

Effectiveness of Highway Safety Public Education at Montana Motor Registration Stations by Streaming a Variety of Safety Context

Project Final Presentation & Implementation Meeting

August 2, 2023

Agenda

- Project Review
- Conclusions and Future Research
- Implementation Recommendation Discussion

Project Objectives

- Identify and secure already available safety content (as opposed to creating new content) and purchase and deploy the appropriate equipment to display safety content;
- Survey the public to determine if they are paying **attention** to the videos shown at the Motor Vehicle Division (MVD) driver license stations and County Treasurer Offices; and
- Determine if the safety messages have an **impact** on the behavior of the viewing public

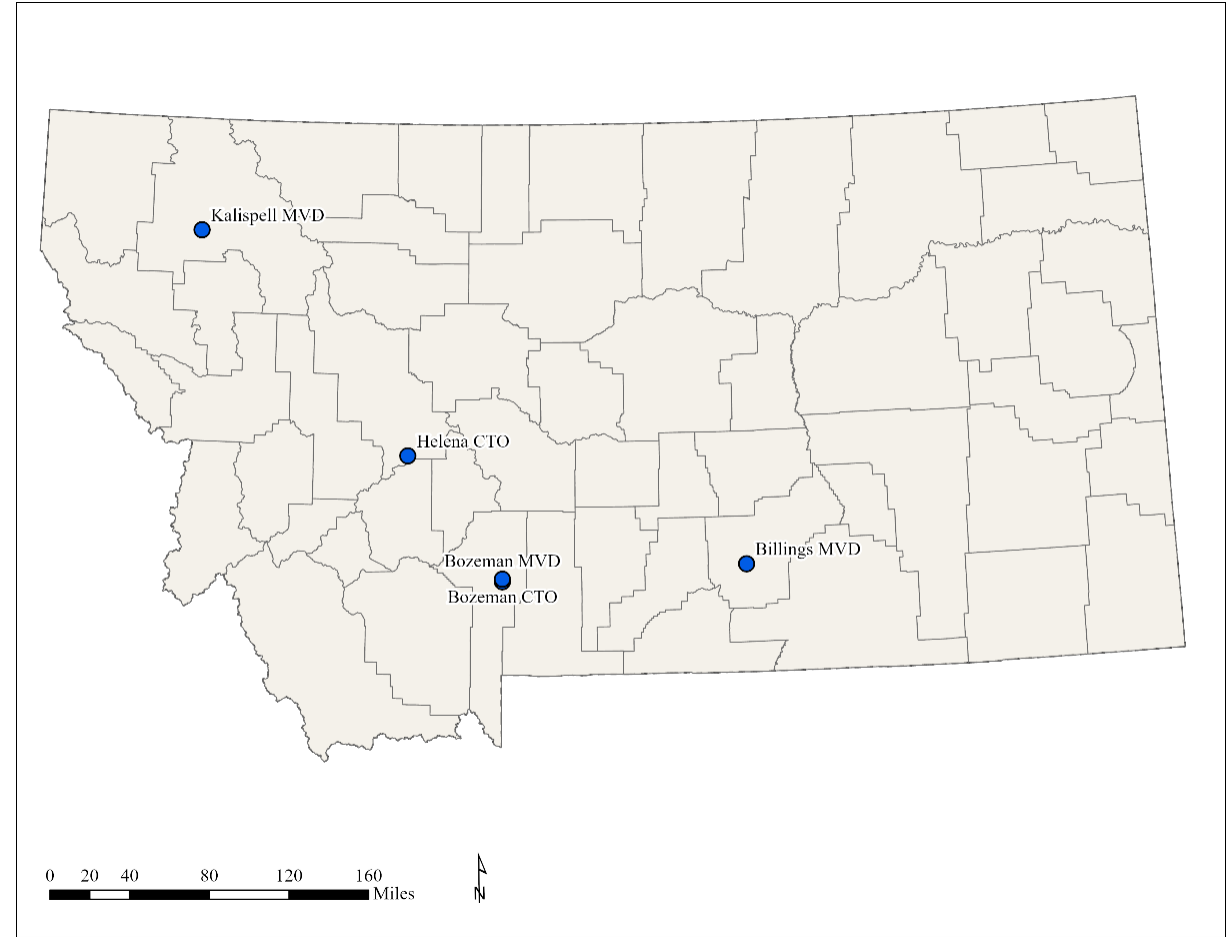
Equipment

- Seven options considered
- Chose an “off-the-shelf” option
- Components included:
 - LCD smart TV
 - Digital media player
 - USB power and HDMI cables
 - Media storage
 - Lockbox and hardware
 - Wall mount bracket
 - Power cord/surge protector
- Total cost per system approx. \$450



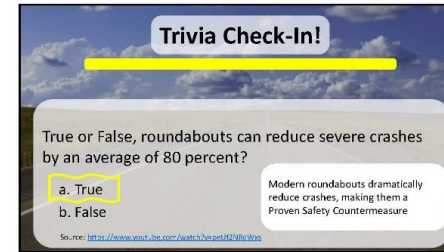
Locations

- Considerations:
 - 2 hr radius of Bozeman
 - Near remote WTI researchers
 - Attempt to avoid locations
 - Visitation to achieve statistically significant results
 - Room layouts
 - Inclusive of tribal locations
 - Agreement to participate
- 25 potential locations
- 3 MVD and 2 CTO locations



Storyboards

- 4 originally created
- Media type:
 - Videos
 - Photos
 - Infographics
 - Trivia
 - Thank you slide
- Topics:
 - Emphasis areas in MDT's CHSP
 - Safety priorities of technical panel
 - Real ID video



Final Video Loops

- Chose storyboards #1 and #4 to update
- Updated content based on:
 - Permissions for content use
 - Decision to not use audio
 - New videos produced by MDT
 - Favorite videos from storyboards #2 and #3



Final Video Loops (cont.)

- Video loop/sequence #1
 - 7 minutes and 5 seconds
 - Deployed July 2021-April 2022
 - Intercept surveys
 - August/September 2021
 - October/November 2021
- Video loop/sequence #2
 - 5 minutes and 25 seconds
 - Deployed April 2022-August 2022
 - Intercept surveys
 - April/May 2022
 - June/July 2022

- Topics Video Loop #1
 - encouraging Montanans to buckle up
 - bicycle safety
 - motorcycle safety
 - emergency responder safety
 - roundabout safety
 - Real ID
 - obtaining a sober driver
 - the costs of driving under the influence
 - operating safely around snowplows
- Topics Video Loop #2
 - buckling one's seat belt
 - rumble strips
 - railroad crossing safety
 - slow vehicles
 - reducing speed when entering a horizontal curve
 - the impacts of texting on situational awareness
 - the flashing yellow arrow treatment at traffic signals
 - Real ID
 - speeding



COVID Impacts

- Delayed schedule
 - Deployment
 - Second round of surveying
- Affects to intercept survey
 - Lack of detailed visitation data during COVID
 - Operational changes at locations
 - Room layout changes for social distancing
 - Need for cleaning of survey materials
 - Wearing masks



Survey Results

- Survey respondents
 - Wide range of ages 18-90 years
 - Evenly balanced for gender
- Low participation rate
- TV conspicuity
 - Video content
 - TV location
 - Time at location
 - Age: Younger patrons
- Recall of screen captures and slogans
 - Videos were recalled more often than the slogans
 - Time at location
 - Video length
 - Videos that were shocking or engage viewer's empathy
 - Age: generally slanted towards younger patrons
 - Those will children
- Respondents felt the trivia was memorable



 Date: _____

The Western Transportation Institute at Montana State University (MSU) is working with the Montana Department of Transportation to improve safety for Montanans. Participation is voluntary. You may skip any question you want, and you may stop at any time. We anticipate that the survey will take about 5 minutes to complete. Please direct any questions about the survey to Natalie Villwock-Witte: n.villwockwitte@montana.edu or 505-414-8935.

What is your 5- digit zip code? _____

What is your age? _____

What is your gender? Male Female Non-Binary

Did you look at the TV monitor during your visit? Yes No





If you did **not** watch the TV monitor during your visit, how did you spend your wait time?

Filling out forms On a phone/smartphone Other (please specify): _____

Which of the following best describes the amount of time you spent at the Motor Vehicle Division (MVD)/County Treasurers' Office?

Less than 15 min. 15 to 30 min. 31 to 45 min. 46 to 60 min. More than 60 min

Please circle all of the following that you saw today viewing the videos in the MVD/County Treasurers' Office?

Please share anything particularly memorable that you may recall from the videos in the MVD/Treasurers' Office.

Which of the following slogans or phrases (check all that apply) did you learn from viewing the videos in the MVD/Treasurers' Office?

Slow down and move over. What's your one reason? Slow down, look around, be ready to yield.

Never Drink and Drive Don't Crowd the Plow

Including yourself, how many adults _____ and children (under 18) _____ live in your household?

Would you be willing to complete a short follow-up survey in two weeks? Yes No

The information that you provide will be solely used for research purposes. Personal information about respondents will remain strictly confidential and will not be sold or shared per MSU's IRB.

If yes, please either provide us with your email address (survey will be sent via email) or mailing address:

Email Address: _____

or

Mailing Address

Name: _____

Address: _____

City, State, Zip: _____

Project Objective Recap

- ✓ Secure existing traffic safety video content and purchase and deploy technical equipment to show the content
- ✓ Determine if facility users viewed the traffic safety videos
 - ✓ Some of the TV locations were not conspicuous
 - ✓ Billings location was updated, but Kalispell could not be due to power
- ✓ Evaluate if displaying the videos impacted the traffic safety culture
 - ✓ Respondents did not report a change in behavior
 - ✓ To change behaviors, we must change beliefs – one step in the process
 - ✓ Suggest that they would be safer drivers
 - ✓ Some shared the information they watched on the project TVs with others

Conclusions

- Overall, the traffic safety videos had an impact
 - Considered a low-cost solution for educating the public about traffic safety
 - Reach the desired age and gender demographic (male, aged eighteen to thirty-four) that many of MDTs media campaigns were currently targeting
- Influence of the location of the TV cannot be understated
 - Direct view for visitors waiting to be seen by an examiner
 - Behind the examiner desk while a visitor waits for them to enter information
- Project outcome marketing
 - TRB 2023 poster session
 - Published in ITE journal in Nov/Dec 2023 timeframe