 3 of 6 (50%) parent focus groups, participants said the examples were unrealistic.
- In 3 of 6 (50%) of parent focus groups, participants disliked the messaging in the examples.
- In 2 of 6 (33%) of parent focus groups, participants said 1 or more examples was boring.

> The examples were over exaggerated and they implied that kids smoke pot just to fit in. (Medford parent)

> There's an overwhelming amount of shaming in all of this. It's absurd. (Portland parent)

WHAT ABOUT THESE *STAY TRUE TO YOU* EXAMPLES WAS BELIEVABLE OR UNBELIEVABLE?

In 4 of 6 (67%) parent focus groups, participants said the *Stay True To You* examples were believable.

- Parents participants in 1 of 6 (17%) focus groups said they found the *Don't Copy Me* ad to be particularly believable.

> The *Don't Copy Me* ad has more action, it convinces you. (Spanish-speaking parent)

In 3 of 6 (50%) parent focus groups, participants said the *Stay True To You* examples were not believable.

- In 2 of 6 (33%) parent focus groups, participants thought the statistics used in the ad were not believable.

> From our perspective down here, I find the statistics hard to believe. You see [marijuana use] everywhere. (Medford parent)

HAS YOUR ATTITUDE ABOUT YOUTH MARIJUANA USE CHANGED IN THE LAST FEW MONTHS?

In 5 of 6 (83%) parent focus groups, participants reported that their attitude about youth marijuana use had changed in the past few months.

- In 4 of 6 (67%) parent focus groups, participants said they now felt the need to talk to youth about marijuana use.
- In 3 of 6 (50%) parent focus groups, participants said they were concerned that marijuana use in general had increased.

> I think it's going to be a horrible epidemic, because of the law now. It's so readily available. So my attitude has changed about it.
> (Portland parent)

In 2 of 6 (33%) parent focus groups, participants reported that their attitude about youth marijuana use had not changed in the past few months.

- One of 6 (17%) parent focus groups, participants said that they had always been against youth marijuana use and that position had not changed.

> The kids are still growing. They need their brain to adjust to puberty and everything else. They don't need marijuana to screw that up. But I've always felt that way.
> (Portland parent)

AS A HISPANIC PARENT IN YOUR COMMUNITY, WHAT DO YOU THINK ARE THE IMPORTANT MESSAGES FOR YOUTH TO HEAR ABOUT MARIJUANA? WHAT DO YOU THINK IS THE BEST WAY TO COMMUNICATE THOSE MESSAGES TO YOUR CHILD?[1]

In the Spanish-speaking parent focus group, participants discussed the desire to have messaging be more focused on the negative consequences associated with youth marijuana use.

- Parents wanted more ads depicting the negative consequences of youth marijuana use.

> I would like to see more messages that tell us how after a certain amount of marijuana use, it will have a negative impact.
> (Spanish-speaking parent)

[1]This question was only asked during one Spanish-speaking focus group

In the Spanish-speaking parent focus group, participants expressed a desire to continue the youth marijuana use campaign, including additional avenues for circulating the campaign.

- Some focus group participants expressed a desire for marijuana education at school.
- Focus group participants felt that having these ads in the community was important because they reach youth and counteract marijuana advertising.

> Just as they talk to them in the school about diseases, they also must take up the subject of what marijuana is and all the potential consequences. (Spanish-speaking parent)

IS THERE ANYTHING ELSE ABOUT THE CAMPAIGN OR YOUTH MARIJUANA USE YOU WOULD LIKE TO MENTION?

In 4 of 6 (67%) parent focus groups, participants said the ads should be more direct and stronger in regard to showing negative impacts of youth marijuana use.

- In 2 of 6 (33%) parent focus groups, participants expressed a desire to see ads that depict more serious consequences of youth marijuana use.

> You could make a commercial like the texting one of high schoolers getting in a car, getting stoned and running over a little kid. (Medford parent)

In 3 of 6 (50%) parent focus groups, participants said they wanted to see the campaign continue to run.

- In 3 of 6 (50%) parent focus groups, participants reported liking the campaign and wanting to it to be continued and/or expanded.

> I'm glad you guys are doing it, and I hope you make more. (Medford parent)

In 2 of 6 (33%) parent focus groups, participants wanted to see messages directed at youth marijuana users or parents of youth marijuana users that are educational and/or encourage more responsible behavior around use.

- In 2 of 6 (33%) focus groups, parents expressed interest in ads about talking to children already using marijuana.

> I'd like to have educational material out there, because I'm pretty sure at some point I'm going to find out that one of my kids is using marijuana, and it would be nice to have those resources out there. (Portland parent)

Appendix I
Youth and Young Adult Survey Post-Stratification Weighting

Because the survey samples for this evaluation were collected from social media platforms (i.e., Facebook, Instagram) rather than using a random sampling methodology,[24] there is a higher potential for demographic bias in the sample. To address this demographic bias, the evaluation team conducted weighting of the Youth and Young Adult Survey data at each time point. Weighting was not possible for the Adult Survey because of the unavailability of population estimates for parents of youth aged 12–20 and youth-serving adults. The discussion below describes the current research on the demographic characteristics of teenage Facebook and Instagram users and the evaluation team's use of weighting to address the imbalance in the youth samples that arose from sampling from these social media sites.

Demographic Characteristics of Teenage Social Media Users

Whereas teenagers widely use Facebook and Instagram—about 71% use the former and 52% use the latter—research from the Pew Research Center suggests that the youth who use these sites may differ from the general population. Although Facebook and Instagram are the social media sites of choice for most youth, rates of use are highest among lower-income youth. Use of Facebook does not differ according to race or gender, whereas Instagram use is more common among girls and Black non-Hispanic teenagers. For both Instagram and Facebook, older teenagers (aged 15–17) are more likely to use the sites than younger teenagers (aged 13–14).

These demographic biases of Facebook were somewhat evident in the evaluation team's sample. For example, Exhibit I1 shows the demographic characteristics of youth baseline survey respondents in the Portland metropolitan area compared to U.S. Census estimates. Consistent with the findings of the Pew Research Center, Youth and Young Adult Survey respondents were more likely than the general population to be older and female. However, contrary to the findings of the Pew Research Center, which found few racial/ethnic differences among respondents, more Youth and Young Adult Survey respondents identified as a racial or ethnic minority than would be expected based on census estimates.

[24]Random sampling was not possible because of resource constraints.

Exhibit I1
Baseline Youth and Young Adult Survey Sample Characteristics in Portland Metropolitan Area Compared to the U.S. Census

Demographic Characteristic	U.S. Census	Baseline Youth and Young Adult Survey
Age		
13	12.8%	4.0%
14	12.6%	9.1%
15	12.7%	14.9%
16	12.8%	19.8%
17	12.9%	24.1%
18	12.5%	8.9%
19	11.9%	8.8%
20	11.9%	10.4%
Gender		
Female	50.7%	61.6%
Male	49.3%	34.6%
Transgender	—	1.4%
Other	—	2.4%
Race		
White	82.9%	72.4%
Black/African-American	3.6%	3.1%
Asian	7.6%	5.8%
Native Hawaiian/Pacific Islander	1.4%	1.2%
American Indian/Alaska Native	0.5%	1.3%
Two or More Races	4.1%	16.2%
Hispanic or Latino (of any race)	12.0%	16.4%

Note. Data retrieved from U.S. Census Bureau: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Data for age were calculated using 2010 U.S. Census data: single years of age and sex. Data for gender, race, and ethnicity were calculated using the 2010–2014 American Community Survey. Portland metropolitan area is defined as Multnomah County, Washington County, and Clackamas County. Dashes indicate that the data were unavailable.

Post-Stratification Weighting of Youth and Young Adult Surveys

To ensure that the youth samples were demographically representative of the population, the evaluation team calculated post-stratification weights based on U.S. Census county-level estimates for sex, age, race, and ethnicity. Post-stratification weighting is a commonly used statistical procedure designed to correct for demographic bias in survey samples.

Calculation of post-stratification weights requires estimates of the demographic characteristics of the target population; for the current study, estimates for youth aged 12–20 were retrieved from the 2014 American Community Survey conducted by the U.S. Census Bureau. For each county represented in the survey, the evaluation team obtained estimates for the number of youth by single years of age, sex, race, and ethnicity. These estimates allowed the evaluation team to determine what the demographic distribution of the Youth and Young Adult Survey respondents would have been if the survey was unbiased (i.e., if random sampling was conducted). Based on those estimates, the evaluation team was able to calculate weights such that responses from survey respondents with demographic characteristics that were underrepresented in the survey (e.g., males, younger teenagers) were weighted more heavily. Likewise, responses from respondents who were overrepresented in the survey (e.g., women, older teenagers) were weighted less heavily. Poststratification weights were calculated using a macro function called SPSSINC RAKE, an SPSS extension command that is implemented in Python. Weighted and unweighted demographic characteristics of baseline survey youth respondents are shown in Exhibit I2 for pilot regions and Exhibit I3 for comparison regions. Both exhibits include the U.S. Census estimates, demonstrating that post-stratification weighting resulted in a weighted sample that was more demographically representative of the population than the unweighted sample.

Note that some demographic variables (i.e., race, ethnicity, sex) had a very small amount (< 5%) of missing data.[25] To successfully run the weighting program, no missing data on the demographic variables was permitted, necessitating imputation of the data. Imputation is the process of replacing missing data with estimated values. Imputation was conducted using the Multivariate Imputation by Chained Equations (MICE) package in R.[26] MICE imputes incomplete multivariate data by running a series of regression models on each variable with missing values in the dataset, using all other variables in the dataset as predictors. Binary variables are modeled using logistic regression, whereas continuous variables are modeled with linear regression. MICE operates under the assumption that data values are missing at random (MAR), meaning that the probability of a missing value depends only on the observed values in the dataset (not on unobserved values not measured).[27] Diagnostic analyses conducted on the Youth and Young Adult Survey dataset suggested that the data met the MAR assumption, and thus values were imputed with MICE before calculating the post-stratification weights.

[25]The most common source of missing data was on the gender variable. Because the U.S. Census only provides data for binary sex (i.e., male or female), for purposes of weighting it was necessary to treat gender as missing for youth who chose *other* or *transgender* responses on the Youth and Young Adult Survey. Otherwise, the responses of transgender and other sexed individuals would have been excluded from the weighted results.

[26]Buuren, S. & Groothuis-Oudshoorn, K. (2011). MICE: Multivariate imputation by chained equations in R. *Journal of Statistical Software, 45*(3).

[27]Azur, M.J., Stuart, E.A., Frangakis, C., & Leaf, P.J. (2011). Multiple imputation by chained equations: What is it and how does it work? *International Journal of Methods in Psychiatric Research, 20*(1), 40-49.

Exhibit I2
Pilot Areas: Weighted and Unweighted Youth and Young Adult Survey Sample Characteristics Compared to U.S. Census Estimates

Demographic Characteristic	Unweighted Baseline Youth and Young Adult Survey	Weighted Baseline Youth and Young Adult Survey	U.S. Census
Age			
13	4.0%	12.6%	12.7%
14	8.6%	12.6%	12.6%
15	13.8%	12.7%	12.7%
16	17.2%	12.8%	12.7%
17	20.5%	13.0%	13.0%
18	11.4%	12.6%	12.6%
19	12.1%	11.9%	11.9%
20	12.4%	11.9%	11.9%
Gender			
Female	58.7%	49.5%	50.8%
Male	38.4%	47.5%	49.2%
Transgender	1.0%	1.2%	—
Other	1.9%	1.9%	—
Race			
White	75.2%	86.6%	84.3%
Black/African-American	2.4%	2.5%	3.1%
Asian	2.9%	5.9%	6.7%
Native Hawaiian/Pacific Islander	1.2%	0.3%	0.5%
American Indian/Alaska Native	2.3%	0.8%	1.3%
Two or More Races	15.1%	3.9%	4.0%
Hispanic or Latino (of any race)	15.2%	10.8%	12.1%

Note. Data retrieved from U.S. Census Bureau: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Data for age were calculated using 2010 U.S. Census data: single years of age and sex. Data for gender, race, and ethnicity were calculated using the 2010–2014 American Community Survey. Dashes indicate that the data were unavailable.

Exhibit I3
Comparison Areas: Weighted and Unweighted Youth and Young Adult Survey Sample Characteristics Compared to U.S. Census Estimates

Demographic Characteristic	Unweighted Baseline Youth and Young Adult Survey	Weighted Baseline Youth and Young Adult Survey	U.S. Census
Age			
13	3.1%	7.8%	10.4%
14	5.8%	9.9%	10.5%
15	10.5%	10.8%	10.6%
16	12.0%	11.1%	10.7%
17	15.1%	11.6%	11.3%
18	14.8%	14.0%	13.5%
19	18.1%	17.1%	16.3%
20	20.6%	17.6%	16.7%
Gender			
Female	55.2%	49.4%	50.8%
Male	41.4%	47.1%	49.2%
Transgender	1.4%	1.4%	—
Other	2.0%	2.1%	—
Race			
White	80.4%	90.5%	90.5%
Black/African-American	1.7%	0.9%	0.9%
Asian	1.8%	2.4%	2.4%
Native Hawaiian/Pacific Islander	1.0%	0.3%	0.3%
American Indian/Alaska Native	2.7%	1.7%	1.7%
Two or More Races	12.5%	4.1%	4.1%
Hispanic or Latino (of any race)	12.2%	7.7%	7.6%

Note. Data retrieved from U.S. Census Bureau: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
Data for age were calculated using 2010 U.S. Census data: single years of age and sex.
Data for gender, race, and ethnicity were calculated using the 2010–2014 American Community Survey.
Dashes indicate that the data were unavailable.

Appendix J
Sample Characteristics

Exhibit J1
Youth and Young Adult Survey Sample Characteristics

Characteristic	Baseline	Mid-Evaluation	Evaluation End
Age			
13	3.6%	4.0%	4.0%
14	7.5%	6.0%	7.8%
15	12.4%	11.4%	12.0%
16	15.1%	17.3%	16.1%
17	18.3%	21.9%	16.7%
18	12.8%	13.1%	14.0%
19	14.6%	12.5%	14.6%
20	15.8%	13.8%	14.8%
Gender			
Female	57.2%	59.5%	55.9%
Male	39.6%	36.6%	40.2%
Transgender	1.2%	1.9%	2.3%
Other	1.9%	2.0%	1.6%
Race			
White	77.3%	80.0%	78.6%
Black/African-American	2.1%	1.3%	1.6%
Asian	3.0%	2.9%	3.0%
Native Hawaiian/Pacific Islander	1.1%	1.0%	0.5%
American Indian/Alaska Native	2.4%	2.3%	2.6%
Two or More Races	14.1%	12.4%	13.7%
Hispanic or Latino (of any race)	14.0%	11.7%	11.8%

Note. Baseline *N* = 2,476; Mid-evaluation *N* = 2,551; Evaluation end *N* = 2,371.

Exhibit J2
Youth and Young Adult Survey Respondents' 30-Day Use

Item	Baseline	Mid-Evaluation	Evaluation End
During the past 30 days, on how many days did you use marijuana or hashish (weed, hash, pot)?			
0 days	**65.3%**	**59.9%**	**64.0%**
1 to 2 days	8.4%	8.8%	7.8%
3 to 5 days	4.7%	5.0%	4.2%
6 to 9 days	2.9%	3.5%	3.7%
10 to 19 days	4.9%	5.7%	6.6%
20 to 29 days	6.2%	6.9%	6.0%
All 30 days	7.6%	10.2%	7.7%

Note. Baseline *N* = 2,465; Mid-evaluation *N* = 2,549; Evaluation end *N* = 2,366.

Exhibit J3
Youth and Young Adult Survey Respondents' Lifetime Marijuana Use

Item	Baseline	Mid-Evaluation	Evaluation End
During your life, how many times have you used marijuana?			
0 times	**46.0%**	**41.6%**	**43.8%**
1 or 2 times	8.9%	8.8%	9.3%
3 to 9 times	8.2%	7.7%	7.6%
10 to 19 times	5.5%	6.1%	5.6%
20 to 39 times	5.0%	5.9%	5.4%
40 or more times	26.4%	29.9%	28.3%

Note. Baseline *N* = 2,469; Mid-evaluation *N* = 2,547; Evaluation end *N* = 2,371.

Exhibit J4
Adult Survey Sample Characteristics

Characteristic	Baseline	Mid-Evaluation	Evaluation End
Age			
21–29	6.4%	7.6%	3.7%
30–39	25.1%	27.2%	29.7%
40–49	35.8%	37.1%	36.9%
50–59	25.3%	19.5%	23.8%
60–69	6.1%	7.1%	5.2%
70–79	1.3%	1.3%	0.7%
80 or older	0.0%	0.2%	0.1%
Gender			
Female	73.5%	81.1%	84.8%
Male	26.0%	17.0%	13.7%
Transgender	0.4%	1.0%	0.4%
Other	0.1%	0.8%	1.1%
Race			
White	87.3%	87.0%	87.7%
Black/African-American	1.9%	1.8%	1.6%
Asian	1.2%	1.2%	0.7%
Native Hawaiian/Pacific Islander	0.9%	0.6%	0.4%
American Indian/Alaska Native	1.3%	2.4%	1.5%
Two or More Races	7.4%	7.0%	8.0%
Hispanic or Latino (of any race)	7.5%	8.0%	6.5%

Note. Baseline *N* = 1,057; Mid-evaluation *N* = 871; Evaluation end *N* = 917.

Exhibit J5
Adult Survey Respondents' Lifetime Marijuana Use

Item	Baseline	Mid-Evaluation	Evaluation End
How long has it been since you last used recreational marijuana?			
Never used	**36.1%**	**34.6%**	**44.4%**
More than 12 months ago	33.2%	27.9%	31.5%
More than 30 days but within the last 12 months	5.7%	11.3%	6.4%
During the last 30 days	25.0%	26.2%	17.7%

Note. Baseline *N* = 1,033; Mid-evaluation *N* = 840; Evaluation end *N* = 878.

Exhibit J6
Focus Group Sample Characteristics

Characteristic	Youth and Young Adults	English-Speaking Parents	Spanish-Speaking Parents
Age			
14	4.2%	—	—
15	8.3%	—	—
16	25.0%	—	—
17	16.7%	—	—
18	29.2%	—	—
19	12.5%	—	—
20	4.2%	—	—
30–39	—	41.2%	16.7%
40–49	—	23.5%	44.4%
50–59	—	23.5%	27.8%
60–69	—	11.8%	11.1%
Gender			
Female	42.1%	58.8%	83.3%
Male	57.9%	35.3%	16.7%
Transgender	0.0%	5.9%	0.0%
Race			
White	79.2%	94.1%	83.3%
Black/African-American	4.2%	5.9%	0.0%
Asian	29.2%	0.0%	0.0%
Native Hawaiian/Pacific Islander	0.0%	0.0%	0.0%
American Indian/Alaskan Native	8.3%	0.0%	0.0%
Two or More Races	25.0%	0.0%	0.0%
Hispanic or Latino (of any race)	16.7%	5.9%	100.0%
Total Number of Participants	**24***	**17***	**18**

Note. Three youth and young adult and 2 English-speaking parent focus group participants did not complete demographic forms. Denominators for percentages are based on the number of participants in each group who completed demographic forms.

Exhibit J7
Youth and Young Adult Focus Group Participants' 30-Day Use

Item	Percent
During the past 30 days, on how many days did you use marijuana or hashish (weed, hash, pot)?	
0 days	**66.7%**
1 to 2 days	7.4%
3 to 5 days	3.7%
6 to 9 days	0.0%
10 to 19 days	7.4%
20 to 29 days	11.1%
All 30 days	3.7%

Note. N = 27

Exhibit J8
Youth and Young Adult Focus Group Participants' Perceived Risk of Harm of Marijuana Use

Item	Percent
How much do you think people under age 21 risk harming themselves (physically or in other ways) if they use marijuana regularly (once or twice a week)?	
No risk	0.0%
Slight risk	**44.4%**
Moderate risk	33.3%
Great risk	22.2%

Note. N = 27

Exhibit J9
Parent Focus Group Participants' Lifetime Marijuana Use

Item	Percent
How long has it been since you last used recreational marijuana?	
Never used	**54.1%**
More than 12 months ago	27.0%
More than 30 days but within the last 12 months	8.1%
During the last 30 days	10.8%

Note. N = 64

Appendix K
Survey Open-Ended Responses

Youth and Young Adult Survey Responses

What do you think the *Stay True to You* campaign is trying to say about youth marijuana use? (open ended)

Response	Mid-Evaluation	Evaluation End
Educate youth and young adults on negative impacts/consequences of marijuana use on SELF ▸ Dangerous, harmful or unhealthy (e.g. impacts brain development) ▸ Impacts life and/or future (school, social life) ▸ Impacts memory ▸ Legal consequences	531 (51.0%)	355 (39.1%)
Youth and young adults should not use marijuana	338 (32.5%)	243 (26.8%)
Resist peer pressure/Not everyone is using marijuana	103 (9.9%)	92 (10.1%)
Educate youth and young adults on negative impacts/consequences of marijuana use BEYOND SELF	77 (7.4%)	37 (4.1%)
Youth and young adults should wait to use (health, legality)	76 (7.3%)	56 (6.2%)
Think before you try/use (do what is right for you, make a choice)	75 (7.2%)	26 (2.9%)
Marijuana is bad	50 (4.8%)	117 (12.9%)
There are better options (for recreation, etc.)/Do not need marijuana to have fun	49 (4.7%)	38 (4.2%)
Campaign ignores medicinal value of marijuana	22 (2.1%)	25 (2.8%)
Marijuana impacts people differently	20 (1.9%)	26 (2.9%)
Marijuana is more accessible now/Too many youth and young adults use marijuana	15 (1.4%)	7 (0.8%)
Other	102 (9.8%)	100 (11.0%)

Note. Total mid-campaign evaluation *N* = 1041; Total evaluation end *N* = 908; Note: In this table, bulleted codes are examples of sub-codes within the higher-level code listed above. Survey responses were double-coded when appropriate. As such, the percentages do not add up to 100 and the references do not add up to the Total *N* by time point.

Adult Survey Open-Ended Responses

What do you think the *Stay True to You* campaign is trying to say about youth marijuana use? (open ended)

Response	Mid-Evaluation	Evaluation End
Educate youth and young adults on negative impacts/consequences of marijuana use ▸ Dangerous, harmful or unhealthy (e.g. impacts brain development) ▸ Impacts life and/or future (school, social life) ▸ Legal consequences ▸ Risks of driving under the influence	56 (39.7%)	45 (38.1%)
Resist peer pressure/Not everyone is using marijuana	29 (20.6%)	32 (27.1%)
Think before you try/use (do what is right for you, make a choice)	23 (16.3%)	8 (6.8%)
Youth and young adults should not use marijuana	20 (14.2%)	16 (13.6%)
Other ▸ Response not applicable to the question ▸ Youth and young adults should wait to use marijuana ▸ Marijuana is not necessary	43 (30.5%)	29 (24.6%)

Note. Total mid-campaign evaluation *N* = 141; Total evaluation end *N* = 118*;* Note: In this table, bulleted codes are examples of sub-codes within the higher-level code listed above. Survey responses were double-coded when appropriate. As such, the percentages do not add up to 100 and the references do not add up to the Total *N* by time point.

What do you think the *Talk with Them* campaign is trying to say about youth marijuana use? (open ended)

Response	Mid-Evaluation	Evaluation End
▸ Parents should dialogue with their children about marijuana use	48 (36.4%)	47 (40.5%)
Youth and young adults should not use marijuana	34 (27.3%)	28 (24.1%)
Educate youth and young adults on negative impacts/consequences of marijuana use	22 (16.7%)	23 (19.8%)
Youth and young adults should wait to use marijuana	18 (13.6%)	5 (4.3%)
Think before you try/use (do what is right for you, make a choice)	11 (8.3%)	4 (3.4%)
Other ▸ Response not applicable to the question ▸ Marijuana is more accessible now/More openly discussed in the community ▸ Parents are role models ▸ Marijuana is bad ▸ Resist peer pressure/Not everyone is using marijuana	36 (27.3%)	20 (17.2%)

Note. Total mid-campaign evaluation *N* = *132*; Total evaluation end *N* = 116; Note: In this table, bulleted codes are examples of sub-codes within the higher-level code listed above. Survey responses were double-coded when appropriate. As such, the percentages do not add up to 100 and the references do not add up to the Total *N* by time point.