

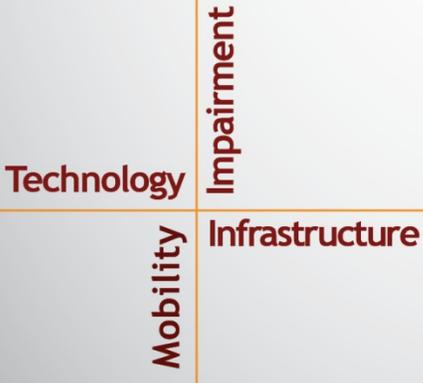
# NSTSCCE

## National Surface Transportation Safety Center for Excellence

### Commercial Motor Vehicle Driving Safety Website

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## **LIST OF ABBREVIATIONS AND SYMBOLS**

CMV	commercial motor vehicle
NSTSCE	National Surface Transportation Safety Center for Excellence
VTTI	Virginia Tech Transportation Institute

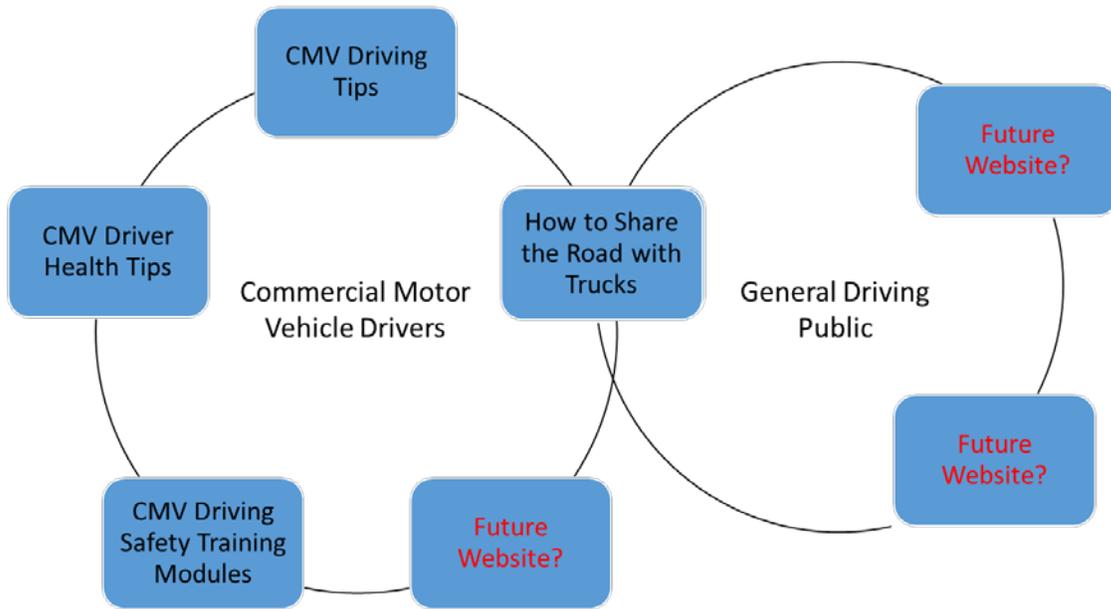


## CHAPTER 1. BACKGROUND

The National Surface Transportation Safety Center for Excellence (NSTSCE) focuses on pragmatic research and, among its priorities, it aims to perform outreach activities that benefit multiple stakeholders and the public. One of the research and outreach priorities for this center is focused on commercial motor vehicle (CMV) drivers. Incorporating an outreach component focused on CMVs is an excellent opportunity to assist many CMV fleets and drivers, driver trainers, CMV training schools, and insurance entities. The NSTSCE researchers involved in this effort felt a website using previously developed, pilot-tested NSTSCE materials<sup>(1)</sup> would be an ideal delivery method to reach both national and international audiences. This led to the creation of the website <http://www.CMVDrivingSafety.org> (Figure 1), which became active on April 1, 2014. This follows in the footsteps of previous NSTSCE outreach websites (Figure 2) by providing important knowledge and training for professional drivers.



**Figure 1. Screenshot. The CMV Driving Safety website.**



**Figure 2. Illustration. NSTSCE Outreach websites. URLs provided in the reference section.<sup>(2,3,4)</sup>**

## CHAPTER 2. CMV DRIVING SAFETY

CMV Driving Safety was designed as an interactive website containing 15 unique web pages. The website is organized in a manner that allows users to easily navigate between the pages and find the content of interest. The website provides six training modules, each of which encompasses a unique facet of CMV safety. The six training modules were selected from a needs assessment survey that was distributed to over 60 fleet managers. Once selected, they were developed and pilot tested with a group of CMV fleet safety managers in Hartford, Connecticut. The six training modules are:

1. Driver Distraction
2. Driver Health
3. Hours-of-Service
4. Driver Drowsiness & Fatigue
5. Sharing the Road
6. Safety Systems

Each training module has specific learning objectives, discusses safety issues related to the topic, provides the latest science behind the topic, and shows select video clips where applicable. Short quizzes can be found within the modules and used as a review of knowledge retention. These modules are designed to take between 15 and 30 minutes to complete. The modules were created in Microsoft PowerPoint and can be viewed directly on the website or downloaded for viewing at a later time. This is a useful feature for CMV drivers and fleet managers as the material can be downloaded for use at driver safety meetings.



Figure 3. Screenshot. The Training Modules page.

Additionally, a resources page is provided that contains useful information and website links regarding various topics relevant to the module such as fatigue, healthy eating habits, prescription medications, and Federal regulations. A references page is also included which provides all references used in the training modules as well as links to the source material where applicable.

Website users can also find pages with information about the Virginia Tech Transportation Institute (VTTI) researchers (Figure 4) who authored the training modules, our privacy policy, and a “Contact Us” form.

**CMV DRIVING SAFETY**

Home Training Modules About CMV Driving Safety search here ... Go

Home > About CMV Driving Safety > Our Researchers

## Our Researchers

Researchers from across the VTTI have come together to share their expertise with industry professionals – risk managers, safety directors, dispatchers and their insurance agents. Through the sharing of this expertise, it is hoped that industry professionals utilizing these resources will gain the knowledge they need to develop strategies for a safer, more productive workforce.

 Dr. Myra Blanco leads Virginia Tech Transportation Institute's Center for Automated Vehicle Systems (CAVS). She is responsible for oversight of the CAVS, as well as ensuring the quality of the design, execution, and interpretation of research efforts. Formally trained in human factors engineering, her areas of expertise extend beyond automated vehicles. Dr. Blanco's experience includes evaluation of in-vehicle devices, distraction, driver behavior, training, work/rest cycles, fatigue, and active safety systems for light and heavy vehicles. She has directed research efforts in naturalistic, on-road, test track, and simulator test environments. Blanco has authored and co-authored numerous publications on driver performance and safety. As a member of the Transportation Research Board (TRB) of the National Academies, she serves on key committees and as a technical paper reviewer. She also participates with a number of professional organizations, including the Intelligent Transportation Society (ITS) of America and the Society of Automotive Engineers (SAE).

 Dr. Jeffrey Hickman is a Group Leader at the Virginia Tech Transportation Institute. His primary areas of research include community-wide applications of behavior-based safety, self-management and organizational culture change techniques, assessing driver behavior, fatigue, work/rest cycles, and driver distraction in commercial motor operations. He has produced over 60 presentations, as well as 30 scientific publications, technical reports, and scientific reviews for the National Institute for Occupational Safety and Health. He currently serves as a reviewer for the Journal of Occupational Health Psychology, the Journal of Organizational Behavior Management, and Accident Analysis and Prevention.

### Driver Health Tips

Tweets Follow

 **Driving Healthy** @DrivingHealthy 7h  
New dietary guidelines: Does your dinner table make the grade? - Health - TODAY.com ow.ly/3xtmwn  
Show Summary

 **ChooseMyPlate.gov** @MyPlate 20h  
#GimmeFive ways to eat healthy? Choose foods from all 5 food groups! Fruits, Veggies, Dairy, Protein, & Grains. #MyPlate @LetsMove

Tweet to @DrivingHealthy

**Figure 4. Screenshot. The Our Researchers page.**

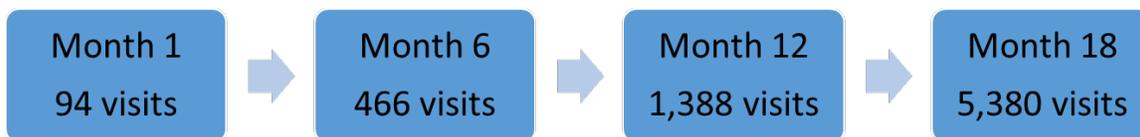
### CHAPTER 3. SUMMARY

The CMV Driving Safety website has created a key global resource for CMV fleets and other entities that deal with truck and motorcoach drivers by providing important training aids to improve safety not only for CMV fleets but also for the general motoring public that shares the road with these heavy vehicles. The website has proven to be a success. Website traffic has continued to increase, as has the number of times each of the training modules has been downloaded. Through September 28, 2015, the training modules have been downloaded a total of 1,081 times. It is important to note that any time a training module is viewed online, rather than downloaded, it is not counted toward the download count. Also, once a training module is downloaded, the number of times it is used can no longer be counted. Table 1 provides a breakdown of downloads per training module.

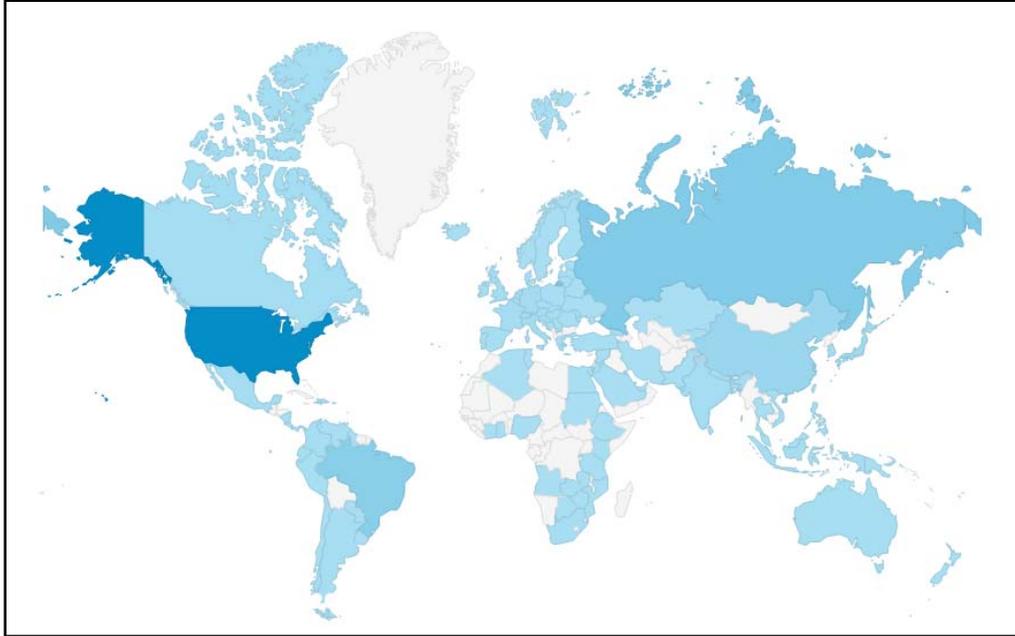
**Table 1. Number of downloads per training module.**

<b>Training Module</b>	<b>Times Downloaded</b>
Hours-of-Service	211
Driver Distraction	206
Driver Health	179
Driver Drowsiness & Fatigue	176
Sharing the Road	163
Safety Systems	146

The website has been visited 5,380 times (see Figure 5 for timeline of website visits), which includes views from 110 countries and territories in addition to the United States. All of the countries shaded in blue (Figure 6) have had site visits to the CMV Driving Safety website. The darker the shade of blue, the greater the number of website visits.



**Figure 5. Chart. Timeline of CMV Driving Safety website visits.**



**Figure 6. Map. Website visits by country.**

Moving forward, the website will continue to be monitored and maintained by VTTI personnel. Any relevant updates will continue to be applied as necessary. The website was designed in a manner to allow new training modules and other content to be added should any become available.

A potential next step would be to evaluate the effectiveness of this website. This could prove to be a valuable tool in further promoting the website and reaching those fleet managers who may be unsure about incorporating the training modules into their safety programs. It would also allow VTTI researchers to refine the current training modules and develop new training modules based on the data gathered from an effectiveness evaluation. Further, this could reveal other potential areas in need of a resource and training website, within both the commercial motor vehicle driver population and the general driving public.

## REFERENCES

1. Hammond, R., Blanco, M., Hickman, J., Bowman, D., Mabry, E., Soccolich, S., Fitch, G., & Baker, S. (2014). *Heavy-vehicle safety outreach: Final report*. Blacksburg, VA: National Surface Transportation Safety Center for Excellence.
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