

JSI RESEARCH & TRAINING INSTITUTE, INC.

Vermont *Down and Dirty* Campaign Evaluation Report

September 2017

Prepared For:

Vermont Tobacco Control Program
Vermont Department of Health

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Executive Summary

The Vermont Tobacco Control Program (VTCP) has worked with Rescue Social Change Group (Rescue) since 2012 to develop and implement a statewide social marketing campaign to prevent and reduce tobacco use among country youth in Vermont. Launched in 2013, *Down and Dirty* is a highly tailored and targeted teen tobacco prevention and cessation social marketing campaign that uses branded events, social media (i.e., Facebook), local influencers (e.g., brand ambassadors), and video advertisements to reach and engage country youth in an authentic way, aiming to disassociate the peer crowd culture from tobacco use.

The VTCP contracted with JSI Research & Training Institute, Inc. (JSI) in 2017 to evaluate the campaign. JSI conducted a cross-sectional outcome evaluation using an online survey approach during spring and summer 2017 to assess campaign impact on select tobacco use outcomes and association with brand awareness, appeal and association. The evaluation findings were intended to inform the VTCP on the success of the campaign in preventing and reducing tobacco use among the country youth peer crowd.

JSI established a licensing agreement with Rescue to integrate Rescue's I-Base Survey™, a research instrument designed to measure peer crowd affiliation. The approximately 20 question survey was fielded during May – August, 2017. The evaluation aimed for 800 overall survey respondents with 400 identifying as the country peer crowd. JSI used a mix of digital and in-person/print efforts to obtain a convenience sample of Vermont teens, 13-19 years of age, to take the survey. Digital promotion comprised of Facebook and Instagram ads targeting country teens in Vermont. An option to refer the survey link to friends was included to incorporate snowball sampling into the recruitment methods. Print promotion included distribution of flyers and palm cards, and use of country teen survey ambassadors to share the survey with their friends and networks (snowball sampling). All survey respondents could opt to receive a \$10 digital gift card for completing the survey.

There were 857 teens that met survey eligibility criteria, consented to participate, and completed the survey. Of the 857 teens, 687 or 80% of the sample was generated from accessing the survey through Facebook or Instagram ads. The survey ambassadors generated 46 or 5% of the eligible respondents. About 390 youth responded they would share the survey link with friends. This process generated 124 valid surveys, 15% of the total sample size. The survey sample represented all 13 counties in the state, 52% were male, and the majority (65%) was high school students.

Of the 857 teens who met the survey eligibility criteria, 33 did not complete six or more of the 12 I-Base questions and were dropped from the analysis. The final analytic sample size is 824 teens. One-third of the sample (264/824) identified with the country peer group. The remaining two-thirds of the sample (560/824) identified with non-country peer groups.

The prevalence of current tobacco use among country teens was 20.2%, statistically similar to non-country teens of 19.5%. Electronic vapor products (8.6%) were the most common tobacco product used among country teens, followed by cigarettes (7.6%). Electronic vapor products (9.2%) and cigarettes (8.0%) were also the most common among non-country teens. Use of smokeless tobacco use was relatively rare, and lower among non-country teens compared to country teens, but not significantly so (2.7% vs. 5.8%). Generally, tobacco use rates among high school students, for both country and non-country teens, was lower than 2015 YRBS rates among high school students.

Brand awareness, appeal and association for the *Down and Dirty* campaign appear favorable. Half of all survey respondents were aware of the brand, including 53% of country teens. Most survey respondents (73%), including country teens and non-country teens, associate the brand with living tobacco-free, an important objective of the VTCP for this youth prevention campaign.

Despite favorable brand awareness, appeal, and association, tobacco-use rates, current or past, were not influenced by awareness of the *Down and Dirty* campaign. Dosage of exposure to the brand and campaign were not captured in this evaluation, thereby limiting assessment of tobacco use rates by brand awareness.

Conclusion. The *Down and Dirty* campaign has broad and positive brand awareness, favorable brand appeal among the intended audience of country teens, and strong brand association with tobacco-free living among country and non-country teens aware of the brand. Tobacco use rates among country teens and non-county teens in Vermont are similar.

I. Introduction

The Vermont Tobacco Control Program (VTCP) has worked with Rescue Social Change Group (Rescue) since 2012 to develop and implement a statewide social marketing campaign to prevent and reduce tobacco use among Vermont youth. Based on Rescue's formative research indicating greater tobacco use among country youth in Vermont, the *Down and Dirty* social marketing campaign was launched in 2013. *Down and Dirty* is a highly tailored and targeted teen tobacco prevention and cessation campaign that uses branded events, social media (i.e., Facebook), local influencers (e.g., brand ambassadors), and video advertisements to reach and engage country youth in an authentic way, aiming to disassociate the peer crowd culture from tobacco use.

To determine the impact of *Down and Dirty* on tobacco use outcomes among country teens in Vermont, the VTCP contracted with JSI Research & Training Institute, Inc. (JSI) in 2017 to conduct an outcome evaluation. Using an online survey approach, JSI conducted a cross-sectional outcome evaluation during spring and summer 2017 to assess campaign impact on select tobacco use outcomes -- any tobacco use (primary outcome), cigarette use, and chew use, as well as assess campaign impact and association with brand awareness, brand appeal and brand association with tobacco-free living. The evaluation findings are intended to inform the VTCP on the success of the campaign in preventing and reducing tobacco use among the country youth peer crowd. This report describes JSI's outcome evaluation, including methodology, results, and considerations for the VTCP to inform their decision-making and tobacco prevention and control strategies.

II. Project Overview

Background

Preventing tobacco use among youth is critical to ending the tobacco epidemic. The Vermont Department of Health (Health Department) Vermont Tobacco Control Program (VTCP) implements multi-component evidence-based tobacco prevention and control strategies throughout Vermont to prevent tobacco initiation and reduce tobacco use among youth.

Tobacco use among youth in Vermont has declined significantly over the past decade and more recently over the past 5 years. In 2015, 11% or about 2,800 high school youth reported smoking cigarettes, compared to 15% or 4,500 in 2011.¹ However, the tobacco landscape has changed in recent years, with other tobacco products such as cigars, chew and e-vapor products increasing in use. In 2015, the rate of cigar use among high school youth in Vermont was 10%, the rate of smokeless tobacco use was 7%, and the rate of e-cigarette use was 15%. One in four or 25% of high school youth in Vermont reported current use of any tobacco product (i.e., cigarettes, e-vapor products, cigars, chew, etc.). Furthermore, disparities in tobacco use exist, with greater rates of use among youth of lower socio-economic status and of certain geographic regions in the state.²

The VTCP and its partners work to prevent tobacco initiation and use among Vermont's youth by a combination of strategies, including conducting youth communication and media campaigns to promote tobacco-free social norms. Since 2012, the VTCP has worked with [Rescue Social Change Group](#) (Rescue), a behavior change marketing agency, to develop and implement a statewide social marketing and branding strategy to prevent and reduce tobacco use among Vermont youth. Rescue conducted formative research in 2012 to explore tobacco use among youth peer crowds in Vermont. The research suggested that teens that identified with the country peer crowd used tobacco at greater rates than the general teen population in Vermont, particularly for use of smokeless tobacco or chew.³ Per these findings, Rescue estimated that a country targeted peer crowd campaign could reach 30% - 50% of all Vermont teens, at varying levels.⁴ Subsequently, per VTCP request, Rescue estimated that the rate of tobacco use among the country youth peer crowd in Vermont is about 22%.⁵

"Country" Youth Peer Crowd
Interests and values associated with the "country" youth peer crowd include:

- Enjoy outdoor activities such as hunting, mudding, and fishing;
- Love and support of their country;
- Value personal freedom and independence;
- Dress includes camouflage, Carhartt and Wrangler brands;
- Favor for country music.³

The higher rate of tobacco use among the country teen peer crowd resulted in the development of Rescue's *Down and Dirty* campaign, designed to target the country peer crowd, 13-19 years of age in Vermont. *Down and Dirty*, launched in 2013, is a highly tailored and targeted teen tobacco prevention and cessation campaign that uses social marketing and branding strategies aiming to disassociate the country peer crowd culture from tobacco use. Strategies have included branded events, social media (i.e., Facebook), local influencers (e.g., brand ambassadors), and video advertisements to reach and engage country youth in an authentic way. The VTCP's annual budget for the campaign is approximately \$220,000.

Rescue has conducted online surveys for the VTCP annually, 2014 – 2016, to assess reach and engagement of the campaign, and impact of the campaign on tobacco attitudes, beliefs, and behaviors. The surveys include Rescue's proprietary I-Base Survey™, a research instrument designed to measure peer crowd affiliation. The annual surveys collected responses from 128, 230, and 257 youth, respectively. In general, the surveys have demonstrated that the campaign has had positive reach and positive brand awareness and appeal among respondents, and particularly so for country respondents.^{6,7,8} Rescue's additional analyses of the data combined across years indicated some impact on tobacco use, particularly, use of chew was statistically significantly lower among all survey respondents in 2016 (6.0%) compared to 2014 (14.3%) and use of cigarettes among all survey respondents was statistically significantly lower in 2016 (13.3%) compared to 2014 (21.0%) (using a 90% confidence interval).⁹

Considering the campaign data available and duration of the campaign, in 2016 VTCP decided to pursue independent evaluation of *Down and Dirty* to assess impact of the campaign on long-term outcomes of tobacco use among country teens in Vermont.

Purpose of Evaluation

The VTCP contracted with JSI in 2017 to conduct independent outcome evaluation of the *Down & Dirty* campaign. JSI engaged the VTCP in planning to define the evaluation purpose and questions, and inform the evaluation approach. The outcome evaluation was intended to provide reliable and generalizable

data on the long-term impact of the campaign on tobacco use among country youth in Vermont. Specific measures to be assessed were: prevalence rates of any tobacco use, cigarette use, and chew use, also stratified by campaign awareness and appeal. The strategy for collecting this information was an online survey using incentives and a social marketing campaign to encourage teens to take the survey.

Analysis and interpretation of survey findings was designed to consider several angles to aid the VTCP in understanding the impact of *Down and Dirty* on country teen tobacco use and to what extent it has been successful. These evaluation findings will be used to inform program decision-making on future youth prevention and cessation campaigns and strategies.

Evaluation Questions

Evaluation questions were defined and prioritized by JSI and the VTCP for this evaluation. Specific analyses using the survey data to support these questions were also developed.

- To what extent is the *Down and Dirty* campaign reaching the intended audience of country teens in Vermont?
 - Describe the intended audience: who are country teens in terms of demographics and interests, and whether they are similar to other peer groups.
 - Describe *Down and Dirty* brand awareness, opinions and knowledge of country youth as well as other peer groups (“non-country”).
- What is the rate of tobacco use among the intended audience of country teens in Vermont?
 - Estimate the prevalence of current and past year tobacco use, cigarette smoking, chew/dip/snuff/snus, and electronic vapor product use. Compare country teens to “non-country” teens; provide estimates for the sample overall.
- To what extent does the *Down and Dirty* campaign influence tobacco use among country teens in Vermont?
 - Estimate the prevalence of current and past year tobacco use, cigarette smoking, chew/dip/snuff/snus, and electronic vapor product use. Compare teens that are aware of the *Down and Dirty* brand to those who are not.
- What are the recent trends (since 2011) in youth tobacco use prevalence in Vermont?
 - Compare the prevalence estimates from the 2017 survey to the 2015 YRBS estimates.

III. Evaluation Approach & Methods

Evaluation Approach

A cross-sectional outcome evaluation of the *Down and Dirty* campaign was conducted during April – September 2017. **The survey was open from May through August 2017.**

JSI's evaluation protocol was submitted to the Vermont Agency of Human Services (AHS) IRB. While the IRB recognized that the evaluation project clearly involved human subjects, the board determined that

project does not meet the federal definition of research. As a result, JSI's evaluation project fell outside of the purview of the AHS IRB and did not require AHS IRB approval/oversight.

Survey

JSI established a licensing agreement with Rescue to integrate their I-Base Survey™, a research instrument designed to measure peer crowd affiliation. It is a proprietary tool created by Rescue and has been used in this study under license. The I-Base Survey™, short for identity-based segmentation, involves a picture sort exercise to determine which peer crowds the respondent associates with. For the picture sort exercise, respondents are presented with two-sets of 40 images (40 males and 40 females, 80 total) of teenagers and then asked to identify three individuals who would *best fit* into their main group of friends and three individuals who would *least fit* into their main group of friends. Peer crowd affiliation can be scored in multiple ways, and is based on respondents' selection of pictures of teens representing those most and least likely to be in their friend group. Based on the picture sort results, respondents are categorized as associating with one of five different peer crowds: Popular, Alternative, Mainstream, Hip Hop, or Country. The total score for each peer crowd ranges from -12 to 12. For this evaluation, categorical variables reflecting the peer crowd affiliation were used. Respondents were categorized as "country non-exclusive" if they received any + score (i.e., +1 - +12) for the country peer crowd on I-Base, and "non-country" if they received no + score for the country peer crowd. Additionally, JSI included a sub-set of the country respondents who were defined as "country exclusive" per having a higher positive score for the country peer crowd than any other peer crowd. This approach to scoring and assigning to the country peer crowd aligns with Rescue's approach in their campaign survey findings for VTCP, 2014 - 2016.

JSI selected Survey Gizmo as the platform for the online survey. It was chosen because it has advanced question types (picture sorting and rating) and features (response piping) that allowed for implementing the I-Base survey. The survey was optimized for both desktop and mobile survey takers. Care had to be taken to ensure the I-Base images were discernable on the mobile platform. The other survey components were: consent page (including the option to view a more detailed form), demographics, youth interests, current and past year tobacco use questions (aligned with YRBS questions), and *Down and Dirty* brand awareness (using Rescue questions from their previous Vermont *Down and Dirty* surveys).

At the end of the main survey, respondents who wanted to collect an incentive were redirected to a second survey. On the second survey (gift card survey), e-mail address was collected to distribute the gift card incentive. Teens were asked whether they would be willing to ask friends to take the survey as well. Using a second survey ensured that no personally identifying information was collected on the main survey.

Sample

JSI aimed for a survey sample size of 800 Vermont youth, 13-19 years of age, of which 400 would identify specifically with the country peer group (via I-Base assessment). This sample size would allow for precision in the estimate prevalence rates of priority tobacco use outcomes. Based on Rescue evaluation data for campaign year 3 (FY2015), the rate of tobacco use was similar for both the overall sample and the country peer group, 25-26%. Assuming JSI would also find the true prevalence rate of any tobacco use to be in the 25% to 30% range, the target sample size of 800 overall and 400 country respondents would provide reliable and relatively precise estimates of tobacco use outcomes. **Table 1**

shows that, at 95% confidence, these sample sizes will produce margins of error ranging from +/-1.5% to 4.5%, depending on the group and measure.

Table 1. Down and Dirty Evaluation: Margins of Error for Tobacco Use Outcomes, by Sample Size		
Expected prevalence (range of likely values)	Sample size = 800 overall youth	Sample size = 400 country peer youth
Any tobacco use		
25%	+/- 2.9%	+/- 4.2%
30%	+/- 3.1%	+/- 4.5%
Cigarette use		
10%	+/- 2.0%	+/- 3.0%
15%	+/- 2.5%	+/- 3.5%
Chew use		
5%	+/- 1.5%	+/- 2.1%
15%	+/- 2.5%	+/- 3.5%

The sample sizes of 800 total and 40 country were also based on an assumption that about 50% of respondents would identify as country. This was based on Rescue's earlier evaluation survey results, for which they targeted teens who liked the *Down and Dirty* Facebook page. JSI's approach for reaching the evaluation sample was intentionally broader (to attain the larger sample sizes) and so it is possible the yield of country youth would be smaller. Further, there were no good data on the size of the peer groups in Vermont. Thus, JSI used convenience sampling to hit the overall sample size target and from that large sample, determined the actual number of country youth who completed the survey. JSI employed a recruitment strategy that targeted Vermont teens generally, but also heavily focused on recruiting country teens. Three times while the survey was in the field JSI downloaded responses and prepared data sets for Rescue to score the I-Base questions. This enabled intermittent check-ins throughout the survey administration period to see how many country teens had been recruited. The recruitment strategy was adjusted accordingly, to maximize the country teen response.

Recruitment Strategy

In order to achieve a recruitment goal of 800 Vermont teen survey respondents, a promotional recruitment strategy involving a mix of digital advertising and in-person efforts was implemented.

Digital Promotion. Digital promotion of the survey was conducted via online advertisements (ads) on Facebook Ad Manager--Facebook, Instagram, and Twitter, using Facebook Interest-Based Targeting (IBT). Rescue provided JSI the key words used for targeting the *Down and Dirty* campaign to country teens in Vermont. Digital promotion of the survey via Facebook Ad Manager was used as a primary recruitment strategy for the survey for multiple reasons. First, Facebook continues to be a highly utilized social media platform among youth; in 2016 66% of American teens 13-17 years of age used Facebook.¹⁰ Second, Facebook Ads are an effective way to leverage ad dollars given their affordability and flexibility in targeting to reach the intended audience. Further, Facebook is a primary channel for the *Down and Dirty* campaign. Thus, targeting survey ads with the IBT keywords used in the *Down and Dirty* campaign (as well as using additional related key words and other targeting strategies) to reach country teens in Vermont increased the likelihood of recruiting country teens in Vermont to take the survey.

During the recruitment period 21 digital ads were placed through Facebook Ad Manager, which included Facebook and Instagram ads on Facebook's desktop website and mobile app, and Instagram mobile app. Digital promotion using Twitter as a recruitment tool was ceased early on in the recruitment period due to several instances of automated Twitter 'bots' taking the survey and flooding the survey with false or invalid responses.

A brand and coordinating Facebook page known as Project VT was developed in order to house survey information and serve as a landing page for the advertisements. In addition, establishing a Facebook page allowed the team to facilitate messages and respond accordingly to potential or actual survey respondents.

In conjunction with the digital ads, a chatbot, [@Mssg](#), was used to engage with potential survey respondents upon clicking on an ad. Many Facebook users access this social media platform from their smartphones. The @Mssg chatbot is a tool intended to boost survey completion rates by providing a "warm transfer" from ads to the survey link. The @Mssg chatbot also pre-screened potential survey respondents for eligibility criteria (state residence and age) before directing them to the survey. Given that approximately three fourths of youth access the internet, including social media, by smartphone,¹¹ @Mssg was included in the digital promotion strategy to increase the likelihood that eligible teens who clicked on ads would take the survey. Ads that included the @Mssg chatbot, once clicked, engaged the individual in a brief, two question screener. This screener asked the respondent if they were between the ages of 13-19 and if they were residents of Vermont (Appendix A).

Several digital ad design approaches were used, including 'memes,' which are popular items, including images, videos, and text, that spread widely through social media; and country-focused ads that featured youth participating in outdoor activities, such as hunting and fishing (see Appendix B for example ads used).

The Facebook and Instagram ad targeting strategy was designed to reach the intended campaign and survey audience of country teens in Vermont. Audience profiles were created for use in Facebook ad targeting. A generic youth audience was created to include all genders, ages 13-21 (as sometimes youth do not report their exact age on Facebook), and the location was set to the state of Vermont. A specific country audience was created, which included the IBT keywords that Rescue provided, with additions (Appendix C). Additions included related IBT keywords that enhanced the existing IBT keywords. The country audience profile was modified and refined throughout the recruitment period per testing of country-related IBT keywords. A third audience was created to target youth who lived in rural Vermont. Of the digital ads placed through Facebook, 75% targeted country and rural teens while 25% of ads targeted all Vermont teens.

In addition to digital ads, the survey used snowball sampling among survey respondents who completed the survey by including a 'refer to friends' question. This recruitment method operates under the premise that survey respondents are likely to know others who share the characteristics that make them eligible for the survey. And, in this case, would increase the likelihood of reaching additional country teens in Vermont by asking those who completed the survey to share the survey link with their friends or networks. On the final page of the online survey, survey respondents could agree to refer their friends to the survey. By clicking 'Yes, I will refer my friends to this survey,' survey respondents were entered in a lottery for a \$100 gift card. Upon completion of the recruitment campaign, one winner was

chosen at random using a random-number generating tool. This winner received a \$100 gift card for their agreement to refer their friends to the survey link.

In-Person & Print Promotion. An in-person and print promotion campaign was also executed to supplement the digital advertising efforts. Flyers and palm cards were developed to provide information about the survey, the intended audience, the incentive, and accessing the survey. To increase ease of accessing the survey via print material information, a short code—a short, five digit number that individuals can text to receive information, was developed and used. When individuals texted “survey” to the short code, they received a short message asking them a few questions before providing a link to the survey. This short code was intended to help facilitate survey-taking from print materials, as individuals could text a short number to receive the URL, instead of typing a URL into their smartphone or computer’s internet browser. Throughout the recruitment period, flyers and palm cards were distributed at seven events and/or venues (Appendix D). Events and venues were identified based on likelihood of reaching the intended audience for the survey—country teens, and included outdoor retailers, auto-racing venues, and an archery venue.

Snowball sampling was also utilized in the in-person and print promotion strategy in an effort to broaden the survey sample (beyond those recruited via social media ads) and increase the likelihood of reaching and recruiting country teens through peer networks. Furthermore, sharing and promoting the survey peer-to-peer aimed to increase credibility of the survey among the intended audience, and therefore promote responses. A survey ambassador strategy was designed and employed, identifying, engaging, and incentivizing country teens to promote the online survey to their friends and networks. In person “country teen” ambassadors were recruited using Vermont’s Front Porch Forum¹ to post a call for country teen survey ambassadors to assist with sharing the survey link with their networks. JSI coordinated with community tobacco coalitions throughout the state to post the call for country teen survey ambassadors to aid survey recruitment. In total, 14 in-person ambassadors were engaged to recruit for the survey. In addition to in-person country teen survey ambassadors, Facebook users were identified through the Project VT Facebook page to serve as Facebook survey ambassadors (i.e., individuals who had engaged with the Project VT page). Identifying Facebook survey ambassadors from the Project VT Facebook page was based on the assumption that those who engaged with the Facebook page would likely be country teens in Vermont, the intended audience for the survey. Ambassadors were incentivized with a \$5 digital gift card for each eligible respondent recruited, up to a \$100 gift card for 20 eligible respondents. Survey ambassadors were provided custom URL links for the survey to enable tracking of eligible survey respondents recruited by each ambassador. Ambassadors shared the survey link with their networks using social media posts and messaging (e.g., Facebook, Instagram), text messaging, and in-person. Ambassador demographic information, activities and interests, and mechanisms for sharing the survey were collected.

All eligible survey respondents could opt to receive a \$10 digital gift card through [Rybbon](#) for taking the survey. Survey respondents would opt in by clicking “yes” to indicate their interest to receive a link for the \$10 digital gift card. Upon clicking “yes”, respondents were routed to another survey that asked for the respondents email address. Email addresses were needed to administer the digital gift card, but

¹ Front Porch Forum (FPF) is a digital bulletin board covering 185 neighborhoods or communities throughout Vermont. Members of FPF post on their community bulletin board to share information with their local community and / or neighbors. This includes exchanging new, tips, questions, recommendations for services. <http://frontporchforum.com/>.

were collected in a separate file from the other survey data to maintain anonymity. The incentive amount for each survey respondent was increased to \$20 near the end of the recruitment period in an effort to increase respondents before closing the survey. Survey respondents who provided an email address were administered a link to a digital gift card by Rybbon. Respondents could claim the gift card of their choice from a selection provided by Rybbon. Unclaimed gift cards will be reimbursed to the project and VTCP following conclusion of the project.

Response Monitoring

To ensure valid survey responses and data were collected, JSI designed the survey screener to mitigate the likelihood of:

- (1) Robots taking the survey (e.g., incorporated reCAPTCHA on both the main survey and gift card survey),
- (2) Individuals who did not meet eligibility criteria but tried to take the survey e.g., (to get the gift card incentive) by providing false information to meet the eligibility criteria. For example, instead of asking respondents in the screener survey if they lived in Vermont, they were asked to provide their zip code. This response field was set up so that non-Vermont zip codes entered received a message indicating the survey has obtained the responses needed; individuals who received this message were not able to proceed with taking the survey.
- (3) Repeat survey respondents (to get the gift card incentive multiple times) by setting a temporary browser cookie allowing only one response per computer.

In addition, a regular monitoring process was employed by JSI staff to determine valid and invalid response records (e.g., suspicious and ineligible response records, including responses by bots and repeat respondents). First, a listing of gift card and survey responses were screened each business day. We examined whether the respondent's IP address was in the United States, whether the email address provided to get the gift card was a repeat from a prior day, and whether the gift card survey linked to a main survey record. We also scanned the email addresses for validity, looking for suspicious or ineligible characteristics, such as variations of an email address (e.g., johndoe@gmail.com and johndoe1@gmail.com) or an email address indicative of a robot (fdjfdkl@yahoo.com). Second, Rybbon served as another check for duplicate respondents by identifying duplicate email addresses to ensure that the individuals did not receive multiple gift cards.

Statistical methods

Most of the survey questions had categorical response options. Thus, the results are presented in the form of percentages (denominators). The exceptions are the I-Base peer group scores, for which average scores could be computed. When describing peer groups in terms of demographics and interests, the chi-square test of association was used to determine whether country teens had a different response pattern than "non-country" teens. The chi-square test was also used when analyzing *Down and Dirty* brand awareness.

For the tobacco use outcomes, prevalence estimates and their associated binomial 95% confidence intervals are presented. When the prevalence estimate was 5% or less, exact confidence intervals are presented (normal approximation to binomial should not be assumed for rare events). Non-overlapping confidence intervals were indicative of a statistically significant difference between groups. Occasionally, when the intervals were only marginally overlapping, they are described as borderline significant.

Peer Crowd Analysis

The surveys included Rescue's proprietary I-Base Survey™, a research instrument designed to measure peer crowd affiliation. Rescue analyzed peer crowd affiliation among all valid survey responses and provided scoring data to JSI.

IV. Results & Findings

Recruitment Response

Recruitment for the survey occurred during May – August 2017. Ad copy varied in length, tone, and call to action depending on the type of advertisement (meme, humor, or country-focused), but all included similar messaging around the survey incentive, ease of ask (the survey would take approximately 10 minutes), and link to 'learn more'. The majority of Facebook ads (75%) used the @Mssg chatbot, although the team found little to no difference in engagement rates between ads that used @Mssg and those that did not.

A total of 21 ads were placed on Facebook and Instagram. Digital ads reached 46,729 unique individuals², and yielded 718,428 impressions³. This resulted in 2,828 link clicks, which lead to either an engagement with @Mssg or directly to the survey in Survey Gizmo (see Appendix B for campaign ads and details on type, reach, impression, link clicks, and click through rates). Digital ad costs varied by audience, date published, length of run, and ad design, but on average each link click costed \$3.97, which accumulated a \$11,232.27 digital ad spend. This resulted in 866 unique @Mssg chatbot engagements.

Despite switching the ad copy and image every four to seven days, engagement rates dropped in the final weeks of the recruitment period, indicating ad fatigue. The team modified the target audiences to focus on new IBT keywords and locations, including rural Vermont locations, which helped increase engagements. Another benefit of using Facebook Ad Manager includes the ability to monitor ad results in real time. This allowed the team to modify audiences as well as test ad copy and understand what performed well among teens. For example, the recruitment team's original memes performed well among both general Vermont teens and country teens, but when an existing meme was used, engagements dropped.

We are not able to report the number of valid survey responses based on type of ad. In order to have done this, we would have had to create a new survey link for every ad (and likely for every time the ad ran). Given the number of ads, run over a short period of time, it was too difficult to coordinate changes to the survey across JSI survey and communications staff, as well with the @Mssg staff.

A total of 110 palm cards and 5 flyers were disseminated at seven events and venues throughout the recruitment period (Appendix D), which resulted in 5 unique texts. Of note is that efforts to attend and recruit survey respondents in-person at events in which country teens were likely to attend was not successful. First, several venues and events engaged to obtain permission to recruit at declined. Second, teens were generally not receptive to taking palm cards on the survey when distributing them face-to-face at events.

² Reach: total number of unique individuals who saw the advertisement

³ Impressions: total number of times the advertisement was viewed

A total of 14 survey ambassadors were engaged during the recruitment period to promote the survey among their networks; 9 in-person ambassadors and 5 Facebook ambassadors. Ambassadors ranged in age from 12 – 18 year old; 8th grade to graduated high school; and represented 5 counties and 11 towns throughout Vermont. Ambassador interests and activities included: hunting, fishing, hiking, sports, 4-wheeling, mudding, and working. Appendix E provides detailed information on the survey ambassadors and their number of eligible respondents recruited.

Gift Card Dissemination. Through the online gift card dissemination tool Rybbon, a total of 780 digital gift cards were distributed and 674 were claimed. The online tool allowed the team to send reminder ‘nudges’ to individuals who received the gift cards but did not claim them after several weeks. Despite these nudges, 106 gift cards were still unclaimed at the conclusion of the recruitment period. Given Rybbon’s flexibility in reimbursing unclaimed gift cards, money spent on unclaimed gift cards will be recovered and reimbursed to the VTCP.

Survey Respondents

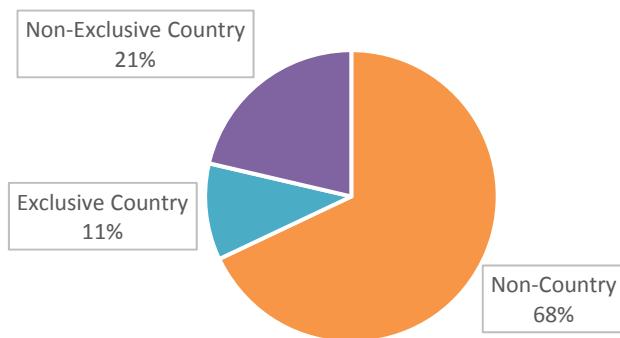
There were 857 teens who met survey eligibility criteria (Vermont resident and age between 13 and 19 years, inclusive), consented to participate, and completed the survey. Of the 857 teens who met survey eligibility criteria, 687 or 80% of the sample was generated from accessing the survey through Facebook or Instagram ads. The survey ambassadors generated 46 or 5% of the eligible respondents. About 390 teens responded they would share the survey link with friends and thus were eligible for the raffle. This process generated 124 valid surveys, 15% of the total sample size.

Peer Groups

Of the 857 teens who met the survey eligibility criteria, 33 did not complete six or more of the 12 I-Base questions and were dropped from the analysis. The final analytic sample size is 824 teens.

One-third of the sample (264/824) identified with the country peer group. I-Base scores were categorized as two types of country teens: those that identified exclusively with the country peer group (88/264, or 33%), and those who identified non-exclusively with the country group (176/264, or 67%). The remaining two-thirds of the sample (560/824) identified with non-country peer groups (**Figure 1**).

Figure 1: Peer group distribution



Each survey respondent's five peer group scores were also provided; a positive score is indicative of affinity for the group (**Table 2**). The country-exclusive group clearly only identified with country peers. Members of the non-exclusive country group also identified with the popular, and to some extent, the mainstream, peer groups. Members of the non-country group identified with popular, and to some extent mainstream and hip-hop, peer groups. Association with the alternative peer group was very uncommon.

Table 2: Average Peer Group Score (positive indicates affinity)

	Exclusive Country Peer Group (n=88)	Non-Exclusive Country Peer Group (n=176)	Non-Country Peer Group (n=560)
Popular	-0.5	2.9	3.5
Hip Hop	-1.1	-0.6	0.8
Alternative	-4.5	-5.4	-2.9
Mainstream	-0.1	0.9	1.4
Country	6.0	2.2	-2.9

Except where noted, the remainder of this report will describe the country peer group as a whole, combining the exclusive and the non-exclusive groups.

Demographics

Just over half of teens were males (52%), and there was no significant difference in gender distribution between the country and non-country peer groups (**Table 3**). The country group was slightly older, having more teens out-of-school/in college (32% vs. 24%) and few in middle school (7% vs. 10%) compared to the non-country group. The median age was 17 years in both groups.

Table 3: Gender and Age Distribution, by Peer Group

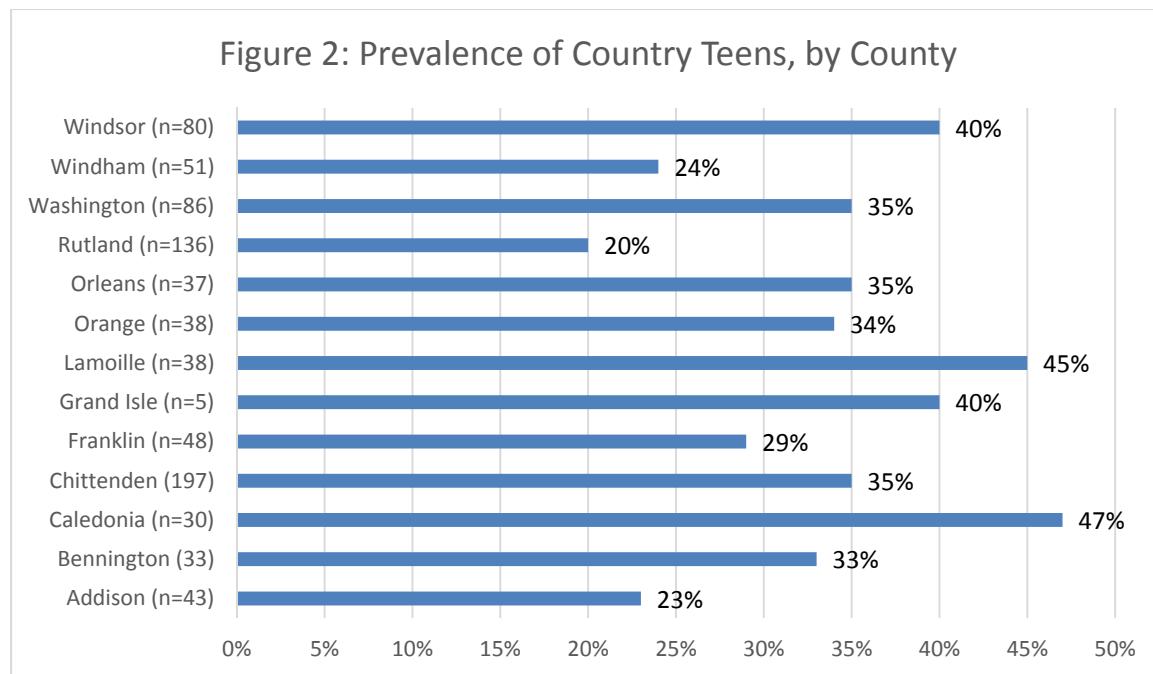
	Country *Peer Group (n=264)	Non-Country (n=560)	Overall (n=824)	Chi-square test of association p-value
Gender				0.5 (non-significant)
Female	41% (109)	44% (240)	43% (355)	
Male	55% (145)	51% (286)	52% (431)	
Other	4% (10)	5% (28)	5% (38)	
Grade				.03 (significant)
Middle School	7% (19)	10% (55)	9% (74)	
High School	61% (160)	66% (372)	65% (532)	
Out of School/College	32% (84)	24% (133)	26% (217)	

*Assigned to the country peer group either exclusively or non-exclusively.

Gender was ascertained in a "check all that apply" format so teens could respond more flexibly. Overall, 38 teens chose options other than solely male or solely female: 14 chose different, 12 chose transgender. The other combinations were: 3 male & different, 2 male & female, 2 transgender &

different, 2 male, female, transgender, & different, 1 male & transgender, 1 female & transgender, and 1 female & different.

Each teen reported their residential zip code, which was coded into county. All 13 Vermont counties were represented (**Figure 2**). The counties with the highest representation of country teens were: Caledonia (47%), Grand Isle (40%), Lamoille (45%), and Windsor (40%). The actual numbers of country teens from Caledonia, Grand Isle, and Lamoille were relatively low (under 20), however. For the other 9 counties, the percentage of their sample that was country teens ranged from 23% to 35%.



Note: next to each county's name is the total number of teen responses from that county. The percentage of those teens who were in the country peer group is depicted in the bar graph.

Interests, Activities, and School Subjects

To learn more about Vermont teens and how country youth may vary from other peer groups, we asked a series of questions about musical tastes and favorite activities and favorite school subject (**Tables 4a and 4b, Figure 3**). There was nearly unanimous interest in music. Most teens liked more than one type of music, averaging 2.5 genres (2.5 country, 2.6 non-country). Country teens were more likely to favor country music (49% vs. 24%), whereas non-country youth were more likely to favor hip-hop/rap and pop/dance. However, over half of all teens liked hip-hop/rap and over 40% liked rock music.

Table 4a: Favorite Musical Genres

Musical Genre	Country (n=264)	Non-Country (n=560)	Overall (n=824)	Chi-square test of association
Music				
Alternative	28% (75)	38% (210)	35% (285)	Significantly higher non-country
Country	49% (130)	24% (134)	32% (264)	Significantly higher country
Hip Hop/Rap	51% (135)	65% (362)	60% (497)	Significantly higher non-country

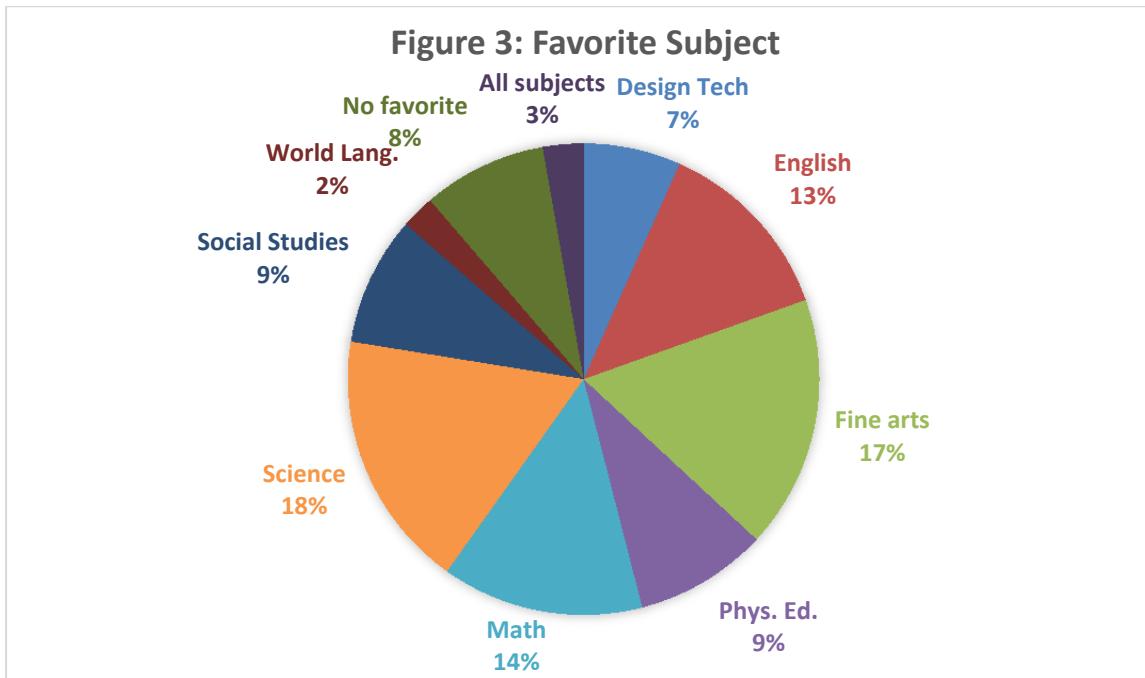
Pop/Dance	43% (114)	49% (272)	47% (386)	Not significantly different
Blues/R&B	15% (39)	19% (109)	18% (148)	Not significantly different
Rock	43% (113)	42% (236)	42% (349)	Not significantly different
Other	23% (60)	19% (107)	20% (167)	Not significantly different
Not into music	1% (3)	1% (5)	1% (8)	Not significantly different

Teens also reported a lot of interests, averaging 5.3 activities per person (5.8 country vs. 5.1 non-country). Some activities were popular across the board: spending time with friends (70%), hiking/running/skiing/canoe-kayaking (57%), and video games/movies/tv (56%). Also of interest to over 40% of both country and non-country youth were: working for pay, reading/studying things. Although less frequently endorsed, country youth were far more likely to express interest in: fishing/hunting/camping (56% vs. 38%), off-roading/snowmobiling (34% vs. 18%), and events like auto racing (23% vs. 8%). Country youth were also somewhat more likely to endorse building or making things/cooking (45% vs 38%).

Table 4b: Favorite Activities

Activity	Country (n=264)	Non-Country (n=560)	Overall (n=824)	Chi-square test of association
Fishing, hunting, camping	56% (149)	38% (214)	44% (363)	Significantly higher country
Hiking, running, skiing, canoe-kayaking	56% (148)	58% (324)	57% (472)	Not significantly different
Off-roading, snowmobiling	34% (89)	18% (102)	23% (191)	Significantly higher country
Team sports	37% (97)	39% (217)	38% (314)	Not significantly different
Events like auto races	23% (60)	8% (42)	12% (102)	Significantly higher country
Spending time with friends	69% (182)	70% (393)	70% (575)	Not significantly different
Doing chores, yard work	15% (40)	12% (69)	13% (109)	Not significantly different
Working for pay	51% (135)	46% (255)	47% (390)	Not significantly different
Reading, studying things	45% (120)	48% (266)	47% (386)	Not significantly different
Video games, movies, TV	58% (153)	55% (308)	56% (461)	Not significantly different
Motorcycles, SUVs, trucks	37% (98)	15% (86)	22% (184)	Significantly higher country
Making art or music	34% (89)	42% (237)	40% (326)	Significantly higher non-country
Acting, dancing	20% (52)	27% (149)	24% (201)	Significantly higher non-country
Making or building things, cooking	45% (118)	38% (210)	40% (328)	Significantly higher country

Consistent with the idea that Vermont teens – country and non-country peer groups alike – have many and varied interests, teens’ no one subject predominated as their favorite subject in school (**Figure 3**). The distribution of favorite subjects was similar for country and non-country youth. Fine arts was the most frequently selected subject for non-country teens and science was the most frequently selected for country teens.



Prevalence of Tobacco Use

Results in this section compare **the country peer group (non-exclusive and exclusive combined) to the non-country peer groups combined**. Results for the teen sample overall are also presented.

The prevalence of current (past 30 day) tobacco use among the country peer group was 20.2%, similar to the non-country group of 19.5% (**Table 5**). For the country group, electronic vapor products (8.6%) were the most common tobacco product used, followed by cigarettes (7.6%). Electronic vapor products (9.2%) and cigarettes (8.0%) were also the most common for the non-country group. Use of chew/dip/snus/dissolvable tobacco use was relatively rare, and lower among non-country teens compared to country teens, but not significantly so (2.7% for non-country teens vs. 5.8% for country teens).

Table 5: Prevalence of Current Tobacco Use (95% binomial confidence interval)

	Country Peer Group (n=264)	Non-Country Peer Groups (n=560)	Overall Sample (n=824)
Any tobacco product	20.2% (15.3% - 25.0%)	19.5% (16.2% - 22.7%)	19.7% (17.0% - 22.4%)
Smoke cigarettes	7.6% (4.3% - 10.9%)	8.0% (5.7% - 10.2%)	7.8% (6.0% - 9.7%)

Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	5.8% (3.0% - 8.7%)	2.7% (1.3% - 4.0%)	3.7% (2.4% - 5.0%)
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, and hookah pens)	8.6% (5.2% - 12.1%)	9.2% (6.8% - 11.7%)	9.0% (7.0% - 11.0%)

Prevalence of current tobacco use by school grade level

Only three of the 41 middle school age teens reported that they had used tobacco in the past 30 days (1 country youth). None of them endorsed a particular type of tobacco. It could be that they were describing brief experimentation or intermittent use, not feeling that they had used for a day or more.

Tobacco use among high school students was higher among country teens than for non-country teens, although not significantly so (19.5% vs. 14.5%; **Table 6**). The same was true for the use of cigarettes (7.8% country vs. 5.2% overall), chew/snuff/dip/snus/dissolvable tobacco (7.0% vs. 1.6%; borderline significance), and electronic vapor products (7.7% in both groups).

Tobacco use was highest among teens who were out of school/in college—teens aged 17 to 19 years (34.1% for the sample overall). While not statistically significant, tobacco use was lower among country teens (25.0%) than non-country teens (39.9%). This was also the case for cigarette use (9.2% vs. 19.8%) and use of chew/snuff/dip/snus/dissolvable tobacco (4.9% vs. 6.8%), and electronic vapor products (12.5% vs. 18.0%).

Across peer groups, there were 217 teens who said they were either out of school or in college. That broke down to 146 teens in college (67%) and 71 teens who were not in school (33%). The tobacco use rate was significantly higher in the “out of school” group (46.5%, 95% CI = 34.9% - 58.1%) than the “in college” group (28.1%, 95% CI = 20.8% - 35.4%).

Table 6: Prevalence of Current Tobacco Use (95% binomial* confidence interval) by school grade level

Country Peer Group (n=264)			
	Middle School (n=19)	High School (n=160)	Out of School/College (n=84)
Any tobacco product	1 teen	19.5% (13.3% - 26.7%)	25.0% (15.7% - 34.3%)
Smoke cigarettes	0.0%	7.8% (3.6% - 12.0%)	9.2% (2.7% - 15.7%)
Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	0.0%	7.0% (3.0% - 11.0%)	4.9% (2.2% - 9.7%)
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, and hookah pens)	0.0%	7.7% (3.5% - 12.0%)	12.5% (5.3% - 19.8%)
Non-Country Peer Groups (n=560)			
	Middle School (n=55)	High School (n=372)	Out of School/College (n=133)
Any tobacco product	2 teens	14.5% (10.9% - 18.1%)	39.9% (31.5% - 48.2%)
Smoke cigarettes	0.0%	5.2% (2.9% - 7.5%)	19.8% (12.7% - 26.9%)
Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	0.0%	1.6% (0.6% - 3.5%)	6.8% (2.5% - 11.0%)
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, and hookah pens)	0.0%	7.7% (4.9% - 10.4%)	18.0% (11.2% - 24.8%)
Overall Sample (n=824)			
	Middle School (n=74)	High School (n=532)	Out of School/College (n=217)
Any tobacco product	3 teens	16.0% (12.9% - 19.1%)	34.1% (27.8% - 40.4%)
Smoke cigarettes	0.0%	6.0% (3.9% - 8.0%)	15.7% (10.7% - 20.8%)
Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	0.0%	3.2% (1.7% - 4.7%)	6.1% (2.9% - 9.3%)
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, hookah pens)	0.0%	7.7% (5.4% - 10.0%)	15.8% (10.8% - 20.9%)

*When prevalence was less than 5%, exact confidence intervals are reported.

Prevalence of current tobacco use by gender

Males were far more likely to report using tobacco products than females (**Table 7**). For the country peer group, use of any tobacco product was borderline significantly higher for males than females (24.3% vs. 11.9%). Use of cigarettes (11.8% vs. 1.9%) was significantly higher among country teen males compared to females. Females were more likely to report using tobacco but then report zero days using a particular type of product; this may be indicative of experimenting or intermittent use. Country males had non-significantly higher prevalence of tobacco use, cigarettes, and chew/snuff/dip/snus/dissolvable tobacco than the sample overall.

The other gender group was very small (38 teens, 10 of whom in the country peer group), but had significantly higher rates of tobacco use, compared to males or females (13/38 or 34.2% overall).

Table 7: Prevalence of Current Tobacco Use (95% binomial* confidence interval) by gender

	Country Peer Group (n=264)		
	Males (n=145)	Females (n=109)	Other (n=10)
Any tobacco product	24.3% (17.3% - 31.3%)	11.9% (5.8% - 18.0%)	5/10 (50%)
Smoke cigarettes	11.8% (6.4% - 17.2%)	1.9% (0.0% - 4.5%)	1/9
Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	7.9% (3.4% - 12.3%)	2.8% (0.6% - 7.9%)	1/10
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, and hookah pens)	11.5% (6.2% - 16.8%)	2.8% (0.6% - 8.0%)	3/9
Non-Country Peer Groups (n=560)			
	Males (n=286)	Females (n=246)	Other (n=28)
Any tobacco product	20.3% (15.6% - 24.9%)	17.5% (12.7% - 22.2%)	28.6% (11.8% - 45.3%)
Smoke cigarettes	6.9% (3.9% - 9.9%)	7.9% (4.5% - 11.3%)	18.5% (3.9% - 33.2%)
Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	4.2% (2.2% - 7.2%)	1.2% (0.3% - 3.5%)	0.0%
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, and hookah pens)	10.3% (6.7% - 13.9%)	7.4% (4.1% - 10.7%)	14.3% (1.3% - 27.3%)
Overall Sample (n=824)			
	Males (n=431)	Females (n=355)	Other (n=38)
Any tobacco product	21.6% (17.7% - 25.5%)	15.6% (12.0% - 19.6%)	34.2% (19.1% - 49.3%)
Smoke cigarettes	8.5%	6.1%	16.7%

	(5.8% - 11.2%)	(3.6% - 8.6%)	(4.4% - 28.8%)
Use chewing tobacco, snuff, dip, snus, dissolvable tobacco	5.4% (3.3% - 7.6%)	1.7% (0.6% - 3.6%)	2.6% (0.0% - 13.8%)
Use electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vape pens, e-hookahs, and hookah pens)	10.7% (7.7% - 13.7%)	6.0% (3.5% - 8.5%)	18.9% (6.3% - 31.5%)

*When prevalence was less than 5%, exact confidence intervals are reported.

Prevalence of current tobacco use by county

Describing smoking prevalence by county is limited by small sample sizes. There were 4 counties with at least 20 country youth who completed the survey. The prevalence rates in these 4 counties were:

- Chittenden County (16/69, or 23%)
- Rutland County (5/27, or 19%)
- Washington County (8/30, or 27%)
- Windsor County (9/32, or 28%)

In addition to Windsor County, three other counties had a relatively high number of country teens in their sample. Caledonia, Grand Isle, and Lamoille counties combined had a current tobacco use prevalence of 15% (5/33), qualitatively lower than the overall sample (19.7%). For all other counties combined (Addison, Bennington, Franklin, Orange, Orleans, Windham) the rate was 14% (10/72), also qualitatively lower than the overall sample (19.7%).

Past year tobacco use and tobacco use transitions

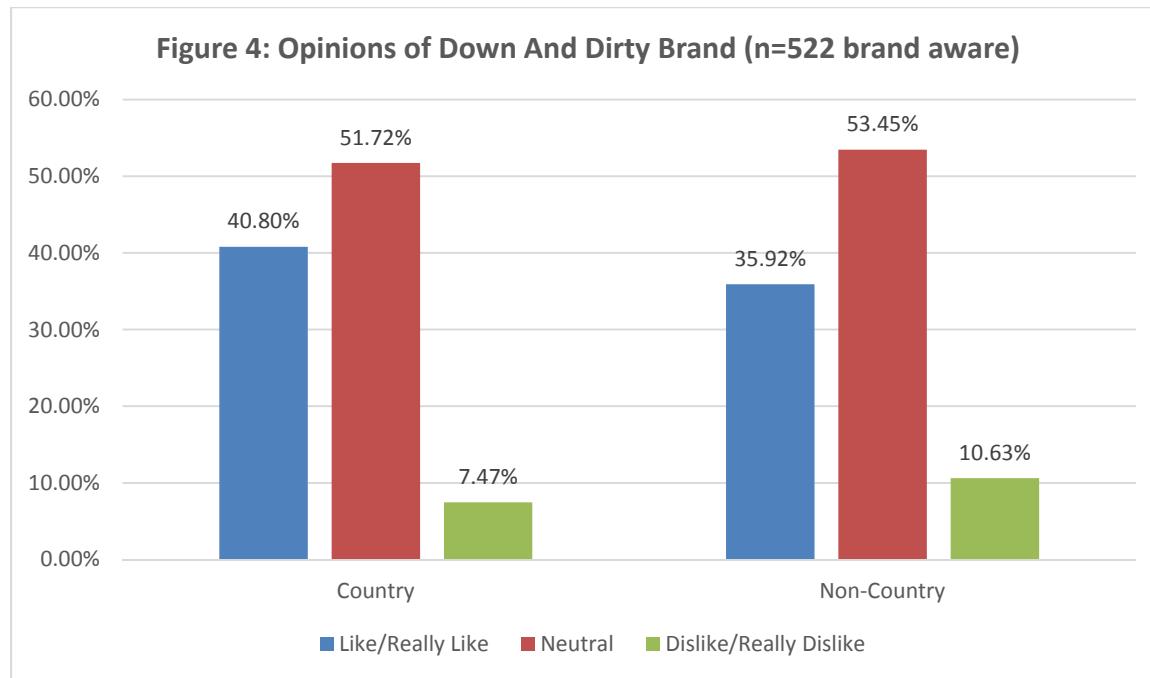
Teens were also asked to recall whether they used tobacco products in the past year (“think back to last spring (a year ago)”). The purpose was to see if there was a change in use over time (**Table 8**). Tobacco prevalence was statistically similar in the past year for the country peer group as it was for the non-country group (15.9% vs. 13.3%). Tobacco use increased over time for country teens (15.9% past year vs. 20.2% currently) and for the non-country group (13.3% past year vs. 19.5% currently). The increase was lower for country teens (4.3% vs. 6.2%). This difference in the absolute increase was due to slightly fewer country teens starting to use tobacco (5.8%) than for the non-country teens (10.0%). Small sample sizes make it difficult to assess the strength of these results.

Table 8: Past year tobacco use and tobacco use transitions

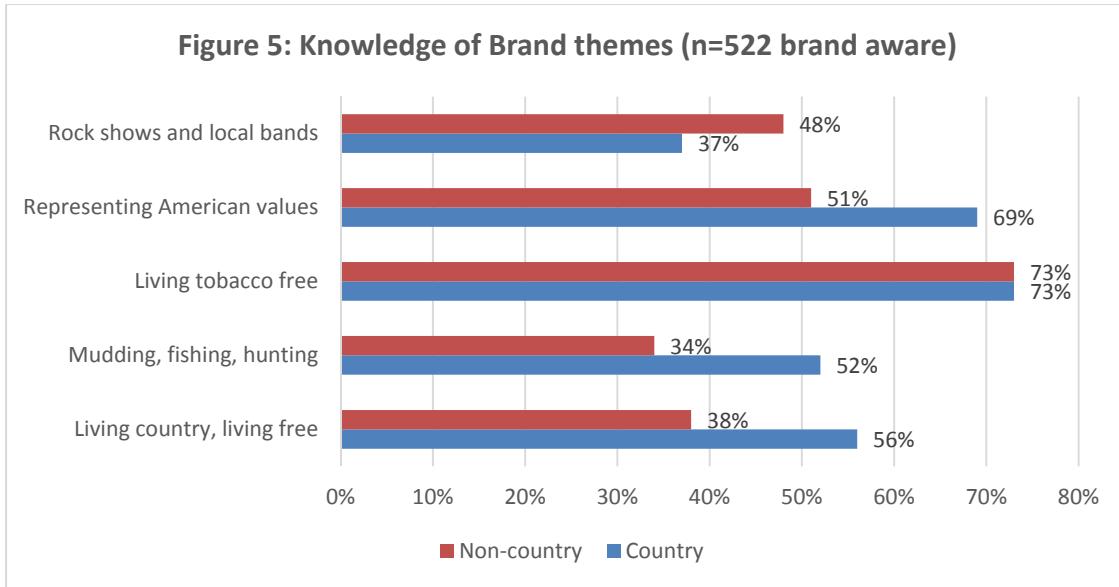
	Country Peer Group (n=264)	Non-Country Peer Groups (n=560)	Overall Sample (n=824)
Past year tobacco use	15.9% (11.5% - 20.3%)	13.3% (10.5% - 16.1%)	14.1% (11.7% - 16.5%)
Tobacco use transitions			
No tobacco used in either time period	76.0% (n=199)	76.7% (n=428)	76.0% (n=627)
Stopped tobacco use	4.2% (n=11)	3.9% (n=22)	4.0% (n=33)
Started tobacco use	8.8% (n=23)	10.0% (n=56)	9.6% (n=79)
Used tobacco in both time periods	11.4% (n=30)	9.3% (n=52)	10.0% (n=82)

Down and Dirty Brand Awareness

About 50% of teens (53% of country teens) had ever heard of the *Down and Dirty* brand, about 13% were unsure, and 36% had not heard of it (34% of country teens). Of those that were aware or unsure (n=522), opinion of the brand was favorable to neutral (**Figure 4**). Opinions were borderline significantly more favorable for country teens, because country teens were more likely to “really like” the brand (17% country vs. 10% non-country).



While country and non-country teens were equally aware (including unsure) of the *Down and Dirty* brand, country teens more accurately identified key brand themes (**Figure 5**). The exception was that the majority of teens associated the brand with “living tobacco free” (73% of both country and non-country).



Note: “brand aware” includes (aware and unsure)

Brand Awareness and Tobacco Use

Current tobacco use was not associated with brand awareness (**Table 9**), nor was past year use. However, within the group that was *Down and Dirty* aware, the increase in smoking prevalence was significant, whereas it was not for those not aware of *Down and Dirty*.

When teens who were aware and were unsure of *Down and Dirty* are disaggregated, those who were aware had a greater increase in tobacco use (current year, 20.4%; past year, 13.6%) than those who were unsure (current year, 19.3%; past year, 14.8%; data not shown).

Table 9: Tobacco use and brand awareness

	Aware of/unsure of <i>Down and Dirty</i> (n=522)	Not aware of <i>Down and Dirty</i> (n=302)
Current tobacco use	20.2% (16.7% - 23.6%)	18.9% (14.5% - 23.4%)
Past year tobacco use	13.8% (10.9% - 16.8%)	14.7% (10.7% - 18.7%)
Tobacco use transitions		
No tobacco used in either time period	76.0% (n=395)	77.0% (n=231)
Stopped tobacco use	3.9% (n=20)	4.3% (n=13)
Started tobacco use	10.4% (n=54)	8.3% (n=25)
Used tobacco in both time periods	9.8% (n=51)	10.3% (n=31)

Country Exclusive Peer Group

Teens who identified exclusively with the country peer group were a focus of the campaign. There were 88 teens that took the survey who were determined to be country exclusive, and 176 teens that identified with country and another peer crowd as well (country non-exclusive). Comparatively, tobacco use was greater among the country exclusive group, although rates are not statistically different (confidence intervals are wide due to small sample sizes) (**Table 10**). The country exclusive rate was similar to the 2015 YRBS estimate. The country exclusive group was somewhat more likely to be aware of the *Down and Dirty* brand (58.6% vs. 50.0% for country non-exclusive). About 40% of both groups really liked/or liked the brand (**Table 10**). Both country sub-groups had similar understanding of key *Down and Dirty* themes.

Table 10: “Country Exclusive” peer group: tobacco use and brand awareness

	Country Exclusive Group (n=88)	Country Non-Exclusive Group (n=176)
Current tobacco use	25.0% (16.0% - 34.1%)	17.7% (12.1% - 23.4%)
<i>Down and Dirty</i> Brand		
Ever heard <i>Down and Dirty</i>?		
Yes	58.6% (51)	50.0% (88)
No	27.6% (24)	36.9% (65)
Not sure	13.8% (12)	13.1% (23)
How much do you like <i>Down and Dirty</i> *?		
Really like/like	39.1% (25)	41.4% (46)
Neutral	51.6% (33)	51.4% (57)
Really dislike/dislike	9.4% (6)	7.2% (8)

*Only asked of those who answered “yes” or “unsure” of ever hearing of brand.

V. Discussion and Program Considerations

The *Down and Dirty* campaign has established favorable brand awareness, appeal and association. Half of all survey respondents were aware of the brand, including 53% of “country” teens (**Table 11**). These rates are in line with brand awareness for *The Real Cost* campaign (54%), which has demonstrated widespread reach and is associated with more negative attitudes toward tobacco products and greater risk perceptions of cigarette smoking among U.S. teens.¹² The campaign did not achieve brand awareness at the target value rate set by the VTCP, 65-70%, based on brand awareness rates among country youth in prior campaign years. Most survey respondents (73%), including country teens and non-country teens, associate the brand with living tobacco-free, an important objective of the VTCP for this youth prevention campaign.

Despite favorable brand awareness, appeal, and association, tobacco-use rates, current or past, were not influenced by awareness of the *Down and Dirty* campaign. A consideration for this finding is that brand awareness was assessed based on one survey question inquiring whether the survey respondent had ever heard of the brand (and included the campaign logo). Dosage of exposure to the brand and campaign are not captured in this evaluation and therefore assessing tobacco use rates by brand awareness is limited to some extent.

The survey found that tobacco use rates among country teens are statistically similar to rates among non-country teens, including any current tobacco use, cigarette use, smokeless use, and e-vapor product use (**Table 11**). These findings indicate there is no disparity in tobacco use among country teens in Vermont. Assessing the survey data by grade, tobacco use rates among country teens in high school are generally higher compared to non-country teens in high school (except for use of electronic vapor products, which is the same), however rates are not statistically different across these groups. Interestingly, tobacco use rates in general are higher comparing the high school groups to out of school/college groups. Qualitatively, use is higher among non-country teens compared to country teens, such as for smokeless use (although differences in rates are not statistically significant).

Assessing tobacco-use rates among high school country and non-country teens, compared to current YRBS data, we find survey respondents have similar or lower tobacco use rates compared to state average rates from Vermont’s YRBS 2015. Interpretation of meaning is limited due to 2017 data being compared to 2015 YRBS data and survey data not being a representative sample of teens throughout the state.

Other notable findings on tobacco use include rates of use by gender. Among country teens, rates of cigarette use, smokeless use, and e-vapor product use were higher among males compared to females, and significantly so for cigarette use. Conversely, among non-country teens, rates of any tobacco product use, cigarette use, smokeless use, and e-vapor product use were statistically similar among males and females. Rate of any tobacco product use among country teen survey respondents that identified as transgender and/or different was 50%, although the sample size for this group is small and limits interpretation of findings.

Table 11. Survey Results Relative to Evaluation Questions & Measures of Success

<p>Evaluation Question 1: To what extent is the <i>Down and Dirty</i> campaign reaching the target audience of country teens in Vermont?</p>
<p>Measures of Success</p> <ul style="list-style-type: none">❖ Brand awareness is high and positive<ul style="list-style-type: none">- VTCP aims for 65-70% brand awareness in year 4 of the campaign❖ Brand is associated with tobacco-free living
<p>Survey Results</p> <p><i>Down and Dirty</i> campaign did not achieve level of brand awareness the VTCP aimed for.</p> <ul style="list-style-type: none">- Brand awareness among survey respondents overall was 50% and among country respondents, 53%.- Brand appeal is favorable among 36% of the non-country sample that are aware of the brand, and 40% of country teens aware of the brand. <p><i>Down and Dirty</i> brand is associated with tobacco-free living.</p> <p>The majority of the sample, 73% of country and non-country teens, aware of the brand associate it with tobacco-free living</p>
<p>Evaluation Question 2: What is the rate of tobacco use among the target audience of country teens in Vermont?</p>
<p>Measures of Success</p> <ul style="list-style-type: none">❖ Any tobacco use, cigarette use, and chew use prevalence among country youth❖ Any tobacco use, cigarette use, and chew use prevalence among country youth compared to non-country youth
<p>Survey Results</p> <p>Per high school student data (to align with YRBS), tobacco use is not significantly different comparing country teens to non-country teens; rates are lower than 2015 YRBS rates:</p> <ul style="list-style-type: none">- Any tobacco use among country (19.5%) is not statistically different than non-country (14.5%), and is lower than the 2015 YRBS rate (25%)- Cigarette use among country (7.8%) is not statistically different than non-country (5.2%), and is lower than 2015 YRBS rate (11%)- Smokeless/chew use among country teens (7.0%) is not statistically different than non-country (1.6%), and is the same as the 2015 YRBS rate (7%)- E-vapor product use is the same among country teens (7.7%) and non-country (7.7%), and is lower than the 2015 YRBS rate (15%) <p>Comparing prior and current year's tobacco use, the absolute increase in year-to-year prevalence was (non-significantly) greater in the non-country group (6.2%) than the country group (4.3%).</p>

Evaluation Question 3: To what extent does the *Down and Dirty* campaign influence tobacco use among country teens in Vermont?

Measures of Success

- ❖ Any tobacco use, cigarette use, and chew use prevalence is significantly less among country youth aware of *Down and Dirty* compared to those not aware
- ❖ Change in any tobacco, cigarettes, or chew prevalence from 1 year prior to current use , by campaign awareness

Survey Results

Rates of any current tobacco use were similar whether one was aware of the *Down and Dirty* brand (20.4%) or not aware (18.9%).

Rates of any past tobacco use, were similar whether one was aware of the *Down and Dirty* brand (13.8%) or not aware (14.7%).

This evaluation has some limitations. The cross sectional data collection method used does not allow for a determination of causality between the *Down and Dirty* campaign and similar tobacco use rates among country and non-country teens in Vermont. The country targeted convenience sampling method and social marketing approach to recruit respondents limits generalizability of the sample. Survey recruitment was oriented towards country teen interests and therefore generalizability of the sample is stronger for country teens. While the sample includes a good mix of non-country peer groups, it is not known whether it is representative of all Vermont teens and the actual proportions of non-country and country peer groups across the state. There were a limited number of “country exclusive” youth (n=88) who completed the survey. It is difficult to know if that is truly a smaller segment of the “country” peer crowd or they were less likely to complete the survey.

Conclusion. The *Down and Dirty* campaign has broad and positive brand awareness, favorable brand appeal among the intended audience of “country” teens, and strong brand association with tobacco-free living among “country” and non-country teens aware of the brand. Tobacco use rates among “country” teens and non-country teens in Vermont are similar.

Appendix A: @Mssg Chatbot Example Interaction

The screenshot shows a messaging interface with a dark blue header bar. In the top right corner of the header, there is a "Actions" button with a dropdown arrow. Below the header, a message from a user is visible, followed by a reply from a bot.

User Message: replied to an ad. This is the last ad you published.

Bot Message:

Image: A yellow gift card with a white border. It features a small circular logo with "POLLIT" and "VT" inside, a white ribbon bow, and a large "\$10" in the center. Below the card, the text "Take our survey - Get a gift card" is displayed.

Text: Thanks for taking this survey. We'll send you a \$10 gift card upon completion. But first: do you live in Vermont? Please click yes or no.

Buttons:

- Yes
- No

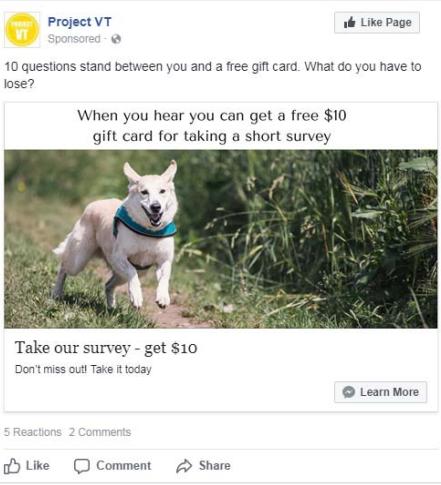
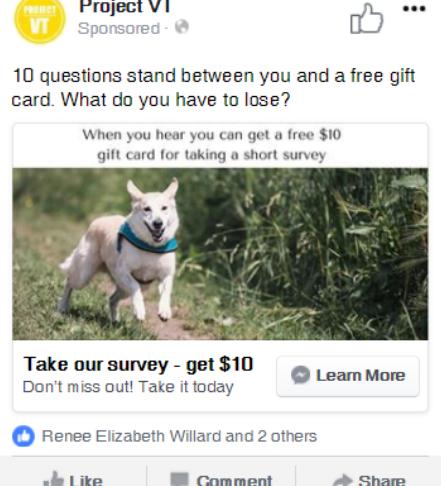
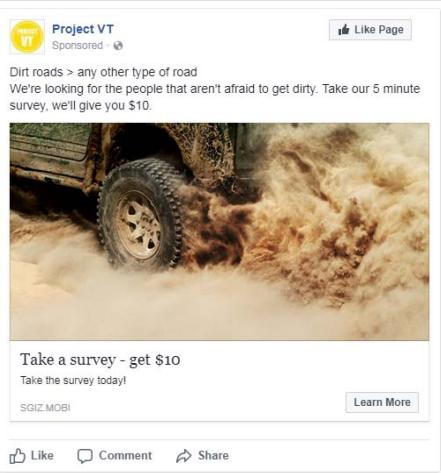
User Response: Yes

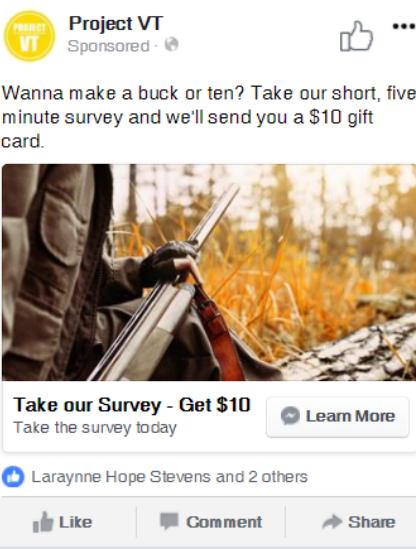
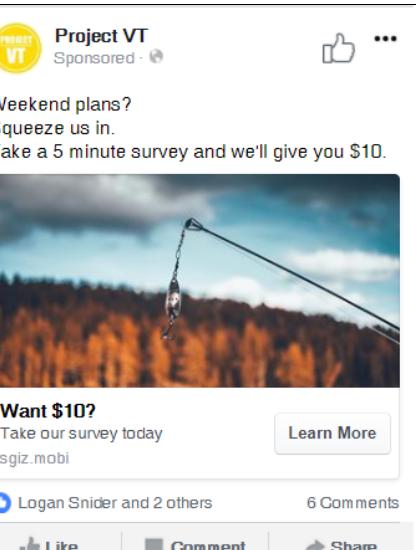
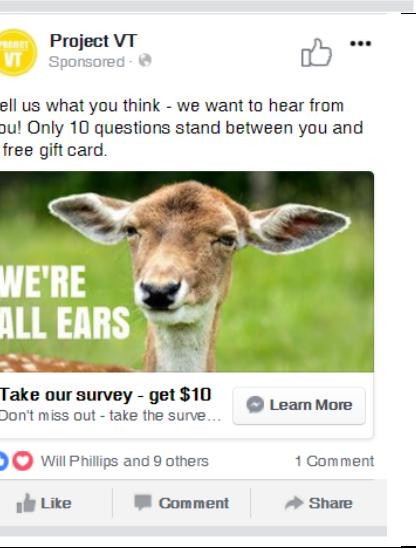
Bot Message:

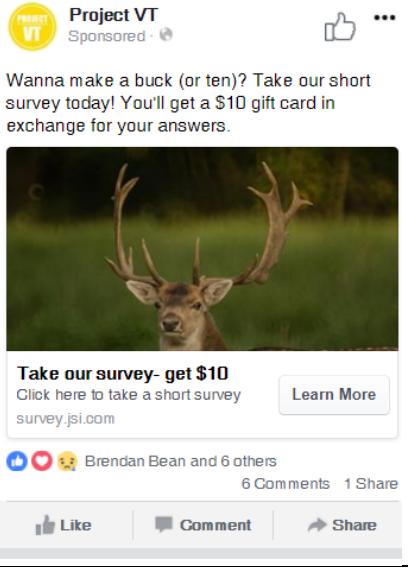
Take the survey now by clicking the button below. When the survey is complete we'll send you a \$10 gift card.

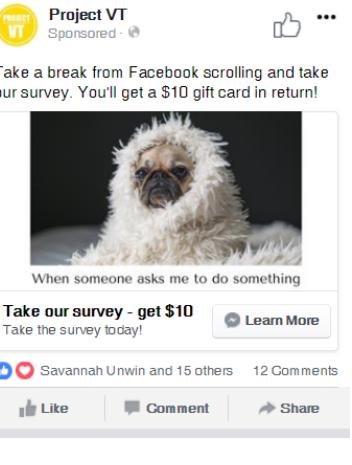
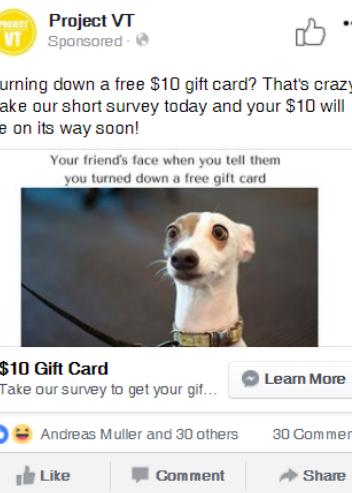
Text: Take Survey

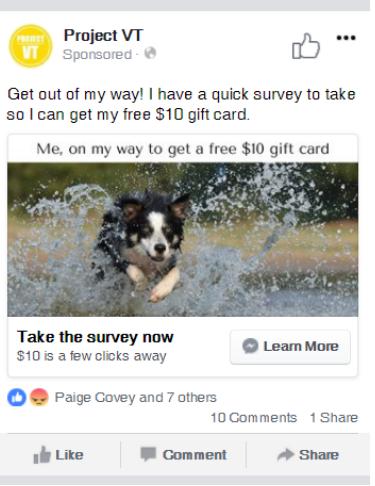
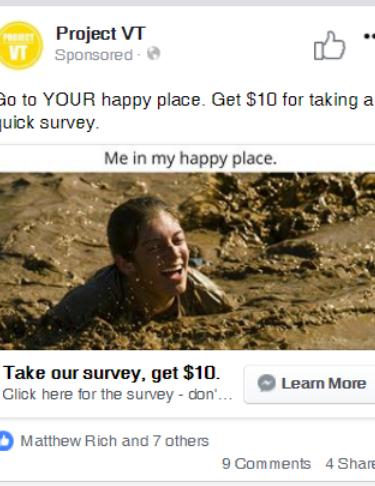
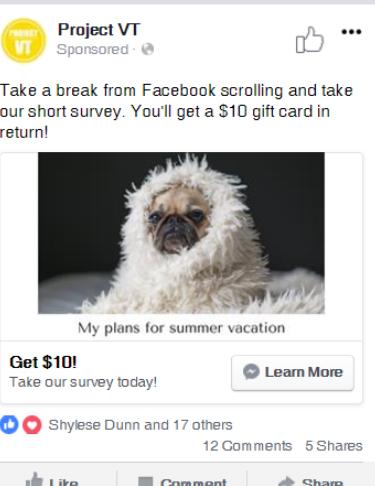
Appendix B: Facebook and Instagram Recruitment Advertisements

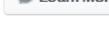
Ad Number and Image	Details	Impressions details
 <p>Project VT Sponsored · 10 questions stand between you and a free gift card. What do you have to lose? When you hear you can get a free \$10 gift card for taking a short survey  Take our survey - get \$10 Don't miss out! Take it today Learn More 5 Reactions 2 Comments Like Comment Share</p>	Dates: May 15-May 18 Type: Meme Used @Mssg	Reach: 10,215 Impressions: 16,185 Link Clicks: 92 CTR: .90%
 <p>Project VT Sponsored · 10 questions stand between you and a free gift card. What do you have to lose? When you hear you can get a free \$10 gift card for taking a short survey  Take our survey - get \$10 Don't miss out! Take it today Learn More Renee Elizabeth Willard and 2 others Like Comment Share</p>	Dates: May 19-May 22 Type: Meme Used @Mssg	Reach: 10,109 Impressions: 16,542 Link clicks: 79 CTR: .78%
 <p>Project VT Sponsored · Dirt roads > any other type of road We're looking for the people that aren't afraid to get dirty. Take our 5 minute survey, we'll give you \$10.  Take a survey - get \$10 Take the survey today! Learn More Like Comment Share</p>	Dates: June 15 – Jun 20 Type: Country-focused Did not use @Mssg	Reach: 670 Impressions: 1,800 Link clicks: 9 CTR: 1.34%

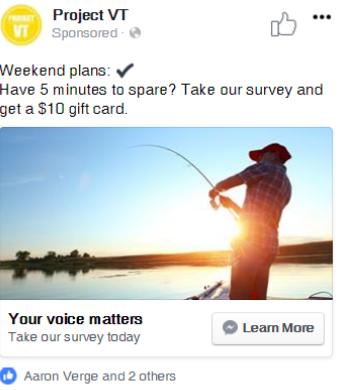
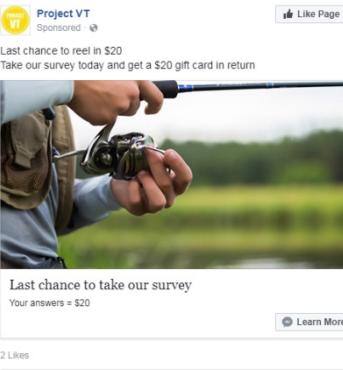
4	 <p>Project VT Sponsored ·  ...</p> <p>Wanna make a buck or ten? Take our short, five minute survey and we'll send you a \$10 gift card.</p> <p></p> <p>Take our Survey - Get \$10  Take the survey today</p> <p> Larayne Hope Stevens and 2 others  </p>	<p>Dates: June 16 – June 23 Type: Country-focused Used @Mssg</p>	<p>Reach: 5,756 Impressions: 18,725 Link clicks: 67 CTR: 1.13%</p>
5	 <p>Project VT Sponsored ·  ...</p> <p>Weekend plans? Squeeze us in. Take a 5 minute survey and we'll give you \$10.</p> <p></p> <p>Want \$10?  Take our survey today sgiz.mobi</p> <p> Logan Snider and 2 others  6 Comments </p>	<p>Dates: June 16 – June 23 Type: Country-focused Did not use @Mssg</p>	<p>Reach: 9,903 Impressions: 43,953 Link clicks: 205 CTR: 1.92%</p>
6	 <p>Project VT Sponsored ·  ...</p> <p>Tell us what you think - we want to hear from you! Only 10 questions stand between you and a free gift card.</p> <p></p> <p>WE'RE ALL EARS</p> <p>Take our survey - get \$10  Don't miss out - take the surve...</p> <p> Will Phillips and 9 others  1 Comment </p>	<p>Dates: May 17 – May 21 Type: Country-focused/meme Used @Mssg</p>	<p>Reach: 46,729 Impressions: 718,428 Link clicks: 2828 CTR: .71%</p>

<p>7</p>	 <p>Project VT Sponsored · 1 hr ago</p> <p>Tell us what you think - we want to hear from you! Only 10 questions stand between you and a free gift card.</p> <p>WE'RE ALL EARS</p> <p>Take our survey - get \$10 Don't miss out - take the survey to... Learn More</p> <p>1 Like · 1 Comment · 2 Shares</p> <p>Like Comment Share</p>	<p>Dates: June 16 – June 20 Type: Country-focused/meme Did not use @Mssg</p>	<p>Reach: 21,706 Impressions: 53,812 Link clicks: 185 CTR: .77%</p>
<p>8</p>	 <p>Project VT Sponsored · 1 hr ago</p> <p>Wanna make a buck (or ten)? Take our short survey today! You'll get a \$10 gift card in exchange for your answers.</p> <p>Take our survey- get \$10 Click here to take a short survey survey.jsi.com Learn More</p> <p>6 Comments · 1 Share</p> <p>Like Comment Share</p>	<p>Dates: May 22 – Jul 7 Type: Country-focused Did not use @Mssg</p>	<p>Reach: 24,803 Impressions: 72536 Link clicks: 435 CTR: 1.57%</p>

9	 <p>Project VT Sponsored ·  ...</p> <p>Wanna make a buck (or ten)? Take our short survey today! You'll get a \$10 gift card in exchange for your answers.</p>  <p>Take our survey- get \$10 Click here to take a short survey </p> <p> Julia Rose and 10 others 2 Comments</p> <p> Like  Comment </p>	<p>Dates: June 28- Jul 5 Type: Country-focused Used @Mssg</p>	<p>Reach: 6649 Impressions: 27,251 Link clicks: 97 CTR: 1.34%</p>
10	 <p>Project VT Sponsored ·  ...</p> <p>Take a break from Facebook scrolling and take our survey. You'll get a \$10 gift card in return!</p>  <p>When someone asks me to do something</p> <p>Take our survey - get \$10 Take the survey today! </p> <p> Savannah Unwin and 15 others 12 Comments</p> <p> Like  Comment </p>	<p>Dates: May 23 – May 27 Type: Meme Used @Mssg</p>	<p>Reach: 15,418 Impressions: 43,691 Link clicks: 218 CTR: 1.34%</p>
11	 <p>Project VT Sponsored ·  ...</p> <p>Turning down a free \$10 gift card? That's crazy! Take our short survey today and your \$10 will be on its way soon!</p>  <p>Your friend's face when you tell them you turned down a free gift card</p> <p>\$10 Gift Card Take our survey to get your gif... </p> <p> Andreas Muller and 30 others 30 Comments</p> <p> Like  Comment </p>	<p>Dates: May 27 – May 31 Type: Meme Used @Mssg</p>	<p>Reach: 17,546 Impressions: 56,493 Link clicks: 226 CTR: 1.31%</p>

12	 <p>Project VT Sponsored ·  ...</p> <p>Get out of my way! I have a quick survey to take so I can get my free \$10 gift card.</p> <p></p> <p>Me, on my way to get a free \$10 gift card</p> <p>Take the survey now \$10 is a few clicks away </p> <p>  Paige Covey and 7 others 10 Comments 1 Share</p> <p>  </p>	<p>Dates: May 37 – May 31 Type: Meme Used @Mssg</p>	<p>Reach: 16,366 Impressions: 67,245 Link clicks: 184 CTR: 1.08%</p>
13	 <p>Project VT Sponsored ·  ...</p> <p>Go to YOUR happy place. Get \$10 for taking a quick survey.</p> <p></p> <p>Me in my happy place.</p> <p>Take our survey, get \$10. Click here for the survey - don'... </p> <p> Matthew Rich and 7 others 9 Comments 4 Shares</p> <p>  </p>	<p>Dates: May 31 – June 4 Type: Country-focused/meme Used @Mssg</p>	<p>Reach: 16,870 Impressions: 55,794 Link clicks: 195 CTR: 1.07%</p>
14	 <p>Project VT Sponsored ·  ...</p> <p>Take a break from Facebook scrolling and take our short survey. You'll get a \$10 gift card in return!</p> <p></p> <p>My plans for summer vacation</p> <p>Get \$10! Take our survey today! </p> <p>  Shylese Dunn and 17 others 12 Comments 5 Shares</p> <p>  </p>	<p>Dates: Jun 5 – Jul 31 Type: Meme Used @Mssg</p>	<p>Reach: 19,176 Impressions: 75,379 Link clicks: 263 CTR: 1.12%</p>

15	<p> Project VT Sponsored ·  ...</p> <p>We don't care what you do with your free \$10 gift card. Your gift card is waiting, take our short survey now!</p>  <p>Take the survey today! Your \$10 is waiting </p> <p>   Sierra Marier and 20 others 1 Comment 1 Share</p> <p> Like  Comment  Share</p>	<p>Dates: June 5 – June 9 Type: Meme Used @Mssg</p>	<p>Reach: 12,060 Impressions: 26,075 Link clicks: 144 CTR: 1.11%</p>
16	<p> Project VT Sponsored ·  ...</p> <p>Squeeze us into your schedule. For a 5 minute survey, you'll get a \$10 gift card.</p>  <p>Weekend plans? Have time to make \$10? </p> <p> Logan Spencer and 8 others 2 Comments 3 Shares</p> <p> Like  Comment  Share</p>	<p>Dates: June 9 – June 11 Type: Country-focused Used @Mssg</p>	<p>Reach: 14,386 Impressions: 29,900 Link clicks: 83 CTR: .55%</p>
17	<p> Project VT Sponsored ·  ...</p> <p>Our survey is almost done & we need your help! If you take the survey, we'll give you a \$10 gift card. If you tag 5 friends on this post, you'll be entered to win a \$100 gift card. The winner will be chosen at random on July 5, 2017. This raffle is not sponsored by Facebook. Read the fine print here: http://docdro.id/fog8FIS</p>  <p>Tag 5 friends - Win a \$100 gift card </p> <p>   Tyler Slie and 6 others 6 Comments</p> <p> Like  Comment  Share</p>	<p>Dates: June 29-Jul 5 Type: Meme Used @Mssg</p>	<p>Reach: 4213 Impressions: 16,208 Link clicks: 56 CTR: 1.31%</p>

18	 <p>Project VT Sponsored</p> <p>Weekend plans: ✓ Have 5 minutes to spare? Take our survey and get a \$10 gift card.</p> <p>Your voice matters Take our survey today Learn More</p> <p>Aaron Verge and 2 others</p> <p>Like Comment Share</p>	<p>Dates: June 24-June 26 Type: Country-focused Used @Mssg</p>	<p>Reach: 8661 Impressions: 20,547 Link clicks: 48 CTR: .55%</p>
19	 <p>Project VT Sponsored</p> <p>Can you point us in the right direction? We're conducting a survey in VT and we need YOUR help. Answer a few questions and we'll send you a \$10 gift card.</p> <p>Want \$10? Take our survey today Learn More</p> <p>Like Comment Share</p>	<p>Dates: June 23-Jun 26 Type: Used @Mssg</p>	<p>Reach: 339 Impressions: 530 Link clicks: 2 CTR: .59%</p>
20	 <p>Project VT Sponsored</p> <p>Last chance to reel in \$20 Take our survey today and get a \$20 gift card in return</p> <p>Last chance to take our survey Your answers = \$20 Learn More</p> <p>2 Likes</p> <p>Like Comment Share</p>	<p>Dates: July 14-July 16 Type: Country-focused Did not use @Mssg</p>	<p>Reach: 2890 Impressions: 7339 Link clicks: 42 CTR: 1.31%</p>

21	<p> Project VT Sponsored ·  ...</p> <p>Summer plans: ✓ Take a break from living the good life - take our short survey and we'll send you a \$10 gift card.</p>  <p>Take our survey - get \$10 Don't miss out! sgiz.mobi</p> <p> Eli Tucker and 2 others</p> <p> Like  Comment  Share</p>	<p>Dates: Aug 7 – Aug 10 Type: Country-focused Used @Mssg</p>	<p>Reach: 5464 Impressions: 24,098 Link clicks: 72 CTR: .55%</p>
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Appendix C: Audience Targeting Strategy

Interest-Based Targeting Keywords

Rescue IBT Key Words:

Eva Shockey, Dale Earnhardt, Snowmobile, Ford F-Series, Big Buck Hunter, Browning Arms Company, John Deere, The Timberland Company, Chevrolet, Phil Robertson "The Duck Commander", Pickup truck, Swamp Loggers, Tiffany Lakosky, Buckwild, Sierra Trading Post, Ducks Unlimited, inside nascar, YETI Coolers, Can-Am, Dodge Ram, Dodge, Dickies, NASCAR, Thunder Road International SpeedBowl, Country rap, KTM, Trophy hunting, Shooting sport, Joe (singer), The Deer Hunter, Lifted Trucks, Yamaha Motor Company, Archery, Virginia Motor Speedway, Field & Stream, Bowhunting, Jeep, Off-roading, Luke Bryan, The Big Buck Club, NASCAR Racing, Dennis Anderson, Big-game hunting, Bass Pro Shops, Bowhunting.com, Target archery, Deer & Deer Hunting, Deer Hunter (series), DAF Trucks, Snowmobile skipping, NASCAR Sprint All-Star Race, Hunting season, L.L.Bean, Outdoor Life, Toyota, Michael Waddell, Jeff Gordon, Suzuki, New Hampshire Motor Speedway, Four-wheel drive, Mud bogging, Ford Motor Company, Country Music Television, Realtree Outdoors, Bow and arrow, Carhartt, Toby Keith, Wrangler (jeans), Jamey Johnson, Kittery Trading Post, Nitro Circus, 4x4 Off-Road Racing, Mossy Oak, Duck Dynasty, Florida Georgia Line, Willie Robertson or Primos Hunting, Behaviors: Dodge RAM, Toyota, Jeep, Pickup truck, Pickup truck, Pickup truck, Dodge RAM, Jeep, Suzuki, Toyota or Pickup Truck

JSI Additional IBT Key Words:

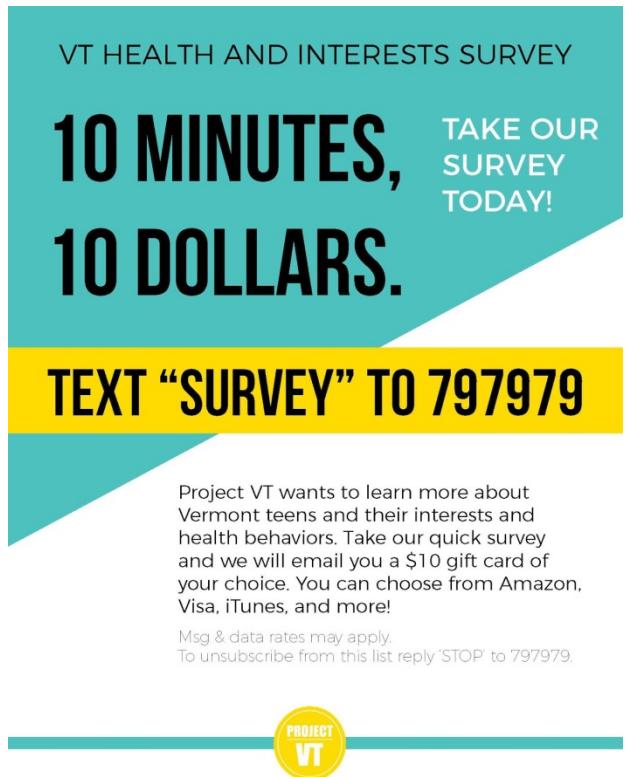
Interests: Outdoors, Fishing, Gander Mountain, Off-road vehicle, Hunting, Side by Side (UTV), Dick's Sporting Goods, Cabela's, All-terrain vehicle, Polaris RZR, Hiking or Sports and outdoors, Atv's, atv, Xtreme 4x4, Arctic Cat - ATVs, Toyota 4x4, Jeep Wrangler, Polaris, Mud bogging or 4x4 Off-Road Racing, Employers: Mudding

Rural Locations Targeted

Anyone who lived within 15 miles of the following Vermont towns:

- Albion
- Andover
- Ascutney
- Athens
- Baltimore
- Brookline
- Cambridge
- Derby Center
- Fairlee
- Grafton
- Guildhall
- Holland
- Island Pond
- North Troy
- Peru
- Stratton
- West Haven
- Woodbury

Appendix D: In-Person Print Materials and Dissemination



Survey In-Person and Print Promotion -- Flyer and Palm Card Distribution				
Event & Venues	Date	# Flyers	# Palm Cards	
King of Dirt SMB at Devil's Bowl Speedway	June 13, 2017	1	20	
Tractor Supply Co. , Morrisville, VT	June 17, 2017	1	5	
Dicks Sporting Goods, Williston, VT (staff break room)	June 23, 2017	1	10	
Guys Farm and Yard, St. Albans, VT	July 1, 2017	1	5	
Pelkey's Archery, St. Albans, VT	July 1, 2017	1	20	
Bradford County Fair, Bradford VT	July 15, 2017	0	20	
Bear Ridge Speedway, Bradford VT	July 15, 2017	0	30	

Appendix E: Survey Ambassadors

	Ambassador Type	Gender, Age, Grade	Town, Zip, and County	Activities/ Interests	Mechanisms for Sharing Survey	Number Eligible & Valid Recruited
1	In-Person	Male Age 12 8 th Grade	Cambridge, VT, 05444, Lamoille County	Hunting, fishing, basketball, 4- wheeling, sports	Text message, Instagram message	2
2	In-Person	Female Age 17 12 th Grade	St. Johnsbury, VT, 05819, Caledonia County	Hunting, hiking, fishing, sports	Text message, Facebook message	0
3	In-Person	Male Age 17 12 th Grade	Northfield, VT, 05663, Washington County	Hunting, fishing, 4- wheeling, building, maple sugaring, disk golf	Facebook, Instagram	8
4	In-Person	Male Age 13 8 th Grade	East Montpelier, VT, 05651, Washington County	Fishing, hunting, riding mini bikes, archery, gardening	Facebook, Instagram, Text	3
5	In-Person	Female Age 18 Graduated high school	Stowe, VT, 05672, Lamoille County	Running, biking, fishing, mudding.	Instagram, Text, In-Person	10
6	In-Person	Female Age 17 12 th Grade	Johnson, VT, 05656, Lamoille County	riding ATVs, country music, mudding, and EMT cadet with Cambridge Rescue	Instagram, Facebook, and text	9
7	In-Person	Female Age 15 10 th Grade	Elmore, VT, 05657, Lamoille County	four wheeling, country music, car racing at Bear Ridge, horses, mud trucks, fishing	text messaging, Facebook, Instagram, Snapchat	6
8	In-Person	Female Age 14 10 th Grade	Johnson, VT, 05655, Lamoille County	Swimming Dance Soccer Canoeing/Kayaking Reading	Text, Facebook, In Person, Snapchat	1
9	In-Person	Female	Bennington,	Hunt, fish, ATV,	Facebook	4

		Age 13 8 th Grade	VT, 05201, Bennington County	snowboard		
1 0	Facebook	Male Age 18 Graduated high school	Barre, VT, 05641, Washington County	Sports, Friends, Games, Hunting/fishing, etc	Facebook/in person/ other social medias	0
1 1	Facebook	Male Age 17 12 th Grade	Wheelock, VT, 05842, Caledonia County	Working	In-Person	0
1 2	Facebook	Did not answer questions				0
1 3	Facebook	Did not answer questions				0
1 4	Facebook	Male 16 11 th Grade	Salisbury, VT, 05769, Addison County	Sports, Fishing, Hanging with Friends	Facebook messenger	3

¹ Vermont Department of Health. Vermont Youth Risk Behavior Surveillance Survey Report 2015.

² Vermont Department of Health. Vermont Youth Risk Behavior Surveillance Survey Report 2015.

³ Rescue Social Change Group. Reducing Teen Tobacco Use in Vermont. A Functional Analysis for Cultural Interventions. 2013.

⁴ Rescue Social Change Group. Reducing Teen Tobacco Use in Vermont. A Functional Analysis for Cultural Interventions. 2013.

⁵ Rescue Social Change Group. Peer Crowd & Tobacco-Use. Unpublished data.

⁶ Rescue Social Change Group. Down and Dirty Campaign Evaluation Report Year 1. 2014.

⁷ Rescue Social Change Group. Down and Dirty Campaign Evaluation Report Year 2. 2015.

⁸ Rescue Social Change Group. Down and Dirty Campaign Evaluation Report Year 3. 2016.

⁹ Rescue Social Change Group. Vermont Down and Dirty campaign evaluation analysis. Unpublished. 2016.

¹⁰ NORC Center for Public Affairs Research. (2017). *New survey reveals Snapchat and Instagram are the most popular social media platforms among American teens* [Press Release]. Retrieved from <http://www.apnorc.org/PDFs/Teen%20Social%20Media%20Messaging/2017.04.20%20%20AP-NORC%20%20Teens%20and%20Social%20Media%20Apps%20%20Press%20Release%20%20FINAL.pdf>

¹¹ Lenhart, A. (2015, April 9). *Teens, social media & technology overview 2015*. Retrieved from <http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/>

¹² Huang LL, Lazard AJ, Pepper JK3, Noar SM5, Ranney LM, Goldstein AO. Impact of The Real Cost Campaign on Adolescents' Recall, Attitudes, and Risk Perceptions about Tobacco Use: A National Study. *Int J Environ Res Public Health.* 2017 Jan 4;14(1)