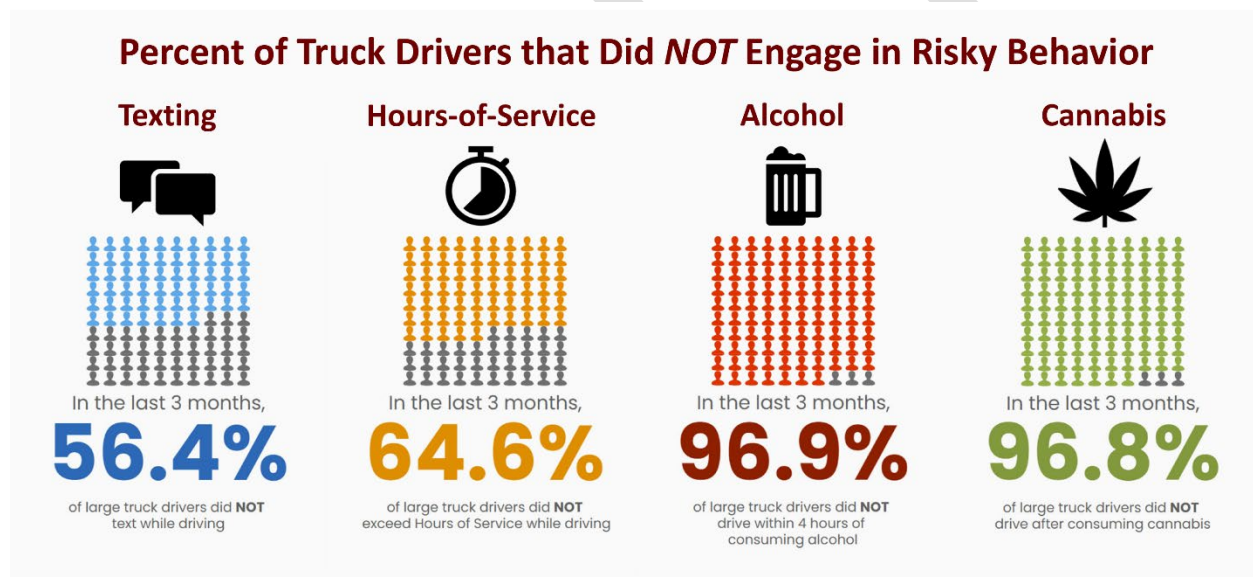


Understanding Safety Beliefs & Behaviors of Large Truck Driver: Utilizing Findings to Create Change

Introduction and Background

The University of Massachusetts Traffic Safety Research Program (UMassSafe), with support from the Federal Motor Carrier Safety Administration (FMCSA), conducted an online, anonymous survey of large truck drivers to gather input on their safety beliefs and behaviors. A total of 1,054 drivers of large trucks operating in the Eastern Service Center (ESC) completed this voluntary self-reported survey. This survey captured basic demographic information, as well as the drivers' beliefs and experiences related to commercial motor vehicle (CMV) large truck operation and its relation to the following risky behaviors: Texting while driving, Exceeding hours of service, Alcohol use and Cannabis use. The findings were shared with key stakeholders via key informant interviews and a CMV Data Driven Safety Work Group, to determine how the findings could impact behavior change.

Summary of Findings



Further details on the survey findings can be accessed on the [Commercial Vehicle Safety Technical Assistance Center](#).

Traffic Safety Culture and Promoting Proactive Traffic Safety

It is essential that traffic safety professionals and relevant stakeholders continue seeking innovative methods for improving safer driver behaviors, while simultaneously reducing high-risk behaviors. The findings from this survey can be used to further cultivate an effective traffic safety culture and promote proactive traffic safety, empowering drivers to actively engage in safer behaviors, as driver behavior is one of the most significant factors that contribute to motor vehicle crashes. In order to improve traffic safety, effective strategies to influence behaviors must be utilized. Showing that the majority are safe can help support the strategy of encouraging proactive engagement by safe peers to help the minority who are unsafe. Because the larger majority of truck drivers engage in safe driving behaviors, proactive traffic safety is an emerging approach that centers these safe road users as a means of influencing the behaviors of the smaller group that engage in risky driving ([Proactive Traffic Safety: Empowering Behaviors to Reach our Shared Vision of Zero Deaths and Serious Injuries](#)).

As stated, most truck drivers engage in safe driving behaviors, which was reinforced in the findings from the Understanding Safety Beliefs and Behaviors of Drivers of Large Trucks survey. For example, most respondents (97%) reported they did not drive within four hours of consuming alcohol in the three months prior to taking the survey, nor did they drive after consuming cannabis. More than one-half of the drivers surveyed (56%) did not text while driving and nearly 65% did not exceed the Hours of Service (HOS) regulations. Traffic safety professionals and stakeholders can utilize these survey results to build and/or strengthen a traffic safety culture.

In order to implement changes toward a sustainable safety-oriented culture, safe and risky behaviors must be appropriately framed within the truck drivers' prevalent culture. In other words, the social motivations to engage in risky behaviors needs to be eliminated, while the social motivations to engage in safe behaviors must be celebrated and used as a model.

Stakeholder Promotion of Traffic Safety Culture

Various commercial motor vehicle safety stakeholders can utilize the survey findings to promote a traffic safety culture. The Safe Driver component of the USDOT Safe System Approach can be utilized to further build an effective traffic safety culture and promote proactive traffic safety. Motor Carrier Safety Assistance Program (MCSAP) offices in the Eastern Service Center area can use the results of the survey to gain further understanding of the safety beliefs and behaviors of drivers of large trucks as well as how they vary based on age, driving experience, truck type, driving schedule, and fleet size. State Trucking Associations and individual trucking companies/carriers can also promote a stronger traffic safety culture by using the survey results.

Utilizing Intervention Agents

While enforcement and education are essential tools for maintaining a culture of safety, behavior-modeling by peers is essential for defining behavioral norms, i.e., which behaviors are or are not socially acceptable. The perception of others' preferences can be sufficient motivation for someone to alter their behavior to conform with the broader group. One's social environment is a constant presence, regardless of where they are or what they are doing, with many factors, such as the fear of disappointing a peer or loved one, which influence one's decisions to engage in certain behaviors. For example, professional drivers may be less likely to drive after consuming alcohol if their peers believe that doing so is unacceptable. Because of this, sustainable behavioral changes can be made across roadways by establishing a social environment that supports safe behaviors and discourages risky ones ([A Primer for Traffic Safety Culture](#))

One way to move toward this social environment within trucking companies and organizations is to establish and utilize safety champions. This is accomplished by identifying employees who have demonstrated exemplary safety practices and having them advocate for safer behaviors among their peers as role models, effectively creating a peer-to-peer safety program. Ultimately, this would engender a culture wherein drivers are empowered to help other drivers behave in safer ways ([Proactive Traffic Safety: Empowering Behaviors to Reach our Shared Vision of Zero Deaths and Serious Injuries](#)).

These kinds of social motivators serve to affirm self-enforcement among drivers, and bypass authorial or regulatory entities, which some drivers may have an adversarial perception of. This could be particularly useful for addressing risky behaviors that, while dangerous, have significantly less severe consequences for violating, such as texting while driving or exceeding Hours-of-Service.

Social Norms Media Campaign

According to social norms theory, one's perceptions of normative behaviors can significantly influence their behavior. Drawing from this premise, a social norm intervention is an attempt to alter one's perceptions of what a social norm is, with the intent of ultimately influencing their actual behavior ([Experimental Test of Social Norms Theory in a Real-World Drinking Environment](#)). The social norms approach consists of further communicating accurate positive norms that already exist ([Social Norms](#)

[and Traffic Safety](#)). It is important that safe and risky behaviors be appropriately framed within the truck drivers' prevalent culture. Therefore, social motivations to engage in risky behaviors need to be eliminated, while the social motivations to engage in safe behaviors must be celebrated and used as a model. The "Most of Us Don't..." campaign can be utilized to create normative messages and media campaigns based on the positive truck driver behaviors found in the *Understanding Safety Beliefs & Behaviors of Large Truck Driver* survey ([Montana's MOST of Us Don't Drink and Drive Campaign A Social Norms Strategy to Reduce Impaired Driving Among 21-34-Year-Olds](#)).

Conclusions and Next Steps

By utilizing the specific risky-behavior findings documented in this study, relevant to the various respondent cohorts, efforts at the enforcement, education, and social-change levels can be effectively prioritized. The table below outlines ways that survey findings can be used towards the promotion of a positive traffic safety culture.

Strategy/Action	Agency
Integrate survey findings into Planning Memo for MCSAP programming	FMCSA
Develop regional or national social norms media campaign	FMCSA
Integrate proactive traffic safety info strategic planning and specifically the Commercial Vehicle Safety Plan	MCSAP State Programs
Develop public education and outreach campaigns where truck drivers' positive safety behaviors are highlighted.	FMCSA MCSAP State Programs State Trucking Associations Trucking Companies/Carriers
Develop Driver Safety Champions to promote safety	State Trucking Associations Trucking Companies/Carriers
Incorporate survey findings into New Entrant Audits	MCSAP State Programs
Conduct presentations and/or incorporate survey findings into existing presentations/trainings for carriers	FMCSA Division Offices MCSAP State Programs
Share findings in New Entrant Audits	MCSAP State Programs

The actions and strategies listed in the table above—utilizing intervention agents and creating social norms campaigns—are examples of programming that various stakeholders can engage in to promote a safer traffic safety culture. In addition to these efforts, cross jurisdictional approaches need to be implemented wherein several states share social norms campaigns using the ESC survey findings in order to move this proactive change movement forward.

With an FY23HP grant, UMassSafe will further examine at-risk attitudes and behaviors among CMV drivers by implementing a second ESC-representative self-report survey to measure the safety cultures of the companies/organizations that truck drivers belong to. Specifically, the survey will examine how both a company or organization's safety culture (or lack thereof), as well as peers, influence driver behavior. It will include the collection of large truck operators' behavioral beliefs, normative beliefs, and control beliefs surrounding various risky behaviors, as a means to determine the influence of traffic safety culture on dangerous driving. Expanding the types of beliefs that are measured will provide a better understanding of how they influence drivers' willingness and intention to drive dangerously. These findings will support specific guidance for programs to address and alter those behaviors.