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Performance Measures Report FHWA/MT-23-003/9832-766

More Info:

The research is documented in Report FHWA/MT-23-003/9832-766

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EFFECTIVENESS OF HIGHWAY SAFETY PUBLIC EDUCATION AT MONTANA MOTOR VEHICLE REGISTRATION STATIONS BY STREAMING A VARIETY OF SAFETY CONTENT

https://www.mdt.mt.gov/research/projects/safety/safetyvideos.aspx

On Montana Department of Transportation's (MDT's) road to zero fatalities and serious injuries, they must include a comprehensive, holistic approach to creating a Safe System for all road users in Montana. This includes not only engineering safer roads, but also educating the road users on why the countermeasures are safer and how to properly use them (e.g., roundabouts and flashing yellow lights), as well as, educating about the impacts of risky decisions (e.g., texting and driving).

The MDT research project "Effectiveness of Highway Safety Public Education at Montana Motor Vehicle Registration Stations by Streaming a Variety of Safety Content" evaluated one method for conducting this public education (showing traffic safety video loops/sequences to the public at Motor Vehicle Divisions (MVDs) and County Treasurer Offices (CTOs) in Montana). While respondents did not report a change in behavior due to the traffic safety video loops/sequences, they did have an impact. First, some respondents suggested that they would be safer drivers while other respondents shared the information they watched with others. This is one step in the process of changing beliefs which can lead to changing behaviors and growing a positive safety culture.

We know that changing beliefs or perceptions depends on the level of engagement, how frequently the audience hears a message, and how much of the audience is reached. Changing beliefs can take extended periods of time (e.g., years). Additionally, growing positive traffic safety culture is a process, not just a single intervention . Therefore, it is likely that the benefits of using this method will be further seen over a longer period of time (if the approach is continued) and in conjunction with the other public awareness campaign strategies that MDT uses (e.g., radio ads, TV ads, rack cards, etc.). This method was found to reach a broad demographic (old, young, and those in between; men, women and individuals identifying as non-binary), including demographics which are the focus of MDT's media campaigns (men, aged eighteen to thirty-four).

As a low-cost solution (\$450 per location for the technology set-up) with minimal staff time required, it was recommended that MDT continue this educational strategy and consider expanding it to other locations. These could include additional public locations that have waiting rooms or private locations, like large employers that have waiting rooms or break rooms (where sound could be used). Other private locations that should be considered may be the media interfaces at gas pumping stations.

While it is hard to quantify the impacts of one specific tool in the safety toolbox when deploying multiple layers of protection at the same time, we can look at it from a general perspective to quantity the value of the research.

The National Safety Council reports that the average economic cost (wage and productivity losses, medical expenses, administrative expenses, motor-vehicle damage, and employers' uninsured costs) in 2021 of a traffic death is \$1,778,000, a serious injury is \$155,000 and a property damage only is \$5,700. Therefore, if the video sequence/loop, caused even one of the respondents reporting to now be a "safer driver" to not crash, then the \$450 spent on that technology may have saved \$5,700 in property damage. Now, think of that in terms of a fatality. Not only would the benefit be much higher, but that life lost is more than just a statistic. It is someone's most important person. With 207 fatalities on Montana roads in 2022, this technique is one more to be used to drive this number to zero.

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