

## About This Research

### Objectives

- Identify existing safety content and equipment needed to create and show videos
- Learn viewers' needs and preferences
- Evaluate impacts on driver behavior

### Benefits

- More targeted and effective public education campaigns in the future
- Low-cost solution for educating the public

# PUBLIC EDUCATIONAL VIDEOS ENCOURAGE SAFER DRIVING



The safety video at the Bozeman County Treasurer Office is on prominent display.

## About This Project

**Project title:** Effectiveness of Highway Safety Public Education at Montana Motor Vehicle Registration Stations by Streaming a Variety of Safety Content

**Project number:** 9832-766

### Technical Panel

Gabe Priebe (Chair, MDT), Marcee Allen (FHWA), Doug McBroom (MDT), and Erin Root (MDT)

### Principal Investigator

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## Research Need

Despite advancements in transportation safety, driver error, such as driving while texting or impaired or not wearing a seatbelt, continues to account for a significant number of serious highway crashes and fatalities.

To help drivers become more aware of how their conduct on the road can impact safety for all road users, the Montana Department of Transportation (MDT) set out to show the consequences of risky behavior through public awareness campaigns and educational safety videos.

By displaying existing safety-related content in strategically selected public spaces, MDT wanted to improve the culture of traffic safety and reduce crashes on the state's roadways.

## Research Process

Researchers began by investigating equipment options and testing a variety of off-the-shelf components and configurations. The system needed to meet a number of logistical and operational requirements, such as having a large display screen with optional sound, and the ability to be mounted on a wall and accommodate a wired connection. The final selected setup, including all technology, mounting hardware and accessory cables needed for one site, cost approximately \$450.

*“By making low-cost investments, this project showed that videos targeting a captive audience can increase highway safety awareness.”*

—Gabe Priebe, Project Champion

## MDT Project Champion



Gabe Priebe

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## Learn More About This Project

Final report is available in [ROSA P.](#)

To identify suitable places for deployment, the researchers considered permanent sites within a two-hour drive of Bozeman to ensure technical support would be available if needed. Anticipated visitor counts, facility layouts and input from the project’s technical panel led to the selection of five locations within the waiting areas of three driver license stations and two county treasurer offices. Following the installation of equipment, staff at each site received training on how to operate the equipment and perform basic troubleshooting tasks.

Next, a search of state, local, and federal transportation websites and other online resources revealed hundreds of safety video segments available for use with proper permissions. Candidate videos had to be less than two minutes long, have downloadable subtitles or captions, and align with MDT’s safety priorities, among other criteria. The selected segments, as well as still photos and trivia questions, formed the basis of two 5- to 7-minute videos that could be looped and played without sound at each location.

Finally, the research included a survey to gauge the videos’ impact and capture viewers’ demographic data.

## Research Results

This research found that video content displayed in waiting areas is a low-cost and effective strategy to educate the public on traffic safety issues.

Despite project challenges that included delays and facility closures related to weather and the COVID-19 pandemic, the two videos played at each of the five sites for a minimum of six months and reached a broad demographic. During the period that the videos were on display, more than 1,600 completed surveys revealed a number of insights for similar educational campaigns in the future, including:

- **Conspicuity is critical.** The location of the screen within the waiting area is an important factor in whether a viewer can see the content.
- **Audio could be beneficial.** Early on in the project, the decision to exclude sound ensured that the business conducted at each location would not be disrupted. However, the lack of audio limited the topics that could be included in the final videos and may have reduced viewer engagement.
- **Emotions and seasons are captivating.** When developing new content, MDT should solicit viewers’ empathy and rotate regularly to relate to the current season.
- **Regular check-ups are key.** Once the equipment has been installed, routine visits to the location can verify that the screen is visible and components are working properly.

With these and other findings in hand, the researchers recommended that MDT continue and expand the use of videos to educate the driving public, identifying other public buildings and private spaces like gas stations as potentially effective locations.

## Research Implementation

To disseminate the findings and help other transportation agencies achieve similar results, this research was featured at a national transportation conference in early 2023 and will be included in an upcoming issue of *ITE Journal*, a highly regarded publication geared toward transportation professionals.

Possible topics for future MDT research could include investigating the benefits and drawbacks of incorporating safety videos that have audio, evaluating the impacts of the videos on drivers younger than 18, and comparing the effectiveness of different types of media content.