

GUARDIAN

A Publication of the Commercial Vehicle Safety Alliance

Volume 25, Issue 3
3rd Quarter 2018

Brake Safety Symposium

Educating Attendees on CMV Brake Technologies and Regulations



Jeremy Usener with the Texas Department of Public Safety is This Year's NAIC Grand Champion



CVSA Launches Out-of-Service Criteria App

CVSA's First Set of Industry Roadside Inspection Courses a Success; More Courses Planned

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GUARDIAN

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PRESIDENT'S MESSAGE

Faith and Service

By **Capt. Christopher Turner**, *Kansas Highway Patrol*

As I write this article, my daughter (age 7) is sitting in her pajamas next to me on the couch. She asked what I was going to write about. I told her I was not sure. She said I should write about family. I took her advice.

I thought about what family is. Family comes down to faith and service to each other. Faith and service to others are two of the most important things in our lives. Our faith in God, family and friends shapes our lives. Our service to God, family, friends and each other is equally, if not more, important. For it is through faith and service that we make a difference in each other's lives.

I am not sure how much we truly appreciate the world around us while we are young. I am sure we think that we do. Just as we think there is all the time in the world to do something, whatever that something is. But, time has a way of changing our perspective. As we get older, there is never enough time, is there? In my 21 years in law enforcement, things have changed incredibly, as many other CVSA presidents have noted in their articles through the years. Yet, so much remains the same. Drugs and alcohol still dominate the reasons people crash, hours of service are still an issue and places for drivers to rest are never plentiful enough. But, we keep going. We continue to push through and build on the work of others. We have faith that progress will continue, just as those who came before us believed we would continue their work. Why? Why don't we just give up? Chuck in the towel? Because we cannot. We will not. We shall not. We believe, have faith and provide service to each other.

The greatest honor of my life has been my daughter. Through her, I have learned to appreciate the world in a way I simply was not capable of before her. Now, I remember the wonder of the world through a child's eyes. I thank her every day for that blessing.

Another thing kids bring – questions, all the questions, all the time. Why dad? How come, dad? Dad, dad, dad, dad, I have another question. It seems to me, somewhere along the way, we got quiet as adults. We quit asking questions. Our wonder turns into habit or routine.

When you think about it, the questions of a child are pretty good questions. We need to ask ourselves and others those questions as we try to shape our policies and practices. Why are we doing this? Because we always have or is there a better way? Who has an idea? I challenge each of you to start asking questions again, to remember your wonder. Let's consider stopping and addressing problems and challenges another way.

Another honor of my life has been my service to CVSA, especially my time as your president. Thank you for allowing me this honor, giving me your trust and allowing me to grow. Through serving you, I have gained an entirely new appreciation for the work of our Alliance. While serving as a chair or member of a committee, it's easy to lose the forest for the trees. This job allowed me to see the forest again. It provides an incredible view of men and women throughout North America – of all the selfless individuals providing time and effort, above and beyond their everyday job.

When I ran to be your president, I did so because I wanted to make a difference in a new and challenging way. While I hope you can be proud of the service I provided to you, it pales in comparison to the lessons I have learned from you.

Thank you for reinvigorating me, for making me want to be better and do better. Thank you for your service. The friends and family I have made here are, without question, a privilege.

To CVSA staff, my admiration and respect run deep and wide. Your exemplary service to CVSA is a gold standard. You are all a cut above. You are tasked with carrying the load and CVSA can be an oversize load. Pardon the pun.

Some of us work the road, some set policy, some enter data, some review data, some clean up the mess. The varied work we do reminds me of a wonderful quote (noted on the right) for the kind of service providers we should strive to be.

There is still much to do. Our service is not done until there are no lives lost during our watch. I have faith in each of you. ■

"If a man is called to be a street sweeper, he should sweep streets even as a Michelangelo painted, or Beethoven composed music or Shakespeare wrote poetry. He should sweep streets so well that all the hosts of heaven and earth will pause to say, 'Here lived a great street sweeper who did his job well.'"

— Martin Luther King Jr.





EXECUTIVE DIRECTOR'S MESSAGE

The Initial Steps to Realizing the Vision of a Level VIII Electronic Inspection

By Collin B. Mooney, MPA, CAE, Executive Director, Commercial Vehicle Safety Alliance

In April 2017, the CVSA Board of Directors voted to approve the creation of our new Level VIII Electronic Inspection for the roadside North American Standard Inspection Program. The initial steps in the implementation process will be the coordinated development of the information technology (IT) infrastructure in order to capture and process the information.

Since member jurisdictions lack the necessary IT infrastructure to accomplish this goal today, a few member jurisdictions within the roadside enforcement community and those within the motor carrier industry have already been asking "How are we going to do this?" and "Where do we start?" It's important to note that many of the technological pieces already exist today. The various stakeholders within this roadside inspection community just need to coordinate their activities. As a result, I've outlined the initial steps to how we can collectively execute this vision and accomplish the goal.

Before we begin, as a reminder, the Level VIII Electronic Inspection is conducted electronically or wirelessly while a commercial motor vehicle (CMV) is in motion, without direct interaction with a roadside inspector/enforcement official. To be considered a complete Level VIII Electronic Inspection, a data exchange must include each of the required and/or applicable data points listed in the CVSA North American Standard Level VIII Electronic Inspection definition.

STEP 1

Communication Receiving Device

The first step in the vision is to outline how and where this new roadside information will be collected. For example, using our current physical infrastructure and the mainline screening processes already in place today, we could theoretically capture roadside inspections electronically for all CMVs travelling through or past a port of entry, weigh scale or vehicle inspection station. However, this limited vision only captures a subset of the CMVs operating on our roadways. In order to leverage technology and realize the vision, we must look at how we can also enhance the efficiency of our mobile patrol activities and deploy additional fixed or mobile receiving devices throughout a jurisdiction, such as establishing an inspection receiving device/post at a state or province boundary, affixing a receiving device to a mobile patrol vehicle, temporarily setting up a mobile receiving device within a construction zone, or responding to citizen concerns by strategically placing a mobile receiving device within a metropolitan area.

STEP 2

Uniform Electronic Vehicle Identifier

Currently, this step can be accomplished by utilizing existing technology, such as transponders, geofencing, and license plate and U.S. Department of Transportation (DOT) readers. However, the universal electronic vehicle identifier (UEVI) is a proposed concept that provides the vehicle biometrics and level of security necessary for the identification of all CMVs to be reliable and the new Level VIII Electronic Inspection initiative to be successful. The basic concept of the UEVI is for the CMV to electronically broadcast the vehicle identification number (VIN) short range, just like Wi-Fi technology today. Since license plates and/or USDOT numbers can be incorrect, missing or obscured, the UEVI should always be wirelessly broadcasting and accurately identifying the CMV. The purpose behind the UEVI is to enhance safety on our roadways by removing unsafe motor carriers from operating and aid in the identification of chameleon/reincarnated motor carriers by increasing the number of roadside inspections

from 4 million to more than 400 million annually. The historical footprint of a CMV can only be accomplished through enhanced monitoring via electronic inspections.

STEP 3

Data Submission from CMV

In this step, the fixed or mobile receiving devices outlined in step 1 will capture the UEVI (e.g., the VIN electronically) and all additional identifying information, such as information identifying the driver of the CMV and the hours-of-service records contained within the electronic logging device (ELD). In the future, sensor data (e.g., vehicle speed, seatbelt usage, etc.) and self-diagnostic information (e.g., brake lights not working and ABS faults) from the CMVs engine control module (ECM) may be available.

STEP 4

Real-time Data Processing

Once the information has been received, a number of real-time data processing activities occur. For example, the VIN will be decoded (e.g., year, make, type, etc.), queried and linked to a CMV registered in a specific jurisdiction, while checking for validation and ownership. Once vehicle ownership has been identified, the CMV should be associated with a motor carrier with an active identification number (e.g., USDOT number while operating in the U.S. or a National Safety Code (NSC) number if operating in Canada) while also checking for any applicable out-of-service orders.

The driver information would be checked real-time through CDLIS, Nlets or other local system(s) appropriate for validating the driver's operating credentials (e.g., CDL type, license class, endorsements, restrictions, expiration date, applicable medical certificate information, etc.). As for hours-of-service compliance, the ELD information obtained would be evaluated electronically for compliance.

In addition, the CMV may be checked real-time for any other applicable administrative credentials to include, but not limited to, the following: International Registration Plan (IRP); International Fuel Tax (IFTA); Uniform Carrier Registration (UCR); and/or state



LETTERS TO THE EDITOR

Using Video-Based Technology to Improve Fleet Safety

By **Chad Glemser**, DOT and Fleet Safety Specialist, *Two Men and a Truck®*

permitting databases. Having a receiving device/post at a state or province boundary could prove significant with validating IRP, IFTA and UCR compliance in the future.

STEP 5

Auto-populating Roadside Inspection Reports

In order to complete the Level VIII Electronic Inspection, once all of the required information has been collected, processed and validated, the roadside inspection report will need to be electronically self-generated by auto-populating all of the required administrative and identification fields. Once accomplished, the auto-populating of violations will also be required. In a future article, I'll address the database storage requirements, data quality improvements, such as hardcoding and smart logic, and file validator processes that will have to be developed in order for this initiative to fully realize its potential. ■

As a former truck driver and Michigan State Police commercial vehicle enforcement officer, I can confidently say that driver behavioral violations are probably the most dangerous and prevalent. Most of the violations that we continue to see are a result of the driver's behavior and are within the driver's control. For example, a driver can control whether or not he or she is speeding, following too closely, using a cell phone, not wearing a seatbelt, fatigued, not completing pre-trip and post-trip vehicle inspections, driving aggressively, exhibiting road rage, etc.

Today's truck drivers are more distracted than ever before and the number of fatalities on our nation's highways is increasing again, after a long period of improvement and a historic low in 2011. What can a motor carrier do to take control of unsafe driving behavior before it starts to take control of the business? I believe the answer lies in video-based fleet safety technology.

When an incident occurs, like harsh braking, harsh cornering, harsh acceleration or speeding, an in-cab camera will record what is going on both inside the cab and outward facing traffic to give fleet safety managers a clearer picture of what occurred before and after the incident took place. The camera

starts recording 10 or 15 seconds before the triggering incident and 5 to 10 seconds after.

When the motor carrier first implements this type of technology, drivers may think of "big brother" and that the system is in place to spy on them, invade their privacy and/or critique them. In fact, it is there to protect drivers and motor carriers from fraudulent insurance claims with video evidence, much like a college football official review. The data is instantly retrievable in the event of a serious incident and the footage is often indisputable video evidence. In the event of a U.S. Department of Transportation (DOT) audit, investigators may look more favorably on motor carriers that are at the forefront of fleet safety with video-based technology.

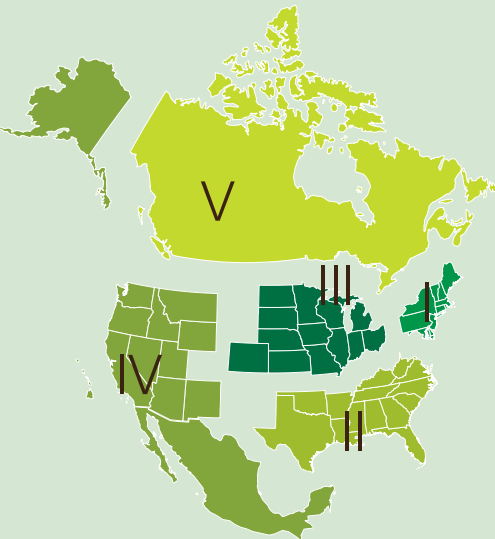
Furthermore, this technology allows motor carriers to observe driving behaviors they may not ordinarily catch. For example, once the camera starts recording, the driver may be smoking, eating, talking on the cell phone or not wearing a seat belt. The video footage can be used as a tool to coach drivers.

Controlling unsafe driving behavior is key in protecting the motoring public, infrastructure and business. ■



Where required and/or applicable, a Level VIII Electronic Inspection must include:

- a descriptive location, including GPS coordinates
- electronic validation of who is operating the vehicle
- appropriate driver's license class and endorsement(s) for vehicle being operated
- license status
- valid Medical Examiner's Certificate and Skill Performance Evaluation Certificate
- current driver's record of duty status
- hours-of-service compliance
- USDOT or NSC number
- power unit registration
- operating authority
- UCR compliance
- federal out-of-service orders



REGIONAL MAP

Region I

Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, U.S. Virgin Islands and Vermont

Region II

Alabama, American Samoa, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia

Region III

Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Northern Mariana Islands, Ohio, South Dakota and Wisconsin

Region IV

Alaska, Arizona, California, Guam, Hawaii, Idaho, Mexico, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming

Region V

Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan and Yukon

Progress Report from Puerto Rico's Public Service Commission

By Luis D. García Fraga, President, Public Service Commission, Puerto Rico

First Phase of New Code of Regulations

Puerto Rico's Public Service Commission has completed the first phase of the new Code of Regulations to monitor the transport of passengers, rental vehicles and expedite services to citizens. This project is part of the recently approved Administrative Transformation Law of the Public Service Commission, which simplifies and unifies the requirements that must be met by all operators of ground transportation.

"Complying with the public policy of the governor of Puerto Rico, Ricardo Rosselló Nevares, to reduce the regulations of the agencies, the Public Service Commission completed the new administrative rules which facilitate obtaining licenses or permits through the approval of provisional permits and, in turn, regulate the transport of passengers, as well as the rental of vehicles," explained Luis D. García Fraga, president of Puerto Rico's Public Service Commission. "This simplifies and standardizes the procedure for the granting and renewal of authorization. In addition, this first phase integrates seven regulations into one, promoting the reduction of obsolete regulation."



Passenger Vehicle Inspections

On June 13, 2018, the Public Service Commission conducted inspections and offered orientations at public vehicle terminals in 18 municipalities as part of the Motor Carrier Safety Program (MCSAP). During the initiative, García Fraga was accompanied by the administrator of the Puerto Rico division of the Federal Motor Carrier Assistance Safety Administration (FMCSA), Adrián Cerros; the president of the Association of Drivers of Río Piedras, Ángel Romero; and the president of the Association of Public Porters, José A. Cátala Berríos. Working alongside inspectors and government officials, they discussed with carriers not only the implications of recently approved rules and regulations, but also the ways in which compliance with the new legislation will lead to a better quality of service and safer roads.

"According to Law 75, which transforms the commission, public carriers previously under the jurisdiction of the Department of Transportation and Public Works are now our clientele," explained García Fraga. "Therefore, we are providing orientation and updated information to drivers and carriers in order to comply with one of our more important duties, which is to help protect the more than 50,000 passengers who use public transportation every day." ■



REGION I

Entrepreneur Howard Levine is Named Maryland Motor Truck Association's 2018 Person of the Year

By **Margie Anne Bonnett**, *Maryland Motor Truck Association Inc.*

Howard Levine isn't your ordinary Frederick County, Maryland, resident or businessman: He was named Maryland Motor Truck Association's (MMTA) 2018 Person of the Year. This award recognizes a key figure dedicated to serving the trucking industry.

Levine's career is no secret now, though it really was at one time. In 1964, he was employed with the U.S. Secret Service. Wanting to pursue a career in sales, he later joined North American Van Lines in 1970. In 1976, he founded a moving company which he left in 1986. One year later, Levine applied to be an agent for United Van Lines. After receiving approval, he and his wife formed Ramar Moving Systems Inc., named for their children Rachel and Mark.

Levine received MMTA's Person of the Year Award for 2018 thanks to his 47 years of active industry involvement and leadership, which include:

- Serving as a long-time member of the MMTA Board of Directors, including representing the association as the chairman of the board from 2014-2015; he is currently the treasurer
- Serving as chairman of the Maryland Movers Conference for two years
- Working with the Department of Labor, Licensing and Regulation to provide information to consumers on how to choose a trustworthy moving company
- Appearing on various television, radio and other media outlets to promote the legitimate moving industry
- Starting the Emerging Leaders Program to help train the next generation of MMTA's leadership

You never really know what a moving van might be carrying. During his career, Levine's trucks have moved throughout the United States transporting many noteworthy items including:

- The Lunar Buggy
- A U.S. telescope
- Multi-million-dollar navy ship models
- The U.S. Air Force F12 simulator (Ramar's tractor/trailer was decorated as the F12 airplane. The simulator traveled to military air bases all over the U.S. Howard and his son Mark had the opportunity to fly the simulator.)
- Instruments and other accessories of the touring U.S. Coast Guard Band
- Satellites and other items of high value

According to Howard, "I believe in the spirit of being an entrepreneur." Entrepreneurs are often key figures in their community.

Not only did Levine serve as MMTA's chairman, he is also a member of the Hagerstown Chamber of Commerce, Frederick County Chamber of Commerce, Better Business Bureau, Registered International Movers, Maryland Movers Conference and many other organizations.

Levine resides in Middletown, Maryland, with his wife of 51 years, Ibby.

The Maryland Motor Truck Association, founded in 1935, serves the needs of every segment of the trucking industry through a wide range of informational, educational, regulatory and legislative initiatives.

To learn more about MMTA, visit www.mmtanet.com. ■



Howard Levine is MMTA's 2018 Person of the Year.

The Dangers of Complacency

By **A.D. Crockett**, Commercial Vehicle Enforcement, Traffic Unit, Garland Police Department, Texas

Don't be complacent. Keep your guard up. Don't get too comfortable.

As we mature throughout our careers in law enforcement, these words and phrases, or variations of them, continually surface in one form or another. They can be manifested via another officer you work with, classroom or roll call training, a family member telling you to be safe or from personal experience.

I recently had an experience with a potentially lethal outcome. I am about to tell on myself in hopes that this story will shake you out of your own false sense of security.

I've been an officer for nearly 26 years. Fourteen years were spent in patrol and the last 12 years have been spent in traffic. During my time on the road, I've stopped more cars, trucks and buses than one could shake a stick at. During that time, it has been my experience that if there is going to be a disagreement on enforcement action, whether it be verbal or physical, more often than not, that disagreement will come from drivers of passenger cars. With that being said, I'd let myself become just a little too comfortable when dealing with commercial motor vehicle drivers.

I'd observed a two-axle fuel tanker rolling down one of our roadways and decided to stop it for an inspection. As I'd done many times before, I made my approach on the passenger side so that I could use the sidewalk. I approached the passenger door and knocked on it to have the driver open it. When the door was opened I hopped up onto the running board and gave the driver a full, frontal view of my torso. I introduced myself and asked him for his shipping papers. The driver, who had to lean over onto the passenger's side to open the door, had propped himself up on the passenger's seat using his right hand. From the time I was in the academy learning how to be a police officer and how to conduct traffic stops, from the numerous



rookie officers that I have trained, to recruit classes that I have taught violator contact/traffic stops to throughout the years, there have always been constant sayings:

1. Continually scan the interior of the vehicle for contraband and weapons.
2. Always watch the hands of the vehicle's occupant(s).

For 12 seconds, I failed to do both. I made small talk with the driver until he moved back into the driver's seat to retrieve his shipping papers. It wasn't until the driver placed the papers into the passenger's seat that I noticed it. Right there in the seat, next to the backrest and where the driver's right hand had been, was a small black .380 caliber handgun. I felt my Adam's apple drop into and through my gut on its way to the soles of my boots. I picked the gun up, dropped the magazine,

racked a round out of the chamber and told the driver that I was going to hold on to it until the inspection was completed. Luckily, the driver wasn't disagreeable to the stop and was fully cooperative. You can only imagine the outcome if the driver had been having a not so agreeable day.

Some may say that 12 seconds isn't long, but when you put it in terms of officer safety, it can be an eternity. If you have ever been in a physical confrontation or, God forbid, a lethal force encounter, you are well aware that time seems to slow down in those situations. In some cases, it feels like time stops. It's those times when someone has to explain to a loved one why a particular outcome occurred.

So here it is once again. Don't get complacent at work. Keep your head on a swivel. Don't let yourself get too comfortable. STAY SAFE. ■



"Some may say that 12 seconds isn't long, but when you put it in terms of officer safety, it can be an eternity."

REGION II

Are You an Instructor or a Teacher?

By **Tpr. Joe D. Berrong II**, Motor Carrier Enforcement, North Carolina State Highway Patrol

I was recently teaching the North American Standard Part A and Part B Courses at our Training Academy here in North Carolina when one of my students fussed at me for not writing any articles in a while. I had to apologize because I hadn't had anything to write about and, honestly, I never thought about anybody reading my articles. I don't know if any other contributors have that feeling, but I never thought anyone would enjoy reading anything I wrote. So, I promised my student that I would write an article if anything spurred me to share. This article is more for my teaching partners, but can be for anyone who helps others learn new things.

I have taken the standard path to where I am today, becoming a state-certified instructor 13 years ago. Over the years, I collected the titles of RADAR, LIDAR, Time/Distance, CVSA Part A and Part B, general hazardous materials and cargo tank instructor. I always strive to learn new things. And, like most of you, I have to be the best. I chose my specialty instruction programs because they are the hardest; however, I have to admit that I had become almost complacent. So, I branched out into other subjects to study and learn.

This brings me to my first thought: If you are an instructor, and have been for a while, make an effort to study something new. I'd forgotten what it was to be a new student trying to grasp the North American Standard Inspection Program for the first time. I'd done it for so long that I'd forgotten the feeling of being lost as someone explains a new subject.

My journey took me to advanced emergency medical technician (EMT) training at Surry Community College here in North Carolina and as the saying goes, "I looked like a calf staring at a new gate." I'd been on the Fire Department and an EMT for years, but the move to the advanced level required a much deeper understanding and thought process. Luckily, I had some of the best teachers one could ever want. However, there was one instructor who really made me think, "Are you a teacher or an instructor?" And, that instructor taught me a lesson I will never forget as I teach my own my students.

Even before I became an instructor, I was helping troopers with the inspection program. I would get the same questions over and over, and sometimes it would get frustrating. I know some of the teachers and leaders reading this know what I am talking about. But when I became a student again and was

on the sending end of those questions, it was an eye-opener.

I was in a very busy emergency room (ER) doing clinicals. It was my second time in the ER. I was doing venous access on patients and was unsuccessful on my first patient. The very nice, experienced nurse I was shadowing stepped in, explained my error and completed the task. The next patient came in and needed venous access without delay. So here I go... missing the first one, again. All right, most of you have medical experience or know someone who does. Think to yourself or ask your nurse friends, would you let this student try again? I know I would have never let me try again. I had just met this nurse and missed my first two attempts and now another needed to be done. The nurse asks if I am going to do the other arm and of course I said yes. All of you fellow Type A personalities know we will always say yes. So, she hands me a catheter and says, "You can do it, but [with the smallest pause, so small that she and I were the only ones in the room who would have noticed] you have to do it."

I took that catheter and mentally went over the procedure my teachers had hammered over and over. This was just like our 37-step process for completing a CVSA inspection. I have had so many students ask me, how will I ever be able to check a truck and all the parts? And I have told so many students to learn the steps, follow them and you will not miss anything. All those times I'd said that and there I was in the ER, not following steps. It was an epiphany: follow the steps you were taught. I successfully gained venous access on that attempt by following all the steps I was taught. And I didn't miss any more from that point on.

As the day wore on, I started thinking, as I always do, what would have happened if she had said no? Being the Type A personality and trooper that I am, I would have gone on and shrugged it off. But, how many times have students made mistakes and we, as instructors, didn't allow them to prove they are better than they performed that time? How many teachers would have had the brass to do what that nurse did?

It got me thinking, am I an instructor or am I a teacher? That nurse was obviously a teacher, a very good teacher. Successfully completing that IV was the boost I needed. I was embarrassed for missing the first two and the faith and support from that nurse was exactly what I needed, when I needed it. I spent the

rest of the day shadowing her and learning. She will never know what she did for me and how much of a motivation she was in that moment. She may not even have realized what she did, but I hope that she did. While the pause was short, it was as long as a lifetime.

So, I ask my fellow educational professionals, are you a teacher or an instructor? Be a teacher. Anyone can instruct someone on how to do something. Instead, teach them. Always teach your students the steps. If they are taught the process, it will come to them when they need it. They will fall back on what you taught them. And most important, be nice to everyone. You never know when the one thing you say is exactly what a person needs to hear.

I have been so impressed with all my teachers at Surry Community College and my clinical time. I will end this article with the following thought: I had never ventured into an ER for anything other than interviewing wreck patients, etc. I saw a side I never knew existed. Nurses are awesome and very overworked. They are the most professional group of people I have ever met. Every one of them were teachers and went out of their way to teach me something. If you know a nurse, thank them for their hard work.

Maybe I will have another epiphany to write about soon. Until then, be safe and watch out for each other. ■





South Carolina Department of Public Safety State Transport Police Held Its Inaugural Junior Academy

By **Sgt. P.R. McLean**, State Transport Police, South Carolina Department of Public Safety

The South Carolina Department of Public Safety State Transport Police (STP) held its Inaugural Junior Academy on May 5, 2018. The purpose of the STP Junior Academy was to create awareness of its mission, create mentorship with the ultimate goal of creating future recruits/officers for STP and build stronger community bonds. STP officers and leaders sponsored 19 young adults ranging between the ages of 16 to 20. The participants were selected from high schools, technical schools, vocational schools and various communities across South Carolina.

The participants selected for the STP Junior Academy gained invaluable knowledge and insight into the specialized law enforcement responsibilities of STP. They were exposed not only to general law enforcement functions, but more specifically the unique mission of STP. The one-day STP Junior Academy was held within a safe and controlled environment in which the participants received hands-on exposure to commercial motor vehicle inspections, size and weight enforcement, use of equipment and other blocks of instruction on how STP regulates the trucking industry through fair and impartial enforcement.

After a long day of learning, the participants received a true southern summertime lunch

which was provided by the generous sponsorship of current STP officers.

The STP Junior Academy is not a one-and-done program. After each event, the goal is to maintain relationships with the participants through not only their sponsor/mentor, but also by the agency itself. Participants who attend the STP Junior Academy will be invited to participate in future events hosted by STP to maintain and further develop their understanding and interest. This will help develop a sense of belonging and purpose, and even if participants do not end up employed with STP, the relationships with the officers will aid in developing the students' future as quality community members, making them safer drivers, as well as creating advocates for STP and law enforcement as a whole.

STP officers who sponsor/mentor participants in the STP Junior Academy will have the unique opportunity to have a direct and tangible part in developing safe drivers, as well as possible future coworkers. The ability to reach participants in such an influential time in their lives is a great opportunity. Once they are on the path, officers can keep them on that path by maintaining contact with them beyond the confines of the classroom or a one-day event.





Col. Leroy Taylor said, "This year marks STP's 25th year as the commercial motor vehicle enforcement division in our state. The STP Junior Academy is cutting-edge and out-of-the-box thinking to aid our efforts in bringing awareness to the unique mission and opportunities for employment with our agency."

Col. Taylor and organizers rate the STP Junior Academy a great success. The feedback from the participants was so great that STP is moving forward with plans to have two Junior Academy events per year. The next STP Junior Academies are scheduled for Nov. 3, 2018, and May 4, 2019.

"The success of the STP Junior Academy is credited to the STP leadership and the men and women of our great division for buying into the vision," Col. Taylor added. "We received a few applications that we would have not received if it wasn't for the teamwork of STP officers and for their commitment to the first-ever STP Junior Academy." DPS Director Leroy Smith said, "What a great way to recruit."

"It must also be noted that the heart and soul of STP personnel, from the highest rank to some of our newest officers, were on display as we are making a difference in the lives of so many," said Col. Taylor. ■



Florida Highway Patrol and FMCSA Work Together During Operation Port Tampa Bay

By Chief Derek D. Barrs, Office of Commercial Vehicle Enforcement, Florida Highway Patrol

On May 15-17, 2018, members of the Florida Highway Patrol Office of Commercial Vehicle Enforcement (CVE) Tampa District in collaboration with Federal Motor Carrier Safety Administration (FMCSA) agents conducted a joint commercial motor vehicle inspection detail at the Port of Tampa. During this three-day operation, 13 troopers and seven FMCSA agents conducted North American Standard Level I, II and III Inspections of commercial motor vehicles operating in and around the port, with an emphasis on hazardous materials inspections.

The goals of Operation Port Tampa Bay were to encourage the safe operation of commercial motor vehicles in and around the port, stop the operation of unsafe vehicles and drivers, enforce Florida state statutes and federal regulations related to commercial motor vehicle operation, and ensure the safe transportation of hazardous materials on Florida's roadways.

As a result of the detail, 266 safety inspections were conducted, between Florida Highway Patrol CVE troopers and FMCSA agents, on commercial motor vehicles.

This joint operation highlights the great partnership between Florida Highway Patrol CVE and FMCSA, and our common mission of fostering safer commercial motor vehicle operation on our highways to promote safety and, ultimately, to protect lives and property, and enhance the flow of commerce. ■



REGION II

Florida Hosts Operation Safe DRIVE Meeting

By Chief Derek D. Barrs, Office of Commercial Vehicle Enforcement, Florida Highway Patrol

The Florida Highway Patrol's Office of Commercial Vehicle Enforcement hosted a planning meeting for Operation Safe DRIVE (Distracted Reckless Impaired Visibility Enforcement) in St. Augustine, Florida, on July 17, 2018. State Representative Cyndi Stevenson from District 17 welcomed the attendees to Florida and showed her support of our efforts in trying to make our highways safer.

The following agencies participated in this planning meeting and data-sharing project: Florida Highway Patrol, Florida Department of Transportation, Georgia Department of Public Safety, South Carolina Department of Public Safety, North Carolina State Highway Patrol, Virginia State Police, Alabama Law Enforcement Agency, Texas Department of Public Safety and the U.S. Department of Transportation's Federal Motor Carrier Safety Administration.

Safe DRIVE is a high-visibility education and enforcement initiative designed to deter driver behaviors that contribute to commercial and non-commercial motor vehicle crashes. Safe DRIVE was developed to promote traffic crash prevention through a multi-agency traffic education and enforcement effort on the interstate system. Where possible, agencies utilize data resources to assign staffing to locations where commercial motor vehicle crash trends have been identified, all in an effort to reduce crashes, injuries and fatalities on our nation's roadways. ■



REGION II

Florida Highway Patrol Partners with Florida Trucking Association to Educate Young Drivers on Safely Sharing the Roads with CMVs

By Chief Derek D. Barrs, Office of Commercial Vehicle Enforcement, Florida Highway Patrol

Tpr. Larry Favors from Troop J-Jacksonville of the Florida Highway Patrol's Office of Commercial Vehicle Enforcement partnered with the Florida Trucking Association's Road Team members at Atlantic Coast High School in Jacksonville, Florida, on July 17, 2018. They educated young drivers on no zones, sharing the road safely with large trucks and buses, and distracted driving around commercial motor vehicles (CMVs).

Great job by all. We truly value our partnership with the Florida Trucking Association and its Road Team. ■



REGION II

Florida Enforcement, Agencies and Organizations Team Up for 'Talking Trucking Tour'

By Chief Derek D. Barrs, Office of Commercial Vehicle Enforcement, Florida Highway Patrol

The Florida Highway Patrol Office of Commercial Vehicle Enforcement and the Florida Department of Highway Safety and Motor Vehicles teamed up with the Florida Department of Transportation and the Florida Trucking Association to conduct six commercial motor vehicle-related educational sessions throughout the state of Florida from May 9-18, 2018.

The "Talking Trucking Tour" was offered in Tallahassee, Jacksonville, West Palm Beach, Miami, Orlando and Sarasota. During these events, a wide range of topics were discussed related to commercial motor vehicle transportation on our highways and attendees were encouraged to ask questions.

This was the first time all of the aforementioned partners teamed up together for this type of event and we look forward to expanding our communication and outreach events as we all work together to enhance highway safety and security. ■



REGION III

Inspection Photos

Photos by Ofc. David Rose, Highway Safety Unit, St. Louis County Police Department, Missouri



This is the exhaust stack on the passenger side of a truck tractor. It was not attached to the mounting bracket at the top, so the whole stack was leaning forward. This photo shows the exhaust stack up against the passenger door. The door would not open without hitting the stack.



Here is a closer look at the top mount on which it should be bolted.

REGION III

PBBT Users Meet in Wisconsin

On Aug. 1, 2018, in Sparta, Wisconsin, CVSA held a meeting for jurisdictions that have performance-based brake testers (PBBT) to discuss PBBT-related issues, review the latest in brake testing research and update CVSA's PBBT training materials. Adam Siekmann, with Oak Ridge National Laboratory, presented the latest research and analysis conducted for the Federal Motor Carrier Safety Administration on PBBT use in enforcement. Greg Dvorchak, with suspension supplier Hendrickson, spoke about testing certain types of vehicles on PBBTs. The meeting was hosted by the Wisconsin State Patrol. The following jurisdictions attended the PBBT Users Meeting: Alaska Department of Transportation and Public Facilities, Florida Highway Patrol, Indiana State Police, North Dakota Highway Patrol, South Dakota Highway Patrol, Tennessee Highway Patrol and Wisconsin State Patrol. ■



REGION III

Michigan's Ofc. Parling Wins State Inspectors Championship; Competes at NAIC

By Lt. John P. Holder, Michigan State Police

The Michigan State Police Commercial Vehicle Enforcement Division (MSP/CVED) held its annual Inspectors Challenge on June 8, 2018, to determine who would represent Michigan at the North American Inspectors Championship (NAIC) this year. Eleven competitors participated, which is the most the division has had compete to date. Three vehicles were staged with violations to inspect and each participant completed four written tests.

It was a long day of competition and the winner was Motor Carrier Officer Mickey Parling. Ofc. Parling represented Michigan at NAIC in Columbus, Ohio, this year.

The MSP/CVED also assisted with judging for the Michigan Truck Driving Championship on June 9, 2018. Thirteen CVED members assessed 95 commercial motor vehicle drivers and their ability to drive around various obstacles.

On another note, the weather did not cooperate for the competition and we stood in the pouring rain for seven hours while drivers completed the course. Several of our officers were given the opportunity to drive commercial motor vehicles through the course to try their hand at the competition. It was a great public relations activity for our members and a great way to promote commercial motor vehicle safety. ■



Pictured from left to right: MC Ofc. Geoff Guthrie; Bill Frizzell, Corrigan Moving Systems; Jeremy with Corrigan Oil; MC Ofc. Steven Frizzell; and Matt Roeder and Eric Scislowicz, Independence Truck Repair.

REGION IV

Tpr. Andersson Maintains His Wits, Fights Off Attack During Violent Encounter

By Capt. Brian Preston, Commercial Vehicle Enforcement, Arizona Department of Public Safety

During the early morning hours of Jan. 12, 2017, Arizona Department of Public Safety's Tpr. Edward C. Andersson broke away from a commercial motor vehicle inspection that he was conducting to respond to a report of shots fired at passing motorists, along Interstate 10, west of Tonopah.

While en route to the reported shooting, Tpr. Andersson came upon a roll-over collision. Tpr. Andersson observed a male subject on the shoulder of the interstate, cradling a severely injured female in his arms. Tpr. Andersson immediately blocked a portion of the roadway with his patrol vehicle and began laying out flares to the rear of his patrol car to keep traffic out of the scene.

As Tpr. Andersson walked back toward the severely injured woman with the intention of administering aid, he was ambushed and shot by the man he observed cradling the woman.

The gunshot struck Tpr. Andersson in the right shoulder – disabling it and preventing him from accessing his firearm. The suspect then used his empty gun to strike Andersson's head, punched him repeatedly and slammed his head into the ground numerous times.

Tpr. Andersson fought the suspect by kicking him and striking him with his left hand. Andersson was unable to access his firearm during the incident, but successfully kept it holstered by rolling onto his injured shoulder so his firearm was between his body and the roadway and unable to be accessed by the suspect.

Tpr. Andersson successfully fought off his attacker long enough for a good Samaritan, Thomas Yoxall, to come to the rescue. After repeated commands from Yoxall to the suspect to get off Tpr. Andersson, Yoxall used his personal firearm to shoot and kill the attacker, effectively saving Tpr. Andersson's life.

Tpr. Andersson found himself in this deadly encounter because, without hesitation, he responded to reports of shots being fired and again, without hesitation, he had transitioned to the role of an emergency aid provider. His ability to fight with his feet, his fist and his instinct to roll onto his badly injured shoulder to keep his firearm from the hands of his attacker, helped him win the battle for his life. His "never give up" mindset and his ability to maintain his wits throughout his possibly deadly encounter are testament to his training and character.

Tpr. Andersson is a member of the department's Commercial Vehicle Enforcement program. In 2016, he conducted 890 traffic stops and completed 825 commercial motor vehicle inspections. Andersson located 3,186 commercial motor vehicle violations and placed 126 unsafe drivers and 118 unsafe vehicles out of service.

For his actions on Jan. 12, 2017, Tpr. Andersson was awarded the department's Medal of Valor. ■



Tpr. Edward C. Andersson

Arizona DOT's Truck Driver Training in Mexico Marks Successful First Year

One year ago, five uniformed officers from the Arizona Department of Transportation's (ADOT) Enforcement and Compliance Division drove south, crossing the Mexican border at San Luis south of Yuma on a mission that had never before been attempted.

Their task: Make Arizona roads safer and boost the state's economy by training Mexican truck drivers and mechanics – in Mexico – about the safety regulations they must follow to drive on U.S. roads.

In its first year, the International Border Inspection Qualification Program has made a dramatic difference in the number of violations found during safety inspections, the number of trucks pulled off the road for significant repairs and the amount of time drivers spend waiting at the border before they can deliver their products to U.S. markets.

"This collaboration with the Mexican trucking industry makes crossing the border safer for everyone," ADOT Director John Halikowski said. "It also supports the growth of Arizona's economy and makes crossing the border more efficient for commercial trucking. The dramatic improvements we have seen in just one year show the commitment of our officers and the trucking community to this important program."

In 16 two-day training sessions over the past 12 months, safety inspectors taught 409 truck drivers and mechanics from Mexico such things as how to secure a load properly and

how to know when tires and brakes are too badly worn. Six more sessions are scheduled in Mexico before the end of 2018.

The training follows Commercial Vehicle Safety Alliance guidelines, which are the standard for commercial motor vehicles across the U.S., used by every state and federal agency.

The numbers for these 409 drivers shout success:

- They have crossed the border 5,253 times since their training.
- Out of all of those crossings, inspectors found just 130 minor violations.
- Only 11 times have their trucks been pulled out of service for significant safety concerns.
- June is one of three months so far in 2018 when no drivers who were qualified through the program had significant safety violations.

There's more to the story. Drivers who complete the training and pass written and field exams are able to communicate with inspectors using the WhatsApp smartphone application. That process has been used 118 times, allowing drivers to ask questions and make repairs before approaching the border, saving what could have been time wasted waiting.

The program stems from ADOT's use of the Arizona Management System championed by

Governor Doug Ducey to have all employees continuously improve state agencies' value to their customers.

ADOT's Border Liaison Unit, created in 2016, also has continued shorter training sessions at Arizona's three border ports of entry in San Luis, Nogales and Douglas. Nearly 2,000 drivers, mechanics and company owners have attended those sessions.

Drivers from Mexico have praised ADOT for giving them information they need to reduce inspection times and get on their way. The business community in Nogales has praised the program for increasing commercial truck traffic and bringing more business to Santa Cruz County. And drivers all across Arizona are safer because the trucks sharing the road with them are safer.

Companies and communities in Mexico are continuing to request that training sessions be held in their areas. Of the six programs scheduled over the rest of 2018, only one is scheduled near the Arizona border. Three programs are scheduled in Mexicali and Baja California, and single sessions are scheduled in Caborca and Hermosillo in Sonora.

"We're getting requests from places away from the Arizona border – Mexicali, Ensenada, Caborca," said Tim Lane, director of ADOT's Enforcement and Compliance Division. "That shows how well the program has been accepted not only in Sonora but across Mexico." ■



REGION IV

Arizona Uses Brake Safety Day to Provide Brake Safety Seminar and Offer Voluntary Brake Inspections at Truck Stops

By **Capt. Brian Preston**, Commercial Vehicle Enforcement, Arizona Department of Public Safety

Sept. 7, 2017, was CVSA's Brake Safety Day. Brake Safety Day, part of the Operation Airbrake Program, is not just an enforcement operation carried out by agencies throughout North America, but also a day to reach out to the commercial motor vehicle industry and provide educational training to drivers and mechanics regarding proper brake maintenance and operation. As a part of Brake Safety Day, state troopers from the Arizona Department of Public Safety (DPS) conducted several brake safety activities on Sept. 6-7.

The activities started off on Sept. 6, with a brake safety seminar hosted at the Arizona Trucking Association located in Phoenix. More than 20 members of the trucking industry received hands-on instruction from industry experts on brake system functions and maintenance. DPS troopers gave presentations on brake system inspections and regulatory requirements.

Meanwhile, up in the high country of Flagstaff, troopers conducted an enforcement detail on Interstate 40. The goal of the detail was not just to conduct Level I Inspections, but to also educate drivers on the importance of proper brake maintenance. The detail was very successful, with many brake violations discovered and several vehicles placed out of service.

On Sept. 7, troopers gave their ticket-writing pens a rest and again reached out to educate members of the trucking industry. With the permission of the proprietors, troopers set up in truck stops' parking lots and offered voluntary brake inspections. As commercial motor vehicle (CMV) drivers would enter the truck stops, troopers asked if they would like a free inspection completed on their braking system. If the driver decided to participate, the CMV was directed to the inspection area where troopers worked in two-inspector teams. One trooper would scribe brake measurements and airbrake pod types, while the other measured pushrod movement. The ABS was checked, both on the tractor and trailer. Each inspection took 8-10 minutes. The drivers seemed to embrace this opportunity, as they would much rather have any brake violations identified at no risk in the truck stop parking lot, rather than out on the highway where they could risk a citation or, even worse, a crash.

During this event, the brake systems of 51 CMVs were voluntarily inspected. Potential violations discovered were brake adjustments, ABS, air leaks and load securement violations. The detail area, located at 7,000 feet, was not selected just as an excuse to get troopers out of the sweltering Phoenix heat; it was strategically selected to check braking systems prior to the CMVs making their descent into Phoenix. The cooler temperature was just a welcome bonus. ■

REGION IV

Washington State Partners for Public Safety

By **Sgt. Rick Fisher**, Commercial Vehicle Division, Washington State Patrol

The Washington State Patrol (WSP) Commercial Vehicle Division, Washington State Utilities and Transportation Commission, and the Federal Motor Carrier Safety Administration teamed up to promote motorcoach safety. Destination passenger-carrying/motorcoach inspections are a priority for the WSP and are strategically part of our operations plan. The WSP currently has 27 certified motorcoach inspectors, with 19 officers scheduled to attend training in September. Destination inspections can be a challenge when it comes to locating an approved inspection site for WSP certified inspectors.

The Alaska summer cruise season brings in hundreds of thousands of cruise passengers arriving in Seattle to board motorcoaches en route to Seattle's cruise terminals. With more than 200 scheduled cruises from May to September, it is an ideal opportunity for motorcoach inspections.

With the assistance of the Port of Seattle, a multi-agency emphasis was conducted in June 2018. The emphasis produced 34 Level I Inspections, 39 violations and five buses were placed out of service for equipment violations. The WSP and its partners are dedicated to commercial motor vehicle safety and work tirelessly at reducing collisions and saving lives. ■



- Poster board of Washington State Patrol/Washington State Department of Transportation project after completion.



Private Industry Funds a Public Project in Washington State

By Lt. Jeffrey D. Closner, Commercial Vehicle Division, Washington State Patrol

Sometimes, the solution to a law enforcement problem resides in a non-traditional approach that exists right before your eyes, if you slow down and take the time to ask yourself, "Why is this happening?"

In law enforcement today, we all have a great deal of work to do. Demands and expectations run high. By developing partnerships with stakeholders who have a vested interest in solving the problems we face, we may find a sustainable way to meet those expectations. The following story provides an example of how the Washington State Patrol Commercial Vehicle Division leveraged a community-oriented policing model to address a commercial motor vehicle (CMV) collision problem on a Washington highway.

To provide some background, State Route 12 is a rural four-lane east/west highway that provides access from the city of Yakima to the rural agricultural areas of upper Yakima County in eastern Washington. This includes access to the cities of Tieton, Cowiche and Naches. The east and westbound lanes are divided by a narrow grass median. Access from surrounding county roads is controlled by "crossover" intersections, requiring drivers to yield to both east and westbound traffic traveling on State Route 12 as they cross or turn onto the highway. The Washington State Patrol investigates two to three serious motor vehicle collisions on this 8-mile stretch of roadway per year. Many of

those involve commercial motor vehicles and most result in serious injuries or fatalities. In response, the Washington State Department of Transportation (WSDOT) upgraded some of the intersections on this stretch of highway with acceleration lanes. The addition of an acceleration lane for east and/or westbound traffic entering the highway eliminates the need to stop in the median prior to merging into traffic. Where added, the acceleration lanes contribute to a significant reduction in collisions.

Kershaw Companies, a local fruit warehouse and packing company, is located near the intersection of State Route 12 and Low Road in Yakima County. During the last few years, Kershaw Companies experienced significant growth. Low Road is being used as the only ingress/egress route for traffic frequenting the warehouse. Prior to our project, drivers wishing to go east on Route 12 were required to cross over the westbound lanes and median, entering directly into the eastbound through lanes. As such, vehicles using the intersection were forced to stop in the median to clear eastbound traffic. This created a dangerous traffic situation when the stopped vehicle consisted of a commercial motor vehicle truck and trailer, or truck and trailer combinations. When stopped in the median, commercial motor vehicle configurations blocked the westbound lanes of State Route 12. During the last WSDOT traffic analysis study, the intersection of State Route 12

and Low Road did not meet the requirements necessary for redesign/revision. With the expansion of Kershaw Companies and an increase in traffic, the intersection was becoming increasingly dangerous.

On Dec. 22, 2015, a fatal collision involving a commercial motor vehicle semi-truck and trailer combination occurred at the intersection of State Route 12 and Low Road. At the time of the collision, the commercial motor vehicle was stopped in the median as the driver waited for eastbound traffic to clear before merging into the eastbound lanes. The trailers of that vehicle blocked nearly all of the westbound lanes. The driver of a passenger vehicle traveling west on State Route 12 failed to identify the hazard ahead. The passenger vehicle ran directly into the stopped trailer and sadly the driver died as a result of injuries sustained in the collision. The Commercial Vehicle Division responded to and investigated the collision. Afterward, in an attempt to establish the cause and what, if any, non-enforcement solution may exist, Commercial Vehicle Division Command looked at the circumstances surrounding the collision.

Very early on, we identified that we had before us a two-pronged problem consisting of road design and driver behavior. Our immediate temporary response was to work with WSDOT to have a sign installed on Low Road warning drivers of the narrow median ahead. We contacted the WSDOT traffic engineering



Eastbound State Route 12 at Low Road intersection prior to improvement.



A commercial motor vehicle blocking the intersection and westbound lanes of State Route 12 at Low Road prior to intersection redesign. Note: The black pickup is swerving to shoulder to avoid collision.



Eastbound State Route 12 Low Road intersection after the acceleration lane was added. Note: The white car closest to the photographer is using the acceleration lane.



Aerial view of State Route 12 Low Road intersection after completed project. Note: This commercial motor vehicle with double trailers is passing through the intersection into the acceleration lane without stopping in median where it would have blocked the entire westbound freeway.

section and worked to design a sign that portrayed the dangers associated with cross-intersection traffic. This sign had never been used in Washington, but met the temporary needs for the intersection.

In fall 2016, the Commercial Vehicle Division opened a problem-oriented public safety project. Three vital stakeholders were identified: Kershaw Companies, the Washington State Department of Transportation and the Washington State Patrol. A stakeholders meeting was convened wherein they determined an acceleration lane on the eastbound side of State Route 12 would be the most effective way to mitigate collisions. WSDOT agreed to assess the feasibility of redesigning the intersection while obtaining estimates on the cost of the acceleration lane.

The initial estimate for redesign of the intersection came in at roughly \$300,000, of which WSDOT was only able to commit roughly \$100,000 in public funding. Kershaw Companies, which had a vested interest in seeing the project through to completion, graciously stepped forward to fund the remaining balance. In their response, Kershaw Companies offered the following statement:

WSDOT is basically telling us this project will never get done unless we (Kershaw) are willing to kick in \$200,000. This is a sensitive issue with us considering this intersection is at the Brian

Kershaw Memorial Park; Brian Kershaw was killed in a traffic accident in 1996. We feel like you cannot put a value on a person's life and we will figure out a way to help fund this project so that it gets done in 2017.

In May 2017, due in large part to an extraordinary \$200,000 donation by Kershaw Companies, WSDOT broke ground on a traffic revision project that included the addition of an acceleration lane for eastbound traffic. During a groundbreaking ceremony, Washington State Patrol Chief John R. Batiste formally thanked and recognized Kershaw Companies with the Washington State Patrol Quality Recognition Award. This award is reserved for individuals and entities outside our agency who make a considerable contribution to sustainable traffic safety. Inscribed on the award was the following:

In appreciation and recognition of your commitment to traffic safety in your community. State Route 12/Low Road reconfiguration project.

At the presentation, Chief Batiste drew attention to the fact that it is rare for a private corporation to fund such a large portion of a public safety project. He also proudly recognized the superior performance of the Washington State Patrol Commercial Vehicle Division for implementation of our version of community-oriented policing as we looked to forge sustainable relationships to address a

serious public safety issue in the community.

In this day of limited public resources, a community-oriented public safety approach is a vital element of sustainable success. Put simply, law enforcement cannot and will not achieve success without the input and assistance of those they've been entrusted to protect. As we move forward, the Washington State Patrol Commercial Vehicle Division continues to collaborate with WSDOT and local businesses located along this stretch of roadway and has, in fact, secured the funding necessary to redesign two additional intersections.

We are very proud to report that since the completion of our initial project, there have been no motor vehicle collisions at the intersection of State Route 12 and Low Road. ■



• Contractor adds acceleration lane to eastbound State Route 12 at Low Road intersection.

Yukon Officers Complete First Class of New Canadian CVSA Highway Tank Course

By **Michael Kasprzak**, Assistant Manager, Yukon Highways and Public Works, National Safety Code

Yukon Territory Carrier Compliance completed its first class of the new Canadian CVSA Highway Tank Course. The class consisted of two previously certified officers and two newly certified officers. CVSA's newly re-written course allowed Yukon to expand its inspections on highway tanks and greatly improve the safety on its highway systems. ■



Pictured from left to right: Cheryl Anderson, Whitehorse Scales; Richard Durocher, Watson Lake Scales; Robert Close, Watson Lake Scales; Sebastien Nadeau, Whitehorse Scales; Michael Kasprzak, National Safety Code Instructor.

Saskatchewan Highway Patrol Gets New Name, New Look, Expanded Mandate

By **Brandy Leippi**, Communications Consultant, Saskatchewan Ministry of Highways and Infrastructure

As of July 1, 2018, Saskatchewan's Ministry of Highways and Infrastructure's enforcement team have an expanded mandate with a new look and name — the Saskatchewan Highway Patrol.

The name change reflects the newly expanded role for the enforcement team. In addition to protecting the provincial highway system through the enforcement of commercial vehicle legislation, the Saskatchewan Highway Patrol will also support the provincial Protection and Response Team.

Commercial vehicle enforcement remains the primary function for the Saskatchewan Highway Patrol. However, the officers also have expanded responsibilities to support their new role on the Protection and Response Team. In addition to arrest and detention powers, their responsibilities include:

- Responding to 911 calls
- Investigating impaired drivers
- Enforcing speed limits and other traffic violations – inside and outside of work zones
- Taking action when someone is found committing an offence
- Responding to motor vehicle crashes
- Investigating vehicles hauling livestock to ensure the health and welfare of the animals.

The new name and mandate comes with a new look – a blue stripe along the side of the vehicle along with the Saskatchewan Highway Patrol name and crest.

Drivers need to be aware that officers from the Saskatchewan Highway Patrol can now enforce traffic violations for commercial and private vehicles. Their vehicles have also been

equipped with automated licence plate readers. The device automatically scans licence plates and alerts the officers if a nearby vehicle is unregistered or associated with a driver who has been suspended for any reason. These devices can be used to look for a vehicle that has been reported stolen, connected to a crime or an Amber Alert.

The Protection and Response Team was created to help reduce crime in rural Saskatchewan. The team is comprised of police officers from the Royal Canadian Mounted Police and municipal police forces, as well as officers from the Ministry of Highways and Infrastructure's Saskatchewan Highway Patrol and Ministry of Environment Conservation officers.

Members of the Saskatchewan Highway Patrol received extensive training to prepare for their new responsibilities. Their training included enhanced use of force, firearms and tactics training, such as clearing a house of suspects and high-risk vehicle stops. Officers also received training in dealing with people with mental health issues, the Criminal Code and the requirements for the collection and control of evidence.

The additional officers capable of a timely response to emergency situations and addressing rural crime are greatly needed in the province of Saskatchewan as rural crime has been climbing. ■



REGION V

Alberta CVE and AMTA Partnership Continues to Gain Momentum

By **Kelsey Hipkin**, *Communication Specialist, Alberta Motor Transport Association*

For the last 25 years, Alberta Commercial Vehicle Enforcement (CVE) and the Alberta Motor Transport Association (AMTA) have come together to celebrate the skills and professionalism of their respective industries with the Alberta Professional Truck Driving Championship and Alberta CVE Inspectors Championship.

While Alberta CVE is celebrating its 25-year milestone, the AMTA has been hosting a championship (formerly known as Rodeo) for 70 years. The event is an opportunity for Alberta drivers and inspectors to demonstrate their knowledge and skills in handling and inspecting commercial motor vehicles.

Drivers compete in three categories: straight truck, tandem and B-train. The day culminates with a championship banquet in which the best drivers and teams are awarded for their efforts.

For the CVE inspectors, the day's Grand Champion goes on to compete in the North American Inspectors Championship (NAIC), which took place this year in Columbus, Ohio, Aug. 14-18. During last year's NAIC, Alberta's Lance Skoog earned third place in the North American Standard Hazardous Materials/Dangerous Goods Inspection category.

Headed to Ohio this year was 2018 Alberta Inspectors Championship Grand Champion Acting Sgt. Trevor Snoddon. If Snoddon was unable to attend, runner-up Ofc. Sarah Brunschweiler would have competed in his place. Snoddon also earned High Point Dangerous Goods and High Point Vehicle during the provincial competition.

"The best results are always achieved through collaboration and partnerships, and highway safety is no different," said CVE Acting Chief Jacquie Daumont. "Our long history of this event with the Alberta Motor Transport Association is an excellent example of coming together to achieve common goals."

"For the AMTA, safety of both commercial drivers and the motoring public is paramount," said AMTA President Chris Nash. "We see the relationship between the AMTA and CVE as a vital one to continue to make

Alberta's roadways the safest they can be."

The Grand Champion, also known as the Ann Taylor Award, of the Truck Driving Championship was Sobey's driver Curtis Phillips. Phillips also earned first place in the tandem event.

Aside from the Professional Truck Driving Championship, the relationship between the two groups is further cemented by other programs and initiatives. For example, AMTA's Partners in Compliance (PIC) program recently received an award from the Intelligent Transportation Systems (ITS) Society of Canada during a ceremony in Niagara Falls on June 19, 2018.

CVE and PIC were awarded for the Driveway Bypass Program in the Project/Program category. Through the Driveway Bypass Program, PIC carriers may receive bypass signals as they approach any one of the 48 vehicle inspection and mobile sites throughout Alberta. This service is available to commercial carriers with exemplary safety records and helps save them time.

"Our PIC program is a program of excellence," said Nash. "It identifies the carriers in our industry that demonstrate commitment to not only their on- and off-road safety, but the safety of everyone around them, and this award serves to exemplify that excellence."

Daumont spoke to how the PIC program further adds to the relationship of the CVE and AMTA. "More than anything else, the Partners in Compliance program is about strong working relationships, cooperation and understanding between enforcement and industry," she said. "This program is one of our best and most productive partnerships with industry and provides great incentives for commercial carriers to achieve high safety ratings."

The groups also partnered on AMTA Driver Appreciation Days in which groups of volunteers handed out gift bags to drivers at a number of vehicle inspection stations across the province, primarily during National Trucking Week in September. ■

REGION V

Inspection Photos

Photos by **Senior Peace Ofc. Ryan Hoffman**, *Enforcement Services, City of Grande Prairie, Alberta, Canada.*



Air hose crimped with vice grips.



Load shifted; cargo securement issues.



Crack in suspension.



Load of pipe fallen on road.

Ofc. **Brett Barteaux** found these broken brake shoes during a Level I Inspection at the Whitehorse Weigh Scales in Yukon, Canada.



Brake Safety Symposium

Educating Attendees on
CMV Brake Technologies
and Regulations

lizing Vehicle Intelligence

By **William Schaefer**, Director of Safety Programs, Commercial Vehicle Safety Alliance

On May 15-16, 2018, in Schaumburg, Illinois, CVSA hosted its Brake Safety Symposium aimed at raising awareness of commercial motor vehicle (CMV) braking technologies, understanding common brake violations, highlighting approaches to improving brake maintenance and regulatory compliance and sharing technological advances, both in trucks and inspections relative to brake systems.

The symposium was made possible through support from CVSA's Operation Airbrake program, volunteers on the organizing committee, and the speakers, exhibitors and sponsors for the event. It should also be noted that the symposium could not have been a success without all the agencies and organizations who sent their staff to attend, with approximately 150 participants in total.

It had been 12 years since CVSA helped host a similar event in 2006; and prior to that, in 2000. Many of the issues and concerns raised in those earlier sessions remain relevant today.

For example, proper pushrod stroke measurement remains a vital check to ensure S-cam drum brakes are properly (and automatically) adjusting. If pushrod stroke is measured beyond the adjustment limits in 49 CFR 393.47(e) then something is wrong with one or more brake components and the underlying cause(s) must be determined and corrected. Manually adjusting self-adjusting brake adjusters does not resolve the condition. Familiarity with how brake systems work when in compliance with the regulations is important for drivers, carriers, technicians and inspectors.

Symposium Kicks Off with General Session

CVSA President Capt. Christopher Turner, with the Kansas Highway Patrol, opened the event with an overview of prominent brake-related violations captured in the inspection results from CVSA's Brake Safety Day and Brake Safety Week campaigns, organized by the Operation Airbrake program, and the International Roadcheck annual inspection campaign.

A look at brake-related issues found in crashes was provided by Jennifer Morrison with the National Transportation Safety Board, who shared her perspective as a crash investigator, as well as some recommendations her agency published based on truck and bus crashes.



Shifting to look at some advanced driver-assistance systems (ADAS) that help prevent or reduce severity of crashes by using automated braking, Kevin Grove from Virginia Tech Transportation Institute shared results from his team's research into radar-based collision avoidance system effectiveness. His talk provided a glimpse of the benefits, limitations and future potential of front-end collision mitigation utilizing radar or similar sensors and the braking system.

Vehicle Standards and Safety Regulations

The event continued with Brake Regulations 101, a plenary session presenting new vehicle standards and motor carrier safety regulations. Manufacturers must build products their customers need while also including safety

features and equipment demanded by the motoring public. Motor carriers and vehicle maintenance providers also need to know and follow the motor carrier safety regulations. Given the rates with which inspectors find violations, it's clear that some drivers, operators and motor carrier personnel don't fully understand and/or heed these regulations.

An overview of the brake-related Federal Motor Vehicle Safety Standards (FMVSS) was given by David Domine from Link Engineering, a company that conducts FMVSS compliance tests for clients.

Another regulatory perspective was provided by Don Moore with the Canadian Transportation Equipment Association, as Canadian regulations, while largely similar to those in the United States, are implemented at the provincial level rather than federally, as in the United States.

Shelley Conklin, whose work for Landstar includes conducting training and identifying acceptable third-party repair shops, expressed dismay with the lack of regulatory knowledge by personnel at some facilities. She also shared some of the efforts her company puts forth to educate its personnel on brake regulations.

Bernie laBastide with Navistar Inc. gave a truck manufacturer's take on how the latest changes to the FMVSS No. 121 (the air brake standard) impact vehicle design, including requiring heavier duty front axles and suspensions, larger front brakes and other related brake and tire considerations. The rule change reduced the allowable, new vehicle stopping distance for most tractors to 250 feet (in the FMVSS No. 121 test procedure conditions).

After the plenary sessions, the symposium was organized with three breakout study sessions, covering: Brake Technologies, S-cam Drum Brake Essentials, and Inspection Procedures and Brake Performance.

Brake Technologies

Braking ability in any motor vehicle relies on several systems performing in concert. Tires provide friction at the road surface. Suspensions keep tires in contact with the road. Steering helps keep the vehicle pointed down the road. And the foundation brakes provide powerful stopping force through controlled application of friction. Utilizing that stopping power are some sensor and control systems, such as antilock braking systems (ABS) and electronic stability control (ESC).

Chuck Brodie with WABCO explored the features, components and benefits of ABS, which build upon the aforementioned systems to improve driver control in low friction (wet, icy or otherwise slippery) driving conditions.

Mike Tober of Bendix Commercial Vehicle Systems further explained the basics of vehicle dynamics and how ESC expands on the functionality of foundation brakes and ABS to address keeping control of steering, yaw (keeping the vehicle from rotating left or right out of control) and roll (keeping the vehicle from rolling over on its side or roof).

In explaining air disc brake technology, Rick Dinkel from WABCO said that ABS and ESC work with both drum and disc brakes, and in both air and hydraulic brake systems, and in the broader context of brake technologies. Although still representing a minority of commercial truck

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brakes (around 5 percent of brake fitments in the North American fleet, according to a 2016 CVSA Operation Airbrake inspection survey), interest in and market share of sales of air disc brakes is rising. Historically a premium product versus S-cam drum brakes, suppliers are reporting that the price difference is trending toward parity. Suppliers have reported as much as roughly one quarter of new tractor sales include air discs. Trailer manufacturers are also fitting air disc brakes in higher quantities.

Air disc brakes have some advantages over the widely used S-cam drum brake, though they are not suitable in all vehicle applications. Disc brakes resist brake fade better than drum brakes and generally have better high-speed stopping performance. Disc brakes also generally engage more quickly and more precisely in concert with ABS and ESC systems – they tend to feel more car-like in handling. Still, there are service applications where drum brakes are preferred (off-highway construction, smaller wheel sizes like on low-boy trailers, certain axle configurations or when comparing upfront costs and time of ownership).

Yet, air disc brakes present a challenge for roadside inspections because there are fewer visible cues, like actuator pushrods on which

stroke is measured in drum brakes, for inspectors to ensure a brake is working properly in modern air disc brake designs.

However, air brakes are not the only stop in town. Joe Kay with Meritor provided an overview of hydraulic brake systems, including how various designs function and key maintenance issues. Hydraulic brake components (hydraulic cylinders, brake lines, actuators/calipers) all operate at much higher pressures in contrast to air systems, so any hydraulic leaks are especially concerning. Like air brakes, hydraulic brake systems need to be maintained and inspected.

CVSA's Operation Airbrake program and the Vehicle Committee have continued to support development and refinement of inspection procedures, inspection bulletins, training videos for inspecting disc brakes, ABS and hydraulic brake systems; all of which are available from CVSA.

S-Cam Drum Brake Essentials

A session dedicated to the S-cam drum brake was an obvious inclusion because although disc brakes are growing in popularity, drum brakes remain the most common brake for heavy-duty trucks and trailers. Measuring pushrod stroke is a key tool for enforcement, but symposium

speakers expressed that it should also be part of a fleet's maintenance program. And since self-adjusting brake adjusters were mandated starting in 1994 in the U.S. (and 1996 in Canada), well over 90 percent of trucks and most trailers on the road today should be automatically adjusting for normal lining and brake system wear. If out of adjustment, an abnormal condition is evident and the brakes need to be serviced.

Long stroke brake chambers led off the discussion of this study session. Scot Reeder with TSE Brakes provided a presentation about brake actuators, or brake chambers, and explored how they function, as well as some of the important terminology used to characterize them. He explained the difference between rated stroke (used by manufacturers to identify the length the chamber's pushrod can travel until the diaphragm and pushrod bottom out) and the regulation stroke limit (the stroke adjustment limit set out in Section 393.47(e) of the federal regulations – and Canadian equivalent – and is enforced at roadside). He also discussed long stroke brake chambers, which were developed to extend the length of stroke available to provide braking power and thereby better accommodate for wear and flex in foundation brake components.



Attendees learned about the key functions of long stroke chambers, brake stroke indicators and automatic brake adjusters, and why we use these technologies.

However, long stroke chambers also have introduced possible confusion for brake technicians and enforcement inspectors who must be able to identify and understand the difference between standard and long stroke chambers. Adjusting a standard stroke brake chamber thinking the regulation stroke limit is that of its long stroke counterpart can result in a violation, an underperforming brake system and increased stopping distance.

When a brake with a self-adjusting brake adjuster is out of adjustment, something beyond normal lining wear is likely causing an issue. Steve Howse with Tramec Sloan discussed self-adjusting brake adjusters, often called automated slack adjusters, their functionality and maintenance needs. Self-adjusting brake adjusters need to be inspected and maintained. They have limits to their service life and should be replaced per the manufacturer's specifications. Howse cautioned that some brake technicians proceed to erroneously re-adjust brakes or replace automatic slack adjusters without fully diagnosing the underlying problems.

Also discussed was the fact that brake stroke adjustment indicators are required by Title 49 CFR 393.53(c) (effective since 1994) on brakes with exposed pushrods. However, a colored band or etched mark on the pushrod is visible only when the pushrod emerges from the out-of-adjustment brake chamber. As it is difficult to see without crawling under the truck, very few drivers or motor carriers, and few roadside inspectors, rely on these pushrod markings to confirm out-of-adjustment brakes. Brakes on vehicles subject to well-managed maintenance programs will rarely reveal these stroke indicator markings. And marked pushrod stroke indicators on many vehicles, especially those that are less well maintained, suffer the practical limitation that the indicators become corroded or covered in grime, dust and dirt, and go unseen.

On a positive note, there are stroke indicators available in the aftermarket that are more visible during a driver's pre-trip inspection and others that perform electro-mechanical stroke sensing.

Andy Malion with Spectra Products and Tom Hewer with TSE Brakes presented some of the technologies their companies have developed. Some carriers using aftermarket stroke indicators report success integrating them in their maintenance programs, and sensor-based systems show promise for when visual inspections are difficult or impossible (air disc brakes have no visible adjustments to inspect;

aerodynamic wheel end or underbody treatments prevent access to brake components or stroke measurement).

To round out the session, Greg Dvorchak with Hendrickson emphasized, once again, that when brakes are found to be out of adjustment, the underlying cause must be diagnosed. Simply readjusting self-adjusting brakes does not resolve the underlying issue.

Thank you to TSE Brakes, Tramec Sloan, Spectra Products, MGM Brakes and Hendrickson for bringing their exhibits and expertise to make this study session a success.

Inspection Procedures and Brake Performance

The inspection procedures and brake performance study session reviewed what the roadside inspector looks for in the brake inspection and the characteristics checked in maintenance of air disc brakes, as well as some tools used by enforcement, such as roller dynamometer performance-based brake testers (PBBTs) and infrared thermal imaging systems.

Ron Jenkins, with the Oklahoma Highway Patrol and a National Training Center instructor, provided a synopsis of the North American Standard Level I Inspection Procedure related to brake systems and components. The procedure already includes air disc brakes but, as discussed previously, what is visible to inspectors is limited. For that reason, we also asked Joey Campbell of Bendix Commercial Vehicle Systems to provide an overview of air disc brake systems and general maintenance inspections. Though many air disc brake maintenance specifications and criteria are not viable for use in a roadside inspection, they provide some idea of what can be measured in a shop, illustrating how disc brakes work and what might be evidence of a problem, e.g., no movement in the caliper or corroded brake rotor contact surfaces.

PBBTs measure brake force at each wheel end and determine if the overall vehicle braking efficiency meets the requirement of 43.5 percent under 393.52 of the FMCSRs. PBBTs can be used to assess performance of most types of brake systems, including S-cam drum, air disc brakes, hydraulic brakes and even electric trailer brakes. However, PBBT use is limited in that not every inspector can carry one. They are used often at inspection facilities or as portable systems.

When brakes are found to be out of adjustment, the underlying cause must be diagnosed.

— Greg Dvorchak, Hendrickson



Drivers, mechanics, owner-operators, safety managers/directors, inspectors and others learned about proper brake inspection, proactive maintenance and safe operations at the symposium.



Attendees learned how manufacturing standards, motor carrier regulations, inspection procedures and the out-of-service criteria all function to help ensure safe and reliable brake system performance in North America.

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PBBTs are used by 12 jurisdictions for roadside inspections (including both mobile systems and fixed weigh station facilities) in North America. Those jurisdictions are Alaska, Alberta, Colorado, Florida, Indiana, Georgia, Kansas, New Jersey, South Carolina, South Dakota, Tennessee and Wisconsin.

Mark Keegans with Vehicle Inspection Systems provided a primer on PBBT systems and how they are used, and the Indiana State Police generously brought their portable PBBT to the symposium. More information about PBBTs can be found at www.operationairbrake.com.

Additionally, automated infrared thermal image processing and analysis are being used by many jurisdictions to screen vehicles for possible tire, wheel or brake-related problems as they pass through weigh station facilities.

Brian Taylor with Intelligent Imaging Systems shared a live web demonstration showing the output available to the user, including infrared axle photos and an alert for possible issues, such as possible flat tires, inoperative brakes, dragging brakes and worn wheel bearings, among other possibilities. Taylor noted the very high out-of-service rate for vehicles identified by this company's infrared screening system.

This study session also took advantage of the exhibit space, with exhibits made possible by generous contributions of equipment and time from Bendix, Indiana State Police, Landstar, Meritor, Stertil-Koni lifts, Vehicle Inspection Systems, WABCO and owner/operator team Beth and Kenn Zelten.

General Session – Designing, Integrating, Using and Inspecting Brake Systems

An important message evident from the discussions was that participants sought to be better informed about the different facets of brake safety with which they were less familiar. The program reconvened with a general session to explore some of the nuances between regulations and CVSA's North American Standard Out-of-Service Criteria. Tpr. John Sova, chair of the CVSA Vehicle Committee, re-emphasized that the out-of-service criteria is not designed to be used as maintenance guidelines. Alan Matsumoto of STEMCO Brake Products shared maintenance and performance characteristics of friction materials – brake linings/pads.

Many aspects of brake safety that were raised in previous brake safety events remain relevant today. Rolf VanderZwaag with Techni-Com Inc. helped organize the North American Brake Safety Conference in 2000 and authored a report on the proceedings, and we invited him to offer his latest observations in brake safety. VanderZwaag noted four areas for improvement:

1. Driver knowledge
2. System design
3. Periodic inspection
4. Future regulatory requirements

In driver knowledge, he noted that surveys from both the 2000 and 2006 events showed poor knowledge of brake systems by drivers. Additionally, the commercial driver's license manual, published by the American Association of Motor Vehicle Administrators and used by many jurisdictions as the suggested minimum in driver training, could offer better information to drivers about how to check their brake systems, including how to perform a proper brake stroke measurement.

He also noted some successes that the Canadian province of Ontario had with requiring minimum hours of training (36.5 hours in class, 17 hours in the yard and 50 hours behind the wheel). On brake systems, the province requires 12 hours of training and a separate exam and license endorsement. The U.S. did recently improve its entry-level

driver training rules, but there is still room to improve further.

VanderZwaag also observed some shortcomings in the U.S. federal safety standards. He suggested that regulations need to be improved to require better protection of the towing vehicle brake system against loss of air. He also noted the U.S. periodic inspection requirements could be much improved to better ensure brake systems are maintained. The equivalent Maintenance Periodic Inspection Standard requirement in Canada, National Safety Code Standard 11, is more comprehensive and highly recommended for use in any jurisdiction. Also, the Canadian driver pre-trip inspection National Safety Code Standard 13 and the U.S. equivalent regulation suggest a driver should check brakes, but neither provide a procedure to do so. The Canadian standards are available at www.ccmta.ca/en/national-safety-code/national-safety-code-nsc.

Alexandre Guay, from Société de l'assurance Automobile du Québec (SAAQ), presented results of an effort he conducted in Quebec to evaluate and address brake system defects. The object was to improve the exchange of information among affected parties – drivers, mechanics, owner-operators, company managers and truck manufacturers. It also aimed to improve awareness with the public and other groups. Quebec plans to produce videos and brochures in the coming year.



Summary Discussions

The latter half of day two of the symposium was comprised of a question and answer exercise, with a panel of experts answering many of the questions raised (though far from all). Panelists Zeke Zakotnik of CRH Americas Materials Inc. kicked off the dialogue with his perspective as vice president for equipment and maintenance of a fleet. Other panelists were Lt. Ron Jenkins with the Oklahoma Highway Patrol; Greg Dvorchak with Hendrickson International; Joe Kay with Meritor; and Bernie leBastide with Navistar Inc.

While many attendees were able to have their questions answered during the event, there remained questions for which there wasn't sufficient time to answer. As a means of continuing the dialogue, CVSA encourages participation in our Operation Airbrake program, which meets twice per year – at the CVSA Workshop each spring and the CVSA Annual Conference and Exhibition each fall. Inspection-related issues for CVSA's programs and committees to consider can be submitted through the Issue/Request for Action Form at www.cvsa.org/inspections/inspections/issuerequest-for-action.

CVSA solicited post-symposium feedback from attendees via an online survey and some of the suggestions were to include more coverage of new technologies and more hands-on engagement with equipment. For example, some attendees would have liked a demonstration of measuring pushrod stroke. CVSA will try to include these in future events,

but we also can expand on new brake-related technologies on these pages.

PBTTs, mentioned earlier, while not a new technology, may represent a tool that could be used in a new way in the future. They could be incorporated into the required periodic maintenance inspections, as was done in Canada, at least as an option. Periodic PBTT tests could also be taken and the test result recorded in a vehicle log, effectively becoming part of an electronic inspection and made available to enforcement upon inquiry. We already recognize that PBTTs resolve part of the conundrum of inspecting disc brakes at roadside, offering a way to check actual braking function and performance.

Similarly, leveraging on-board sensors and diagnostics is a way to improve the ability to check the condition of disc brake systems while on the road. Wheel speed sensors in the ABS and accelerometers used in ESC systems could provide an indication of braking performance limitations. Still, other sensors, such as those discussed by Tom Hower in monitoring pushrod stroke (or disc caliper actuation), could also expand the dataset available to monitor possible braking issues on vehicles. Other sensors could be required by regulation. The cost of data processing, communications and sensors is generally coming down as technology develops.

Also worth considering is what can be done with the advances in ADAS, such as front collision mitigation. The front collision mitigation systems that Kevin Grove studied and presented are

advancing, and the Federal Motor Carrier Safety Administration (FMCSA) and National Highway Traffic Safety Administration (NHTSA) are studying them further, in the context of a possible future mandate. These systems show significant potential safety benefits.

One major carrier, Schneider, reported a 69 percent reduction in relevant front-end crashes and a 95 percent reduction in severity (cost) of the crashes that did occur since outfitting its fleet with radar-based, front collision mitigation systems.

NHTSA is also in the process of requiring vehicle-to-vehicle (V2V) communications that broadcast basic safety information (e.g., vehicle location, speed and other key safety data) to other vehicles nearby as an architecture or platform onto which crash avoidance actions and systems can be developed. A final rule has been published for light vehicles and research is underway regarding heavy trucks.

The symposium was organized to provide a background of what we know from current braking technology, inspections and crash investigations, and an overview of some of the collision mitigation aspects. In addition to the relevant regulations, the details on brake technologies, the ubiquitous S-cam drum brake and today's roadside and maintenance inspections, it's clear that there is more we can include. With attendees expressing a desire to do it again, expect another Brake Safety Symposium in the future, much sooner than 12 years from now. ■



The symposium provided attendees with information, education and training related to brake technologies, regulations, inspection procedures, tools and maintenance.

CVSA Awards College Scholarships to Three High School Seniors



Alan Hansel



Macy Lott



Lauren Osias

CVSA awarded \$1,000 scholarships to three deserving high school seniors to attend the college of their choice this fall. Alan Hansel will attend Temple University; Macy Lott will attend East Central Community College; and Lauren Osias will attend the University of Kentucky.

As North America's leading commercial motor vehicle safety organization, CVSA's annual scholarship award program is a key component of the Alliance's outreach initiatives. The scholarship award program is competitive in its selection criteria, uniquely tailored to recognize outstanding high school seniors. Scholarship recipients are selected by weighing a combination of strong academic performance, volunteer work and extracurricular activities.

"CVSA has been awarding college scholarships to exceptional high school seniors for the past 19 years," said CVSA President Capt. Christopher Turner with the Kansas Highway Patrol. "Being able to consistently sustain that legacy, supporting soon-to-be college students' academic endeavors, is something I'm proud to be a part of as the Alliance's president. I have no doubt the three individuals receiving this year's college scholarship will continue their exceptional high school performance into college and well beyond into their chosen careers."

Our first college scholarship recipient, **Alan Hansel** was accepted to Temple University's College of Public Health. Alan's father, Nicholas Hansel, is a retired police officer, Motor Carrier Safety Assistance Program (MCSAP) inspector and crash reconstructionist, and currently is vice president of safety at A&S Kincaid.

Alan wants to pursue a career in the medical field, driven by his uncle's experience. In August 1988, Alan's uncle Luke was riding his bike with a friend and was struck by a truck that swerved to avoid hitting the friend. Luke sustained a traumatic brain injury that left him in a coma for six weeks, followed by six months of rehabilitation and medical challenges that remain today.

"After getting to know my uncle and all of his challenges, I knew that I wanted to pursue a career in the medical field," said Alan. "The accident gave me a different view on life. It made me realize that you cannot take anything for granted. It made me realize that you have to appreciate everything you have because you never know when it's going to be

taken from you. It made me thankful for all of the doctors and nurses out there because they saved not only my uncle, but our family."

During Alan's high school years, in addition to his outstanding scholastic abilities, he participated in at least one sport in every season for all four years of high school; that's football, basketball, baseball and golf. Alan is also a member of the National Honor Society and Student Leadership Council.

"Alan's values and personal characteristics are highly commendable," said Jeffrey D. Stover, mathematics teacher and department head at Dover Area High School. "He is engaging and he is the type of student all teachers wish to have in class. Descriptions such as hard-working, dedicated and conscientious are often used in connection with Alan."

The second person to receive CVSA's college scholarship award, **Macy Lott** will attend East Central Community College. She is the daughter of Matthew Clayton Lott of the Mississippi Department of Transportation.

Macy volunteered many hours of community service with the First Baptist Church Youth Group and has traveled to Georgia, Haiti, Tennessee and North Carolina as part of mission teams. She also frequently visits local nursing homes to sing for the residents. Macy is a cheerleader, and a member of the Beta Club, the softball and basketball teams and the UHS Fellowship of Christian Athletes. She was also selected to represent her school at the Hugh O'Brian Youth Leadership Conference.

Macy plans to pursue a career in speech pathology to help adults and others with special needs. She discovered the special place she has in her heart for people with special needs while on a youth group mission trip in Nashville, Tennessee, to a local daycare for men and women with special needs.

"They love to be happy," said Macy of her experience in Nashville. "Their smiles are contagious, so smiling back at them comes without saying. I want to be able to make a difference in people's lives in any way that God would allow."

"Although Macy's athletic and academic successes are certainly impressive, it is her heart that is her greatest asset," said Union Elementary School Principal Deanna Rush. "Macy demonstrates compassion for others

every day of her life. She often reaches out to the less popular, less confident students in our school to encourage them. She can often be seen eating lunch with such students or stopping to give a hug to an elementary student in the hallway. She has a welcoming spirit that makes everyone feel important."

The third and final college scholarship recipient is **Lauren Osias**, stepdaughter of David Rose of the St. Louis County Police Department. Lauren plans to go to medical school to pursue a career in the medical field.

"As a child, having both of my parents work in the medical field impacted what I wanted to be when I grew up," said Lauren. "Combining my love for community service projects with my passion for the medical field solidified my goal to someday become a physician. I have dedicated a large portion of my life so far to reaching that goal and will continue working toward it."

"The opportunity to improve the well-being of others and the ability to make a difference in someone's life is what makes the thought of being a doctor so exciting to me and it's what drives me to want to reach my full potential in this field," she continued.

Lauren was the science student of the month, math student of the month, and a member of the National Honor Society and the Student Council at her high school. The school's principal selected Lauren as the Renaissance Gold Standard Award student for 2017. That award is given by a school staff member to one student each year who excels in academics and excellence in character.

In pursuit of her medical dream, Lauren also "shadowed" pediatrician Dr. Christy Hrach at BJC St. Louis Children's Hospital, Emergency Department physician Dr. Tammy Martin at Mercy Hospital St. Louis, an Emergency Department nurse at St. Luke's Hospital, and radiologists and MRI technicians at the Radiology Department of Barnes Jewish-West County Hospital. Lauren also took part in Adventures in Medical and Surgical Procedures at St. Louis University where participants held discussions and hands-on simulations on a variety of medical topics and procedures.

"Lauren possesses a strong work ethic that maximizes her natural abilities," said Andrew Ribbing, science teacher at Eureka High School. "Her desire to succeed and surpass

expectations is unmatched. Lauren immediately gains the respect of those she meets by the way she conducts herself."

The CVSA College Scholarship Award Program is dedicated to Gary E. Curtis. While working for the Virginia State Police, Curtis was an active member of CVSA and a cornerstone in the development of the roadside North American Standard Inspection Program. He came to CVSA in 1992, faithfully serving as the Alliance's director of technical services. His efforts and contributions helped form the solid base upon which CVSA now proudly stands. Curtis lost his life to cancer in December 1998.

All recipients have been notified of their selection as award winners. CVSA was able to award the scholarships thanks, in part, to a generous donation by Smart Safety Services LLC, a family-owned safety consulting firm specializing in U.S. Department of Transportation and Occupational Safety and Health Administration regulations pertaining to the trucking industry.

Information about the 2019 scholarship program will be announced in early 2019. ■

Purchase CVSA's New Out-of-Service Criteria App



The April 1, 2018, North American Standard Out-of-Service Criteria (OOSC) Handbook and Pictorial is now available for purchase as a downloadable app onto your smart device.

You'll have access via your smart phone or tablet to all of the same information that's currently in the 233-page print version of the handbook, along with other helpful and important resources for commercial motor vehicle law enforcement and the motor carrier industry, such as inspection bulletins, pictorials, the learning management system for online training, inspection procedures, operational policies, inspection and educational videos, brochures and webinars.

The app is available for \$49.99 USD (\$69.99 CAD, \$949 MXN).

To download the April 1, 2018, North American Standard Out-of-Service Criteria, search for "CVSA" or "OOSC" in the Apple or Android store.

If you have any questions, contact us at appinfo@cvsa.org. ■

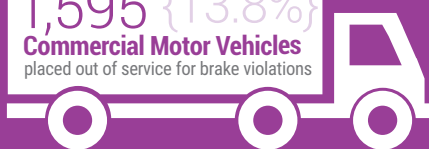
Nearly 1,600 Commercial Motor Vehicles with Critical Brake Violations Were Removed from Roadways During CVSA's Unannounced Brake Safety Day

RESULTS RECAP

11,531

TOTAL INSPECTIONS

1,595 {13.8%}
Commercial Motor Vehicles
placed out of service for brake violations



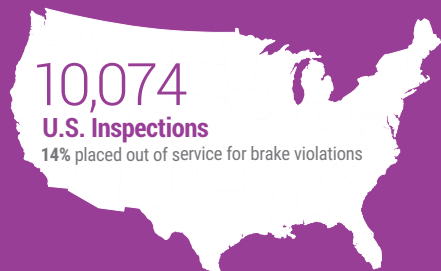
1,457
Canadian
Inspections

12.4% placed out of service
for brake violations



10,074
U.S. Inspections

14% placed out of service for brake violations



86.2%

Did not have any
critical violations



Fifty-two U.S. and Canadian jurisdictions conducted 11,531 roadside inspections on commercial motor vehicles and removed 1,595 vehicles with brake violations from our roadways on April 25, 2018, as part of CVSA's unannounced Brake Safety Day enforcement initiative.

Brake Safety Day inspection data from Canada and the U.S. featured the following notable results:

- A total of 11,531 inspections were conducted for Brake Safety Day.
- In all, 1,595 commercial motor vehicles were placed out of service for brake violations. That's 13.8 percent of the total number of vehicles inspected.
- A total of 52 jurisdictions participated – 41 U.S. states and 11 Canadian provinces/territories.
- The U.S. conducted 10,074 commercial motor vehicle inspections; Canada conducted 1,457.
- In the U.S., 14 percent of commercial motor vehicles were placed out of service for brake violations.
- In Canada, 12.4 percent of commercial motor vehicles were placed out of service for brake violations.
- 86.2 percent of the total number of commercial motor vehicles inspected did not have any critical brake-related vehicle violations.

Many participating jurisdictions surveyed anti-lock braking system (ABS) compliance, as follows:

- 8,128 air-braked trucks and tractors were identified as requiring ABS; 10.2 percent had ABS violations.
- 5,331 trailers were identified as requiring ABS; 14.3 percent had ABS violations.
- 1,299 hydraulic-braked trucks required ABS; 3.5 percent had ABS violations.
- 95 buses required ABS; 2.1 percent had ABS violations.

CVSA holds brake-focused enforcement events throughout the year to identify and remove commercial motor vehicles with dangerous brake issues from our roadways in an effort to reduce the number of crashes caused by or made more severe by deficient braking system performance.

"Inspecting, identifying and removing commercial motor vehicles with brake violations from our roadways is critical to the safety of the traveling public," said CVSA President Capt. Christopher Turner with the Kansas Highway Patrol. "Brake systems that are improperly installed, neglected or poorly maintained reduce braking efficiency and increase stopping distances of trucks and buses, posing a serious transportation safety risk."

According to the U.S. Department of Transportation's Federal Motor Carrier Safety Administration (FMCSA) Large Truck Crash Causation Study, large trucks involved in a crash where the braking capacity of the truck was critical were 50 percent more likely to have a brake violation than were trucks involved in crashes where the truck's braking capacity was not critical. Of the trucks involved in brake-critical crashes, 45.5 percent had brake violations, compared with 29.9 percent of trucks involved in crashes of the same type but where their braking was not relevant.

Brake Safety Day also aims to improve commercial motor vehicle brake safety awareness throughout North America. An important component of the safety initiative involves educating drivers, mechanics, owner-operators and others on the importance of proper brake inspection, maintenance and operation.

Brake Safety Day and other brake-related enforcement, education and awareness initiatives are part of the Operation Airbrake Program sponsored by CVSA in partnership with the Canadian Council of Motor Transport Administrators and FMCSA.

CVSA held another brake safety enforcement event, Brake Safety Week, Sept. 16-22, 2018. The week is an annual outreach and enforcement campaign designed to improve commercial motor vehicle brake safety.

CVSA also held a two-day Brake Safety Symposium in Schaumburg, Illinois, May 15-16, 2018. The symposium provided information, education and training related to commercial motor vehicle brake technologies, regulations, inspection procedures, tools and maintenance. Read more about the symposium on pages 20-25. ■

CVSA Accepting Nominations for 2019 International Driver Excellence Award



CVSA is accepting applications for its 2019 International Driver Excellence Award (IDEA), an award that recognizes the extraordinary careers of professional commercial motor vehicle drivers and their commitment to public safety.

The award acknowledges individuals who go above and beyond the performance of their duties as a professional truck or bus driver, distinguishing themselves conspicuously and beyond the call of duty through the achievement of safe operation and compliance for an extended period of time.

The 2019 IDEA winner will receive:

- A check for \$2,500
- A crystal trophy
- Airfare for the winner and one guest to St. Louis, Missouri, to receive his/her award
- Two-night hotel stay at the Hyatt Regency St. Louis at The Arch

Nominees must have:

- At least 25 cumulative years of crash-free driving in a commercial motor vehicle with a clean driving record for the past three years
- No felony convictions
- No safety-related driving suspensions in the past three years
- No driver violations in the past three years, excluding form and manner violations

CVSA is accepting nominations through Dec. 14, 2018. Complete nomination packets must be received in full by the deadline.

The winner will be announced in March 2019, and presented with his/her award on April 1, 2019, during the general session at the CVSA Workshop in St. Louis, Missouri.

For more information and to download the nomination form, visit www.cvsa.org/program/programs/idea. ■



Ross Reynolds of Con-way Freight set a high standard as CVSA's first annual International Driver Excellence Award Winner in 2015.



Schneider's Bob Wyatt was CVSA's 2016 IDEA winner.



Charles Endorf of Werner Enterprises was the winner of the 2017 International Driver Excellence Award.



On April 9, 2018, Holland's Herschel Evans was presented with a crystal trophy and a check for \$2,500.

Sponsor 2019 IDEA

The annual \$10,000 sponsorship of CVSA's 2019 International Driver Excellence Award, entitles one sponsor to specific, exclusive benefits associated with that program:

- Company logo in the 2019 CVSA Workshop on-site program book
- Company logo and a website link in the IDEA section of the CVSA website
- Company logo on the giant check presented to the winner
- Two-minute speaking portion of the general session to assist with presenting the winner with his/her award
- Company logo on the CVSA Workshop sponsor page with a link to company website
- Logo featured on signage at the CVSA Workshop registration area
- Company name included in the sponsor scroll at the beginning of the CVSA Workshop general session
- Sponsor ribbon on the badge of any company representatives in attendance at the CVSA Workshop

As the IDEA sponsor, at minimum, your sponsorship would make your company a "Platinum" sponsor, which entitles your company to a number of additional benefits associated with platinum-level sponsorship. If you're already a CVSA sponsor, the IDEA sponsorship will be applied to your overall sponsorship level, entitling you to receive the benefits associated with the designated sponsorship level of platinum, diamond, premier or elite.

Visit www.cvsa.org/program/programs/idea/idea-sponsorship to learn more about sponsorship. ■

CVSA's First Set of Industry Roadside Inspection Courses a Success; More Courses Planned

By **Kerri Wirachowsky**, *Director of Roadside Inspection Program, Commercial Vehicle Safety Alliance*

In my previous position with the Ontario government and when I was also the chairperson of the CVSA Vehicle Committee, I was asked numerous times if there was a course available for industry representatives to attend. Our industry partners wanted to better understand the regulations and out-of-service criteria to be better prepared and in compliance during roadside inspections.

During discussions with the CVSA Vehicle Committee, industry members on the Technology Maintenance Council and other industry contacts, it was evident that there was a need to educate industry on the requirements for operating and driving commercial motor vehicles. CVSA has always strived for uniformity and lowering the out-of-service rate to bring motor carriers into compliance. But the only way we were achieving that was through the education of inspectors and enforcement at the roadside. We knew that we needed to proactively extend that knowledge to drivers, motor carriers, safety managers/directors, mechanics, etc.

After I joined CVSA in 2017 as the director of the roadside inspection program, the requests for an industry course continued to grow. With the support of the CVSA Board of Directors, I was tasked with developing a CVSA industry course.

To become certified to conduct Level I Inspections, CVSA inspectors are required to complete both the North American Standard Part A (Driver) and Part B (Vehicle) Roadside Inspection Courses, along with conducting 32 inspections with a certified inspector. However, with industry, the course we offered was educational and knowledge-based; not for certification purposes. Consequently, we added information that was pertinent specifically to industry and offered two distinct courses – one on driver requirements, the other on vehicle requirements.

Knowledgeable and Competent Instructors

Knowing the vast amount of information that is in both courses, it was necessary to find knowledgeable and competent instructors to assist with the delivery of the content. I cannot thank Dick Morrison and Joe Bowling enough for all they did to assist with the development and preparation of the materials for the courses. Based on what I observed and the feedback I received during and after the course, the right decision was made in selecting them to assist in delivering both courses.

The Perfect Location

I admit that finding the venue for this first course was not difficult at all. As talk spread about the new industry course, I was quickly approached by CVSA Associate Member Committee Vice President Dave Schofield, DOT safety specialist, from Staker Parson. Dave indicated that he would be interested in hosting the courses in Salt Lake City, Utah, at the Utah Trucking Association (UTA). So, sight unseen, I put my faith in Dave and off to Salt Lake City we went. My gratitude goes out to Terry Smith with the UTA. He and the association could not have been more accommodating. The facility was perfect, the classroom was equipped with everything we needed, and the parking lot allowed us to bring in vehicles for the hands-on, practical part of the Vehicle Requirements Course.



Driver Requirements Course

On June 11, 2018, the first Driver Requirements Course began with 27 registered attendees. I was excited and eager (and maybe a little nervous) to see how it was all going to work out. The attendees came from all aspects of the industry ranging from safety managers to ELD vendors, as well as drivers from the U.S. and Canada.

This course included information on driver-related regulatory requirements and out-of-service conditions, regulatory definitions, intrastate vs. interstate operations, commercial driver's license and driver qualification requirements, hazardous materials, hours-of-service rules, annual inspections and the differences in Canada for the cross-border carriers. Information on how to properly file a DataQ was added to this course for industry as well.

Before the Driver Requirements Course had even concluded, five attendees who were not registered for the Vehicle Requirements Course promptly asked if they could register for that course as well. That spoke volumes on how well the week had gone.

At the end of the Driver Requirements Course, attendees were given an exam, which benefitted them in measuring their retention of what they had been taught. Several attendees contacted me after the course to discuss questions regarding the exam. This demonstrated their dedication to learning and understanding the content.

» "Excellent course. As a person that works with the safety regulations daily, I was unsure what the course had to offer me. However, learning how officers conduct the inspection and the procedures they follow, what specifically the officers are looking for in terms of compliance, and how they investigate the driver and carrier during the inspection was invaluable."

— Driver Requirements Course Attendee



The first Driver Requirements Course offered exclusively to members of industry took place June 11-15, 2018, in Salt Lake City, Utah.



Students were given an exam to help them measure and assess their retention of the course information.



On July 16-20, 2018, CVSA offered its first Vehicle Requirements Course to industry members.



Staker Parson and FedEx Freight donated use of their vehicles for the Vehicle Requirements Course.

» "Thank you for making this class happen for us. By teaching us mostly the same way you would inspectors, you allow us to take CVSA's culture and the mission of the enforcement inspectors back to our organizations."

— Vehicle Requirements Course Attendee

Vehicle Requirements Course

On July 16, 2018, we returned to the UTA in Salt Lake City for another week with 37 people in attendance for the Vehicle Requirements Course. Approximately one-third of the class had attended the Driver Requirements Course in June; the rest were new attendees. Participants in this class included technicians, drivers, fleet supervisors, inspection equipment suppliers and safety managers.

This course thoroughly explained regulations, the out-of-service criteria and the North American Level I Inspection Procedure as it relates to the vehicle components of a commercial motor vehicle. This course also included information on regulatory requirements of 49 CFR 393, 396 and Appendix G.

Staker Parson and FedEx Freight supplied the vehicles for the course and with that we were off and running for another week. With the number of people in the class and this being the first Vehicle Requirements Course (knowing the amount of content there was to cover), I was excited and nervous all at the same time. The class was great, and I was pleasantly surprised with the dedication of time and effort made by each person in attendance. The amount of content in this course can be overwhelming, but we did manage to get out under the vehicles a few times and some participants stayed late on Friday to go through a Level I Inspection on the tractor-trailer combination.

Thank You to the Sponsors

I want to thank Staker Parson and FedEx Freight for the donation of the vehicles for the Vehicle Requirements Course. Thanks again to

Staker Parson for sponsoring the lunches and breaks and Tim Cheever from Davey Tree for bringing in Friday brunch during both courses.



STAKER PARSON
MATERIALS & CONSTRUCTION
A DAVEY COMPANY



Special thanks to Terry Smith from UTA for making sure the cooler always had cold beverages every day, for the use of such a great facility and for exceptional hospitality. Nothing went unnoticed and the bar has been set very high for future courses.

Thank You to the Students

Both courses were a full five days and words do not describe what a pleasure it was instructing and interacting with the two groups of students. The level of interest, questions and dedication to learning was not only impressive, but also a bit surprising, as I realize that these participants have important jobs that they pulled themselves away from to attend.

Future Courses

One more Driver Requirements Course is scheduled before the end of 2018. It'll take place in Conley, Georgia, Oct. 22-26. Another Driver Requirements Course and two Vehicle Requirements Courses will take place in 2019.

Visit www.cvsa.org/trainingpage/training to register for the October training course. Future training courses will be posted as soon as the dates and locations have been finalized.

If you have any questions regarding training, contact CVSA Director of Roadside Inspection Program Kerri Wirachowsky at 301-830-6153 or kerriw@cvsa.org. ■

» "I've rarely found a course that offered so much information that applies directly to my daily job. Both the Driver and Vehicle Requirements Course offered information that applies to driver qualification, equipment, annual inspections and roadside inspections. The instructors did a great job of showing how the information applies to our daily responsibilities. I strongly recommend the two-part course to veterans of the trucking industry and particularly those just starting their career in transportation. Certainly, this is the best course I've attended in my 30 plus years of trucking. I wish I would have had this opportunity when I started in the transportation industry."

— Driver and Vehicle Requirements Course Attendee

2018 International Roadcheck Throughout North America

Nevada Highway Patrol Participates in International Roadcheck

This year's 72-hour International Roadcheck event for Nevada was held in the city of Elko. Eastbound and westbound check sites were fully operational for the entire 72-hour duration. This event resulted in the inspection of hundreds of commercial motor vehicles traveling the I-80 corridor. Nevada Highway Patrol inspectors identified a variety of violations ranging from hours-of-service violations to out-of-service vehicle violations. Local news reporters from The Elko Daily Free Press were invited to attend the event. The region's public information officer provided event details and the public safety goal of informing and educating the motoring public. ■



Inspectors identify an axle grease leak that could compromise a truck's brakes.



Nevada Highway Patrol Sgt. James Madsen jots down notes during a truck inspection at a commercial vehicle checkpoint near Osino on June 5.



Travis Perkins, a Nevada Highway Patrol commercial motor vehicle inspector, rolls under a truck.



Inspectors check for adequate tie-downs at the Nevada Highway Patrol's checkpoint.



The Nevada Highway Patrol also participated in the **Check Your Load Day**, which was held on June 6, 2018. On that day, two Nevada Highway Patrol troopers assigned to the event encountered an unsafe commercial motor vehicle that spilled its gravel load on a portion of I-80. This involved the same driver on two separate incidents. ■



This sign signals commercial motor vehicle drivers to pull off at the Nevada Highway Patrol's checkpoint near Osino.

Photos by Heather Featherson, Elko Daily Free Press.

Georgia and South Carolina Kick Off International Roadcheck Together



Representatives from the Georgia Department of Public Safety's Motor Carrier Compliance Division, South Carolina State Transport Police, Federal Motor Carrier Safety Administration (South Carolina and Georgia divisions), the South Carolina Trucking Association and the Georgia Motor Trucking Association participated in the kickoff of 2018 International Roadcheck at the Columbia County, Georgia, inspection station on I-20 East near the Georgia/South Carolina border. ■



Representatives from the South Carolina Trucking Association and the Georgia Motor Trucking Association.



At the kickoff of 2018 International Roadcheck, Maj. Johnny Jones of Georgia Department of Public Safety's Motor Carrier Compliance Division and Col. Leroy Taylor of the South Carolina State Transport Police demonstrate a strong highway safety partnership between Georgia and South Carolina with a firm handshake at the Columbia County, Georgia, inspection station on I-20 East.



Pictured left to right: Ofc. Tillman (South Carolina State Transport Police), Ofc. Calloway (Georgia Department of Public Safety) and Ofc. Chan (South Carolina State Transport Police).

Hawaii's International Roadcheck



Hawaii inspectors conduct commercial motor vehicle inspections on the Leeward Coast of Oahu as part of 2018 International Roadcheck.

Pictured left to right: David Ayau and Clifford Ballesteros, Brett Wong, Santiago Jumawan and Angelica Keomaka.



Pictured left to right, kneeling: Gene Gabriel, Sean Prendergast, Angelica Keomaka, Clifford Ballesteros. **Standing:** Marshall Villegas, Lupe Manupule, Santiago Jumawan. Top: Brett Tominaga, Aaron Kalaukoa, David Ayau, Brett Wong.



Pictured left to right: Brett Tominaga, Santiago Jumawan and Marshall Villegas.



Pictured: Gene Gabriel.

More than 360 CMVs Inspected During Nova Scotia's International Roadcheck



Nova Scotia's 2018 International Roadcheck was conducted at Amherst Incoming Compliance Station.

"The weather was less than favorable for the first half of the check, with a cold drizzle cast over the area," said Raymond Beaton, director of TIR/vehicle transportation inspection. "The Nova Scotia inspectors showed their fortitude and dedication to road safety as our inspection numbers were comparable to last year, which was our most productive year to date."

Results from 2018 International Roadcheck:

- 368 commercial units were inspected.
- 64 (17.39 percent) were placed out of service.
- 53 (14.40 percent) vehicles were placed out of service.
- 11 (2.99 percent) drivers were placed out of service.

"Last year, we had a record year of inspections done," said Beaton. "We had one more inspector than we did this year and there was near perfect weather – one cloudy day +13 degrees, two sunny days with +18 degrees."

Results from 2017 International Roadcheck:

- 375 commercial units were inspected.
- 64 were placed out of service; that's 17.07 percent.

"Our inspectors take pride in the work they conduct on behalf of our province and the CVSA program," said Beaton. ■



These drone photos were taken on June 7, 2018, by Vincent Wood of the Fuel and Tobacco Division.

CVSA Announces the Winners of the 2018 North American Inspectors Championship



Jeremy Usener with the Texas Department of Public Safety is the 2018 NAIC Grand Champion.

On Aug. 18, 2018, after two days of tough competition in six North American Standard Inspection categories, Jeremy Usener of the Texas Department of Public Safety was presented with the Jimmy K. Ammons Grand Champion Award at the first-ever joint awards ceremony of the Commercial Vehicle Safety Alliance's (CVSA) North American Inspectors Championship (NAIC) and the American Trucking Associations' (ATA) National Truck Driving Championships (NTDC).

Fifty-two commercial motor vehicle inspectors representing jurisdictions throughout North America gathered in Columbus, Ohio, Aug. 14-18, 2018, to compete at NAIC, the only event dedicated to testing, recognizing and awarding commercial motor vehicle inspector excellence. All of the inspection categories are timed events and the compilation of scores for those categories result in a Grand Champion, which is the highest honor for commercial motor vehicle roadside inspectors.

An award is given to each inspector who scores the most points representing each of the three participating countries: Canada, Mexico and the United States. The following High Points Awards were presented during this year's NAIC:

- **Sean McAlister High Points Canada Award**
Samantha Sarasin
Ontario Ministry of Transportation
- **High Points Mexico Award**
Luis León Merino Gómez
Secretaría de Comunicaciones y Transportes (SCT)
- **High Points United States Award**
Jeremy Usener
Texas Department of Public Safety

Awards are given for first, second and third place for the following inspection categories:

The North American Standard Hazardous Materials/Dangerous Goods and Cargo Tank/Bulk Packagings Inspection includes additional inspection steps related to identifying hazardous materials/dangerous goods and markings, labeling, placarding, packaging, identification, etc.

- **First Place** Jeremy Usener
Texas Department of Public Safety
- **Second Place** Samantha Sarasin
Ontario Ministry of Transportation
- **Third Place** Aaron Azbill
Arizona Department of Public Safety

The North American Standard Level V Passenger Carrier Vehicle Inspection is an inspection of motorcoaches and other passenger-carrying vehicles. Passenger vehicle certified inspectors are specially trained commercial motor vehicle enforcement personnel equipped to inspect both the motorcoach and driver, while also taking responsibility for the safety of passengers.

- **First Place** Roberto Pinedo
Utah Department of Transportation
- **Second Place** Trevor Todd
British Columbia Ministry of Transportation and Infrastructure
- **Third Place** Jeremy Usener
Texas Department of Public Safety

The North American Standard Level I Inspection is the most commonly performed inspection. It is a 37-step procedure that includes an examination of driver operating requirements and vehicle mechanical fitness.

- **First Place** Aaron Azbill
Arizona Department of Public Safety
- **Second Place** Trevor Snoddon
Alberta Justice Solicitor General
- **Third Place** Roberto Pinedo
Utah Department of Transportation

The Team Award is given to the team with the highest combined score. The team with the highest score this year was the **Yellow Team**. The Yellow Team had the following members:

- Trevor Todd
British Columbia Ministry of Transportation and Infrastructure
- Jason Gregory
Missouri State Highway Patrol
- Kris Hunzeker
Nebraska State Patrol
- Daniel Jacquez
New Mexico Department of Public Safety
- Brian Wilson
Ohio State Highway Patrol
- Jeremy Usener
Texas Department of Public Safety
- Roberto Pinedo
Utah Department of Transportation
- Matthew Nesto
Vermont Department of Motor Vehicles
- Maxwell McGuire
Washington State Patrol



The Yellow Team had the highest combined score.



Level V Passenger Carrier Vehicle Inspection category winners, from left to right: Trevor Todd, British Columbia; Roberto Pinedo, Utah; Jeremy Usener, Texas.



Country High Points Award winners, from left to right: Samantha Sarasin for Canada; Jeremy Usener for the U.S. and Luis León Merino Gómez for Mexico.



HM/DG and Cargo Tank/Bulk Packagings Inspection category winners, from left to right: Samantha Sarasin, Ontario; Jeremy Usener, Texas; Aaron Azbill, Arizona.



NAIC Level I Inspection category winners, from left to right: Trevor Snoddon, Alberta; Aaron Azbill, Arizona; Roberto Pinedo, Utah.



ATA's and CVSA's Grand Champions: Scott Woodrome (left) of FedEx Freight and Jeremy Usener (right) of the Texas Department of Public Safety.

Matt Johnson from Illinois received the John Youngblood Award of Excellence.



A special award, the John Youngblood Award of Excellence, is an honor NAIC contestants bestow upon a fellow NAIC inspector who exemplifies the high standards and unwavering dedication to the profession. **This year, NAIC contestants voted to present the John Youngblood Award of Excellence to Matt Johnson from the Illinois State Police.**

Each year, since NAIC's start in 1998, the championship has been co-located with ATA's National Truck Driving Championships. However, this year was the first year that a joint awards ceremony was held to announce the driver winners for NTDC and the inspector winners from NAIC.

"CVSA and ATA worked together to make the joint awards ceremony a reality," said CVSA President Capt. Christopher Turner with the Kansas Highway Patrol. "This is the first time in NAIC's 26-year history that we've had a combined awards ceremony with our ATA partners. Based on its success this year, we hope to continue this unified CVSA/ATA awards ceremony well into the future."

NAIC was created to recognize inspectors and officers – the backbone of the commercial vehicle safety program in North America – and to promote uniformity of inspections through training and education.

Next year's NAIC is scheduled for Aug. 13-17, 2019, in Pittsburgh, Pennsylvania. ■

2018 NAIC Photo Album





The Value of COHMED

By **Bill Reese**, *Director of COHMED Program, Commercial Vehicle Safety Alliance*

Many people don't know what COHMED stands for. It's Cooperative Hazardous Materials Enforcement Development. CVSA took over COHMED in 2003 and we rarely mention the entire title. Through the COHMED program, enforcement, regulators, industry and government work together to improve hazardous materials enforcement and safety. The annual COHMED Conference gives attendees an opportunity to learn about advanced hazardous materials topics but, more importantly, it gives them the opportunity to meet other subject matter experts and develop relationships. The contacts made and relationships developed at the COHMED Conference often help us get our jobs done when we need help and we know who to call, because we met them at COHMED. I've also made lifetime friends at the COHMED Conference. A recent trip reminded me of the value of COHMED.

On June 28, my wife and I traveled to Albany, New York, to attend a retirement party for New York State Police Sgt. Tom Fuller. I first met Tom at a COHMED Conference in 2005. Tom and I had the opportunity to serve together in many leadership capacities at CVSA but it all started at COHMED in 2005. We both eventually served as the COHMED Program chair.

We were joined in Albany by Tom Snyder and his wife Jane. Tom works for Austin Powder Company, a CVSA Class III Associate Member, and is retired from the Indiana State Police. I met Tom after he retired. He was attending the COHMED Conference on behalf of Austin Powder.

Over the years, the three of us became good friends and spent a lot of evenings together at COHMED Conferences and other CVSA events. We also talked and emailed often. We helped each other with hazmat questions and problems. We also used Tom Snyder's expertise on explosives and he taught courses at several COHMED Conferences.

Following Sgt. Fuller's retirement, the three of us and our spouses spent two days in New York City. One of the places we visited was the 9/11 Memorial. This was the first visit back to the site for Sgt. Fuller since the events of that tragic day and the aftermath. He was patrolling in Queens when the first plane hit the North Tower of the World Trade Center. He responded to the scene and arrived to witness the North Tower collapse. Following the events on 9/11, Sgt. Fuller spent more than a month working around ground zero. To say the memorial is sobering doesn't do it justice. I can't come up with words to adequately describe it. I'd be lying if I didn't



Picture taken in Times Square. Pictured left to right: Tom Snyder, Austin Powder Company; NYPD Officer; Retired Sgt. Tom Fuller, New York State Police; and CVSA Director of COHMED Program Bill Reese.

admit I wiped away more than a few tears as I walked through the memorial.

Emergency responders at ground zero needed a lot of equipment to support their rescue and recovery efforts. Their needs included compressed gases to run cutting torches as well as gases needed to run other equipment. One of the companies tasked with delivering these gases was Praxair Inc., another CVSA Class III Associate Member. However, their trucks got stopped at roadblocks and couldn't get through. Dave Sonneman from Praxair knew the trucks were needed at ground zero, so he called Sgt. Eric Adair with the New York State Police. Dave and Sgt. Adair knew each other because they both attended COHMED Conferences. Sgt. Adair immediately made the necessary calls and had the trucks escorted to ground zero. This was all possible because of a relationship started at a COHMED Conference.

9/11 changed our country and it changed us as individuals. For those of us in law enforcement, regardless of where we lived, it had a profound effect on our careers at the time and forever in the future. It also had a significant effect on the hazardous materials transportation industry.

Since 9/11, there have been many classes taught at COHMED Conferences on topics related to regulatory changes made due to this one event. These changes have had a significant effect on enforcement and industry.

COHMED has made a significant difference for me, both professionally and personally. When I attended my first COHMED Conference, the last thing on my mind was eventually working for

CVSA and running the COHMED program. My leadership opportunities at CVSA started with the COHMED program. I've made many friends and have great working relationships with many people I met at COHMED Conferences. Together, we do make a difference. Our country and communities are safer because we work together to improve hazardous materials transportation.

A wise sergeant once told me to take advantage of every opportunity that came my way. I've always tried to heed that advice. Attending the COHMED Conference and getting involved in leadership has had a positive cascading effect on my career. Yet, the most important thing the COHMED program has given is lifelong friendships, friendships that have benefited everyone involved in COHMED.

I dedicate this article to the 412 emergency responders who died on 9/11 and to Sgt. Fuller and the many other emergency responders who dealt with the aftermath at ground zero, some of whom have since died from 9/11-related diseases and are often forgotten. Thank you all for your selfless service. May we never forget. ■



Plaque on the wall at the 9/11 memorial.



THE LEGISLATIVE AND REGULATORY RUNDOWN

By **Adrienne Gildea**, Deputy Executive Director, Commercial Vehicle Safety Alliance

As stakeholders and Congress begin preparations for the next highway bill, one issue will take center stage in those discussions – how to fund the dwindling Highway Trust, which derives most of its revenue from motor vehicle fuel taxes, as well as a smattering of other taxes and user fees. Those revenues are used to fund infrastructure investment, as well as critical transportation safety programs, like the Motor Carrier Safety Assistance Program.

For more than a decade now, policymakers have known that the current combination of revenue sources would not sustain the nation's transportation investment needs long term. In the most recent highway bills, Congress has been able to keep the fund afloat using small pay-fors and offsets and other accounting mechanisms. The list of available small fixes is growing short, however, and members will be faced once again with the challenge of providing for our nation's critical transportation programs when they reauthorize the Fixing America's Surface Transportation Act.

To help with this discussion, in July, Congressman Bill Shuster (R-PA), chairman of the Transportation and Infrastructure Committee in the House of Representatives, released his vision for overhauling how the United States will pay for transportation projects in the future. The proposal includes legislative language, as well as a section-by-section discussion draft.

In it, Congressman Shuster lays out how to provide long-term stability to the Highway Trust Fund. In the short term, he proposes a series of increases to fees and taxes to shore up the fund. Most notably, the plan calls for a phased-in increase to gasoline and diesel fuels, eventually tying the taxes to inflation. The proposal also attempts to bring in revenues from other user groups that benefit from the Highway Trust Fund but may not be contributing directly, including new taxes on electric vehicle batteries and bicycle tires. These increases and new fees are all meant to

be a short-term fix, as the proposal also establishes a new commission tasked with making recommendations to Congress on how to provide long-term stability for the Highway Trust Fund. Congressman Shuster's plan also includes a national, volunteer-based pilot program to explore whether or not a mileage-based user fee could replace the current fuel tax model.

It's a bold proposal that lays out one possible path to long-term transportation funding. Unfortunately, however, it's unclear how much real consideration the chairman's plan will get. Congressman Shuster has already announced that he will not be seeking reelection this year, so the task of moving this initiative forward would fall on the next chairman of the committee, and the two core components – an increase in fuel taxes and a move to a mileage-based system – have both faced harsh criticism from both sides of the aisle in the past.

In addition to a change in committee leadership, the fall midterm elections will likely have an impact on the discussions leading up to reauthorization. Any change in party control in either the House or Senate would also influence the tone and direction of those discussions. And even if the Republicans retain control of both chambers, there will inevitably be change in committee and subcommittee leadership in the next Congress and new leaders will bring in new staff, perspectives and priorities. Luckily, commercial motor vehicle safety and enforcement is a bipartisan issue and CVSA looks forward to continuing our work with members of both parties in the House and Senate on commercial motor vehicle related issues.

One issue that CVSA will be focusing on in the coming months is the growing backlog of regulatory action at the U.S. Department of Transportation. Regulatory activity is the core responsibility of the Federal Motor Carrier Safety Administration (FMCSA) and actions on petitions and necessary rulemakings have

slowed considerably. It is critical to both the enforcement community and the motor carrier industry that federal safety regulations are clear, effective and enforceable. No matter where you stand on the role of government in regulation, we should all be able to agree that maintaining the regulations, keeping them current and clear, is a necessary and important function.

Because the agency cannot move forward with rulemaking, it has come to rely heavily on interpretations, personalized letters, electronic communications, enforcement guidance, frequently asked questions and other means to provide enforcement and industry with the clarity they need when an issue arises, with the expectation that the regulations will be updated at some point in the near future. Often, however, that update never takes place and the end result is confusion, causing inconsistencies in enforcement, which in turn leads to unnecessary conflict between enforcement and industry.

This is not meant as a criticism of the hard-working people at FMCSA. We understand they face a number of challenges, both internal and external. A new administration means turnover and new leadership and often a shift in priorities, as well as a pause in regulatory work as people get up to speed. Also, implementation of the electronic logging device (ELD) rule has been FMCSA's top priority, but the agency has been plagued by frivolous challenges and meritless exemption requests. In addition, the agency is currently tasked with preparing for the implementation of automated commercial motor vehicles – no small task. CVSA will be working with FMCSA and Congress to make sure the agency has the necessary resources, technical staff, authority and time to meet its core responsibility – maintaining the federal motor carrier safety regulations. ■

FLETA Board Grants Accreditation to FMCSA's HM Course

By **Benjamin Werner**, Accreditation Manager, National Training Center, Federal Motor Carrier Safety Administration, U.S. Department of Transportation

On April 19, 2018, the Federal Law Enforcement Training Accreditation (FLETA) Board granted accreditation status to the Federal Motor Carrier Safety Administration's (FMCSA) General Hazardous Materials (GHM) Course. The board meeting was held on the Federal Law Enforcement Training Center campus in Glynco, Georgia.

The purpose of the GHM training is to provide instruction on the laws and organizations responsible for the regulation of the transportation of hazardous materials (HM). The course is designed to train personnel to inspect HM shipments for compliance with Hazardous Materials Regulations. Upon completion of the course, graduates understand the operational use of the Hazardous Materials Table, as well as shipping documents and placarding requirements. The program consists of 40 hours of instruction.

The FLETA Board is the accrediting body for all federal law enforcement training and support programs. To achieve accreditation, agencies submit to an independent review of their academy and/or program to ensure compliance with the FLETA standards and procedures in the areas of:

- program administration
- training staff
- training development
- training delivery
- distance learning

Accreditation is a cyclical process occurring every five years. Annually, agencies must also submit reports in preparation for re-accreditation, which is a new and independent review of the academy/program.

FLETA accreditation enhances public confidence in integrity, professionalism and accountability; provides assurance that an academy or program has voluntarily submitted to a self-regulation process; and demonstrates compliance with a set of standards established by the law enforcement community. There are many lasting benefits to FLETA accreditation that include, but are not limited to, improved training quality, standardization of training and legal defensibility. In addition to FMCSA, FLETA has granted accreditation to entities including the Federal Bureau of Investigation, the U.S. Department of Veterans Affairs, the U.S. Department of Homeland Security and many others.

This is the second program for which the National Training Center (NTC) has received FLETA accreditation. FMCSA's Drug Interdiction Assistance Program has been accredited since 2011.

NTC's long-term goal is to receive accreditation for its entire training center to include its Academy and North American Standard Part A and Part B Courses.

The mission of FMCSA is to reduce the number and severity of crashes involving large commercial motor vehicles. The National Training Center supports this mission by developing and administering high-quality motor carrier safety and law enforcement training for participating federal, state and local government officials. The training that NTC provides not only enhances the capabilities of FMCSA and its partners, but ultimately contributes to making our roadways safer.

For more information on NTC programs, visit www.fmcsa.dot.gov/national-training-center or contact NTC via e-mail at NTC-State-Programs@dot.gov. ■

The FLETA Board is the accrediting body for all federal law enforcement training and support programs.



FMCSA's National Training Center team receives the FLETA Board accreditation certificate for its General Hazardous Materials Training Program. Pictured left to right: James Threlfall, Margie McQueen and Ben Werner.

The Power of Partnerships

By **Raymond P. Martinez**, Administrator, Federal Motor Carrier Safety Administration, U.S. Department of Transportation

The primary mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries and fatalities involving large trucks and buses. The 1,100 men and women of FMCSA work every day toward crash-free roadways because safety is our highest priority.

That is our charge from Congress and it is what the public expects from us.

Since beginning my tenure with FMCSA in February, we have engaged with industry and safety partners to help maintain the safest transportation system possible.

We do so in several ways that I am sure are most familiar to you, including data-driven enforcement, research, and supporting technology and innovation. These approaches are critical to our work to help save lives and prevent commercial motor vehicle (CMV) crashes and injuries every day.

While enforcement is an important part of our daily work, it is not all that we do. We have another powerful tool to carry out our safety mission and that is through the power of partnerships. Let me emphasize this point: Partnerships are critical for FMCSA to meet its mission to reduce crashes on our nation's roads. Partnerships help us leverage our reach to educate and inform road users.

Partnerships are not luxuries, but rather serve as a vital way we provide outreach to engage the public. Working in collaboration with our partners helps us meet our mutual safety goals. And when we work in partnership, we can amplify safety messages and extend our reach.

How does this look in action?

One way we work in partnership is with the Motor Carrier Safety Assistance Program (MCSAP) formula grants. These grants establish and maintain CMV safety programs specific to the state. These grants help prevent thousands of CMV crashes and injuries each year and save hundreds of lives on our roadways through vehicle and driver inspections, traffic enforcement, new entrant safety audits and other special initiatives.

The power of partnerships is also demonstrated with work from the Motor Carrier Safety Advisory Committee (MCSAC)

and Medical Review Board (MRB). MCSAC provides advice and recommendations to me on motor carrier safety programs and regulations, while the MRB provides science-based medical expertise on the medical qualification of CMV drivers, reviews and revises medical standards, and interprets medical research. Experts from both MCSAC and the MRB lend their expertise to provide sound advice and recommendations to FMCSA to help advance our safety mission.

We also use partnerships to educate and inform CMV drivers. The Road Safety Children's Art Contest, for example, reminds CMV drivers about safety belt use, as well as encourages its use by all drivers. Using safety belts is one of the most important ways to protect commercial motor vehicle drivers – and it is also among the most cost effective ways we can do so.

And we are seeing results. A record 86 percent of drivers now use safety belts, demonstrating that the majority of CMV drivers understand that using safety belts can save lives.

We also have another campaign that is integral to making our roads safer where the concept of partnership takes center stage.

Our ongoing Our Roads, Our Safety partnership takes a multimodal approach to road safety by encouraging drivers, cyclists and pedestrians to share the road safely with large trucks and buses. We educate road users about blind spots, stopping distances and limited maneuverability of commercial motor vehicles, as well as the importance of careful and attentive driving around work zones.

Improved safety does not happen by accident. It happens because of focus and diligence in creating a culture of safety from drivers and operators.

FMCSA makes safety first in everything we do, but it is a goal we cannot reach alone. The fact of the matter is this: We all have a stake in safety – FMCSA, along with states, industry, drivers, law enforcement and the motoring public.

Harnessing the power of partnerships allows us to continue our work together to advance our shared priorities and meet our shared goal – safer roadways for all who use them. ■



FMCSA Administrator Raymond P. Martinez.

Partnerships are critical for FMCSA to meet its mission to reduce crashes on our nation's roads.

Electronic Image of IRP and IFTA Credentials

By **Jay Sween**, Section Chief, Wisconsin Department of Transportation

Beginning Jan. 1, 2019, motor carriers will have the ability to carry their International Fuel Tax Agreement (IFTA) license and International Registration Plan (IRP) cab card as an electronic image on a computer, tablet or smart phone. Carriers will no longer be obligated to carry a paper IRP cab card or IFTA license in their commercial motor vehicle and all U.S. states and Canadian provinces will be required to accept an electronic image in lieu of the paper copy.

Regardless of the format, the document must be accurate, accessible and readable. Jurisdictions will make certain they have notified their carriers and are requiring vehicles that carry only electronic copies of the credential to store the documents as a PDF, to ensure access to documentation while in areas without cellular service or Wi-Fi.

This change has been a long time coming and discussions of moving to electronic-type credentials have been heavily debated at IFTA and IRP meetings for several years. To determine the viability of a change, an initial pilot program for electronic credentials (eCredentials) went into effect across seven states (Alabama, Illinois, Iowa, Michigan, Minnesota, Wisconsin and Virginia) in early 2016. After one year of the pilot program, it was determined that there were very few hiccups, so a ballot was passed in both IFTA and IRP to bring about the change.

"The transition to electronic credentials has been a smooth and easy process," according

to Jay Starling, director of Alabama's Department of Revenue that oversees their IRP and IFTA programs. "Alabama participated in the eCredential pilot program, so law enforcement is already aware of eCredential requirements. In addition, IRP and IFTA credentials have been provided electronically for several years, so Alabama motor carriers were already accustomed to receiving eCredentials."

Motor carrier industry leaders are heavily in favor of the program due to ease of getting updated credentials directly to drivers all over the country.

"Moving toward an electronic format to provide required documentation for commercial trucking has been a great success for our industry. Our drivers felt a tremendous sense of relief knowing they could provide the best quality and most up-to-date permit information when asked by authorities," stated Christopher Yeh, safety and compliance manager at AIM Companies. Yeh, who was on the ground floor of the pilot project and helped push the concept, has experienced positive time savings at roadside. "During the pilot program, our roadside inspection time has decreased by 15 minutes on average and allowed our drivers to continue their routes with little delay. Efficiency is a vital part of this industry and this program has saved driver on-duty time," said Yeh.

IRP jurisdiction representatives continue to test various other jurisdictions' bar codes on their IRP cab card to ensure that it continues to function as needed by auto-populating law

enforcement systems (such as CVIEW) as well as inspection reports. To date, almost all tests performed have shown positive results and work is being done to correct issues.

While there is an expectation that there will be some pain points associated with the change, the hope is that this effort will provide the opportunity for development of technologies that will ultimately lead to easier and more automated roadside stops.

This current eCredential program is expected to transition to Electronic Verification of Operating Credentials (EVOC), a program that is currently in the initial stages of development. EVOC will move electronic credentials another step forward to the point where vehicles will not need to carry an IRP or IFTA credential. These credentials, it is hoped, will be completely available through a database-type system and roadside screening will become automated through either license plate and DOT readers, or a signal that the vehicle emits through the vehicle itself or an electronic logging device. This type of system should pave the way for a move to a future Level VIII Inspection.

In the coming months, the IFTA and IRP community will continue to provide additional information regarding the electronic credential program. Please stay tuned.

For more information or to provide thoughts or ideas, contact Jay Sween, section chief for the Wisconsin Department of Transportation, at jay.sween@dot.wi.gov or 608-218-0569. ■





NTSB Special Investigation Report Highlights Lack of Driver Oversight as a Key Issue

By Michele Beckjord, Senior Project Manager and Stephanie Shaw, Safety Advocate, National Transportation Safety Board



Final resting position of buses, looking east on Frederick Avenue. The damaged transit bus is shown at the left. The school bus is shown at the right, rotated outward from its striking position. Image source: Maryland Transportation Authority Police.

The National Transportation Safety Board (NTSB) released a special investigation report on two deadly November 2016 school bus crashes. Although various factors played into each of these crashes, one factor common to both was a lack of driver oversight. No one in either of these cases was making sure the drivers were operating their buses safely and were medically fit. As a result, 12 people were killed and 37 were injured.

On Nov. 1, 2016, a Baltimore City school bus struck a private auto and a Maryland Transit Administration (MTA) bus, killing four MTA passengers and both bus drivers. Medical records show the school bus driver had a history of seizures dating back to childhood. Additionally, he had experienced several (documented) incapacitating medical events while on duty as a school bus driver, including three incidents in the previous five years. NTSB determined that the Baltimore school bus driver was likely incapacitated by a seizure due to his long-standing seizure disorder, which resulted in collisions with the car and transit bus.

On Nov. 21, 2016, six students died and more than 20 others were injured in Chattanooga, Tennessee, when a Hamilton County Department of Education (HCDE) school bus, operated by Durham School Services, struck a utility pole, rolled onto its right side and collided with a tree.

The bus, which was carrying 37 students, was traveling 52 mph in a 25-mph zone at the time of the crash. The bus driver was transporting the students from the school to their drop-off locations when he answered a cell phone call. The call was still active when he lost control of the bus and departed the roadway.

We concluded that the Chattanooga school bus driver's speeding, combined with his cell phone use while driving, led to the crash. At the time of the crash, the driver had about five months of school bus driving experience, during which he had accumulated numerous complaints about his driving performance.

So, how did a person with a disqualifying medical condition get qualified and licensed as a school bus driver? And why was a driver with numerous complaints about his performance operating a school bus?

Baltimore, Maryland

Maryland Motor Vehicle Administration (MVA) records showed that the Baltimore school bus driver had repeated license revocations and suspensions over several decades. He provided documents with different name spellings or birth dates to fraudulently obtain his driver's license, circumventing the MVA verification system. We believe he understood his diagnosis of epilepsy and intentionally hid this disqualifying medical condition (and his use of treatment medication) during his commercial driver medical examinations.

Even though Baltimore City Public Schools (BCPS) contracted for transportation services with AA Affordable Transportation LLC who

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hired the driver, BCPS was responsible for driver oversight, but failed to address multiple deficiencies and identify the bus driver as high risk. Similarly, the MVA verification system failed to prevent the Baltimore school bus driver from obtaining a driver's license through fraudulent means. Although the technology was not in place when the Baltimore driver fraudulently obtained his license, the use of facial recognition software (already used within Maryland in an interstate pilot-program) can now be used to prevent this type of licensing fraud.

This crash might also have been prevented had a coworker or BCPS employee reported the driver to the MVA's Medical Advisory Board (MAB). A state MAB evaluates the medical condition and safety of a driver who has been referred to the MVA to determine if that person should continue to hold a license. We concluded that school districts and their contracted student transportation service providers would benefit from awareness training on federal and state commercial driver fitness regulations and on the avenues available for them to report drivers with medical conditions that may make it unsafe to operate a school bus.

In addition to his incapacitation from a seizure as the probable cause of the Baltimore crash, we also determined that the bus driver's continued operation of a school bus with a disqualifying

medical condition and a fraudulently obtained commercial driver's license resulted from inadequate bus driver oversight that allowed a medically unfit driver to drive a commercial vehicle with a medical condition that his employer knew, or should have known, could lead to unsafe school bus operation.

Chattanooga, Tennessee

During the Chattanooga investigation, NTSB investigators found the Durham School Services driver had no record of disciplinary action or corrective training in his file, despite numerous complaints about his behavior. The driver had two crashes in his school bus, repeated instances of tardiness and was documented to have failed to conduct a child-check, all of which were serious safety offenses in the parent company, National Express, employee handbook. Although these actions could result in termination, Durham did not resolve these performance issues and also did not address the driver's accumulated numerous complaints about his speeding.

When Durham was receiving complaints about the driver's unsafe driving behaviors, the driver himself began reporting student disciplinary problems to Hamilton County Department of Education (HCDE) school staff shortly after the beginning of the 2016 school year. He continued

to send disciplinary referrals to school administrators until they told him he shouldn't be submitting so many. About a week later, the HCDE and Durham received the first complaint that the driver was intentionally swerving or braking, trying to make students fall.

After the crash, our investigators found emails and letters from parents and students about the bus driver's performance in the months leading to the crash, which provided insight into how the driver dealt with student behavioral issues during this period. Student passengers who normally rode this bus said that when there was excessive noise or when students refused to sit down, the driver would slam on the brakes or swerve, causing them to fall. Durham did not take any action to relieve the driver of duty, nor were definitive steps taken to resolve the safety complaints.

We concluded that Durham School Services failed to provide adequate bus driver oversight, allowing an inexperienced driver to operate a commercial motor vehicle with escalating risky driving behaviors. Durham knew, or should have known, that this could lead to unsafe school bus operation. Likewise, the HCDE's lack of follow-up to ensure that Durham addressed a known driver safety issue contributed to the crash.

The Baltimore driver's medical condition and the Chattanooga driver's risky behavior were known before the crashes. Even though the school districts and states had contracted for student transportation services, the school districts still have oversight responsibilities, but somehow, each unfit driver was allowed behind the wheel of a school bus and continued driving until their fatal crashes and no remedial action was ever taken with either of them.

Improved driver oversight by both school districts and contracted school transportation operators could prevent or mitigate future crashes and save lives.

A synopsis of NTSB's special investigation report, "Selective Issues in School Bus Transportation Safety: Crashes in Baltimore, Maryland and Chattanooga, Tennessee," including the findings, probable causes and safety recommendations, is available at <https://go.usa.gov/xQmkC>. ■



Crash scene off Talley Road, showing school bus on its passenger (right) side against tree.
Image source: Chattanooga Fire Department.

How Georgia Put Advanced LIDAR Technology to Work in Reducing CMV-Related Traffic Crashes

By **Matt Torman**, *Contributing Writer*

Georgia is the top state in the nation to do business according to "Site Selection" magazine, but it's also number four in the nation in the number of fatal crashes involving commercial motor vehicles (CMVs). To fight the rising tide of CMV crashes, Georgia is leaving no rock unturned in its quest to find more innovative, effective solutions to increase highway safety.

The state's rank in fatal CMV crashes weighs heavily on the Motor Carrier Compliance Division (MCCD) of the Georgia Department of Public Safety, the agency charged with enforcing commercial motor vehicle safety laws and the lead Motor Carrier Safety Assistance Program (MCSAP) agency in Georgia.

This thriving southeastern state has experienced rapid population and business growth in a relatively short amount of time, and the by-product of that growth means large-scale increases in commercial traffic on the roadways of Georgia. Today, more than 3 million trucks travel through Georgia inspection stations every month, and it's up to the MCCD

to take on the incredibly difficult task of maintaining a safer transportation environment even as the roadways continue to get more congested.

MCCD officials wondered what additional efforts they could implement to ensure an effective crash reduction program that will improve CMV driver behavior over time. Part of the solution was to focus on educational and enforcement efforts to change driver behavior in the short term, and sustain efforts to dramatically reduce CMV-related traffic deaths in the long term.

The department also had to assess whether it was utilizing every tool at its disposal to effect the greatest possible change in CMV safety. That's when department officials started exploring groundbreaking LIDAR technology in an effort to change how officials enforced two major factors contributing to crashes involving CMVs – speeding and following too closely.

The Georgia Department of Public Safety's Motor Carrier Compliance Division uses patented LIDAR technology that measures time and distance between vehicles, in addition to vehicle speed.

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CMV Traffic Swells Amid Statewide Growth

Georgia is in its fifth straight year as the top place to do business in the United States. Its transportation systems help to facilitate this growth. With more than 1,200 miles of interstate highways, one of the busiest airports in the country (Hartsfield-Jackson Atlanta International), and deep-water ports in Savannah and Brunswick, both of which experienced record growth in 2017, commercial trucking continues to be crucial to the state's business environment.

Since 2010, the Peach State has averaged more than 3,000 new motor carriers starting business each year, and more than 64,000 registered motor carriers hit the roads on any given day. With estimates projecting Georgia's population to rise to nearly 11 million people by 2020, and a major port expansion and harbor deepening in Savannah, CMV traffic across the state will increase by as much as 60 percent.

More commercial vehicles on the road means the increased potential for more CMV-related crashes, something of which Maj. Johnny Jones, commanding officer in the Georgia Department of Public Safety's MCCC unit, is well aware.

"From 2013 to 2016, Georgia reported more than 7,500 CMV-involved crashes that caused injuries, and CMV-involved work zone crashes increased 48 percent over the past two years alone," Maj. Jones said. "We have to have better preventative measures to reduce the amount of crashes involving large trucks and buses in Georgia."

In 2017, approximately 18 people a month were killed in traffic crashes involving commercial vehicles in Georgia. Following too closely is Georgia's second-leading crash causation factor involving CMVs (after improper lane usage) and it's no surprise given how difficult it is to unexpectedly brake large commercial trucks in short distances.

Department of Public Safety analysts examining state crash data discovered that rear-end collisions account for 25 percent of CMV crashes statewide, and that number rises to 33 percent in high-crash corridors. The speed of a commercial motor vehicle is very much relative in determining how quickly a large truck or bus can brake within a certain amount of time and distance. At 60 mph, it takes a 40-ton

commercial vehicle approximately 335 feet to stop, just over the length of a professional football field.

Truck drivers who fail to give the proper amount of space to a vehicle in front of them, or those who are cut off by lighter-weight vehicles, then, have little margin for error.

Armed with this information, the Georgia Department of Public Safety's MCCC focused more heavily on reducing the number of trucks following too closely and improving safety on the state's roadways. However, the only tools officers have historically had to recognize following-too-closely infractions were based on training and experience, which varies from officer to officer.

"We use RADAR and LIDAR technology for speed detection, but except for training and experience we have not had technology that would help us enforce Georgia's following-too-closely law," Maj. Jones said. "However, a few years ago, we discovered a patented LIDAR technology that measures time and distance between vehicles, as well as vehicle speed. This technology also was equipped with both photographic and video capabilities."

Embracing Laser Speed Technology with Video

The Federal Motor Carrier Safety Administration (FMCSA) recognizes the need for additional financial support to improve traffic safety in high-risk regions and provides states reporting the most CMV crashes with MCSAP grants to help reduce collisions involving such vehicles.

As the lead MCSAP agency for Georgia, MCCC uses those funds to reduce CMV-involved crashes, fatalities and injuries through consistent, uniform and effective CMV safety programs, which includes the inspection of CMVs and CMV drivers. In accordance with state and national standards, all 270-plus law enforcement officers in MCCC are thoroughly trained to perform North American Standard driver/vehicle inspections on large trucks and buses. In addition to personnel and training, MCCC also invests this funding in education and awareness programs, which includes educating the motoring public, the commercial vehicle industry and other law enforcement agencies in Georgia.



The LIDAR technology used by the Georgia Department of Public Safety's Motor Carrier Compliance Division has photographic and video capabilities built in.

But the agency also uses both state and federal funding to reinvest in more modern traffic enforcement technologies. In 2014, the Georgia MCCC purchased speed detection LIDARs with digital video capabilities because they could capture several things officers believed could help reduce rear-end collisions:

- Vehicle speed
- The time and distance between vehicles
- Photographic and video evidence that could support speed and following-too-closely violations

Suddenly, some of the MCCC's traffic safety awareness campaigns were taking a different shape.

"We often highlight the capabilities of our department on social media and through media PSAs to emphasize commercial vehicle safety programs in our state," Maj. Jones said. "But at every opportunity, we educate the public and trucking organizations about the cutting-edge LIDAR capabilities that we now possess. We want drivers to know that we can measure their speed, the time and distance between two vehicles, take their picture and capture their tag number, all at the same time."

Reducing Risk, Increasing Safety on Georgia Roads

The same manufacturer that released the very first commercial LIDAR speed device in the 1990s developed one of the most sophisticated laser photo/video speed enforcement tools available today. The device collects and stores a complete chain of video evidence for speeding and tailgating violations, along with a high-resolution image that identifies vehicle make, model and license plate number.

"It's unlike any other piece of equipment out there," Maj. Jones said. "This single device, with its ability to enforce speed and tailgating issues, has transformed how we can monitor commercial vehicles and enforce Georgia state law relative to following too closely. It is able to capture these critical measurements and support them with video and photo evidence."

Since 2014, MCCC has increased its following-too-closely citations by 275 percent and its speed violations have increased more than 300 percent, something Georgia law enforcement experts say will help reduce the risk and

severity of CMV-related crashes. With more than 200 of the video-enabled laser speed enforcement devices in use today, Maj. Jones said MCCC plans to purchase more as the agency continues to hire officers and as roadway safety efforts continue to progress.

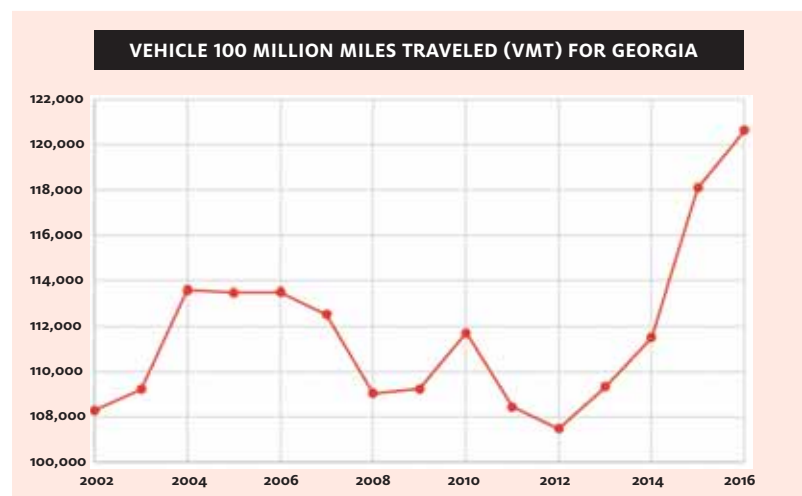
In fact, the Georgia Department of Public Safety's traffic enforcement programs have earned several FMCSA commendations since deploying these laser speed enforcement devices. The department earned an honorable mention for Safety Enforcement for 2015-16, and in 2016, it earned the distinction of winning FMCSA's top honor – the Safety Enforcement Award – in commercial vehicle safety.

"As the state continues to grow and the roads become more congested, and as long as motorists are being killed and injured on Georgia roadways," Maj. Jones says, "the Georgia Department of Public Safety will continue to invest in innovative solutions that are proven to help deter dangerous driving habits across the state."

"If we're going to dramatically improve commercial vehicle safety in Georgia, we need all the tools we can get to effectively accomplish that mission," Maj. Jones continued. "This innovative, dependable LIDAR technology with video and photographic capability helps us keep up with traffic enforcement amid rising business and population expansion, and helps us create a safer transportation environment for our citizens and our nation's motorists." ■

"If we're going to dramatically improve commercial vehicle safety in Georgia, we need all the tools we can get to effectively accomplish that mission."

— Maj. Johnny Jones
Commanding Officer, Motor Carrier Compliance Division, Georgia Department of Public Safety



Georgia is seeing an uptick in vehicle traffic in recent years, especially in the number of CMVs on state roadways.



INSPECTOR'S CORNER

2018 NAIC – Learning New Things, Making Connections, Improving Yourself and Surviving the Stress

By **Tpr. Jeremy Usener**, Commercial Vehicle Enforcement, Texas Department of Public Safety; 2018 North American Inspectors Championship Grand Champion

Hello, my name is Jeremy Usener and I am the 2018 North American Inspectors Championship (NAIC) Grand Champion. I am a trooper V in the Commercial Vehicle Enforcement Service under the Texas Highway Patrol Division with the Texas Department of Public Safety.

It is very important to me that I say thank you to everyone. First, I would like to say thank you to my family who has supported me throughout my career and through these competition events. Second, I want to say thank you to the excellent Commercial Vehicle Enforcement Training Unit that we have at the Texas Department of Public Safety. Its training is top notch and highly recognized. I also want to say thank you to the wonderful people at CVSA who put on NAIC. What an awesome event and thank you for all of your hard work. In addition, I know that NAIC would not be what it is if not for the enormous trucking industry support and sponsorship. It is appreciated by all, especially the competitors.

I want to say congratulations to all of the drivers who competed at the American Trucking Associations' National Truck Driving Championships. Regardless of if you placed in the competition, you are truly professional drivers. I did not get to watch any of the competition this year, but I am sure that all of you can drive those trucks and step vans better than most of us can drive a car.

Winning the 2018 NAIC Grand Championship is a dream come true for me. If you are a future NAIC competitor, the championship can be yours. You will need persistence, patience, practice and a high tolerance for stress. And not to mention, you may need to spend a lot of time studying. I am just a simple country boy from Texas who has devoted himself to learning the regulations and procedures.

At NAIC, you will meet many people and will become lifelong friends with many of them. It is an event where you are surrounded by good people who have the same enforcement interests as you. The competitors are divided into teams to compete for the team award. They meet each other probably for the first time and at that point complete strangers become friends. Go Yellow Team!



Many of the enforcement volunteers, leadership and members of the CVSA staff at NAIC are former competitors and champions. I appreciate the way they lead by example. The industry representatives at this event are very supportive and are anxious to visit with the competitors. I also know that they like to watch the competitors compete.

Attending and competing at NAIC will also make you a better at your job. There is always room for improvement. You may learn more in one week at the competition than you may learn in weeks of training. I learned things from past competitions that I use every day when I am on the job. I think that it is very important to become a sponge when you are at something like NAIC and learn everything you can.

I mentioned earlier about the support that the trucking industry has for NAIC. What I mean by "the trucking industry," is everyone that has anything to do with it, such as electronic logging device providers, equipment and service providers, the drivers, the companies, etc. I believe that one of the reasons that the trucking industry supports NAIC is because they

understand that we have a common goal of safety.

I encourage my fellow inspectors to make contacts with your local industry partners. There are a lot of times when, after you have completed your inspection, you can go an extra step and visit with the driver to discuss in detail the violations you discovered and how they can remedy those violations and prevent future violations. You might even tell the driver how much you appreciate the driver and company being squared away and taking pride in what they are doing. You may be in an area where there are relatively small trucking companies and they may not have a "safety man." You should be that person who can answer a question or two for that company. You may even put on an occasional safety meeting for those companies, if your agency permits it. A little help goes a long way and who knows, you might learn something yourself. Like I said, we ultimately have a common goal of safety.

In closing, I want to remind everyone to be thankful for what you have and to be safe out there. ■

PrePass Trucking Podcast Series Focuses on Industry Hot Topics

By **Andrew Johnson**, Chief Marketing Officer, HELP Inc./PrePass

HELP Inc., the provider of PrePass weigh station bypass and electronic toll payment services, is increasing the ways in which it is emphasizing its mission of truck safety and compliance with the debut of a new podcast series.

"Eyes on the Road" provides quick, valuable information twice a month, of approximately 12 minutes each online. The host, veteran broadcaster and award-winning trucking journalist Evan Lockridge, will interview experts within the trucking industry on a range of timely topics.

"As a nonprofit safety organization, the mission of HELP Inc. is focused on highway

safety and efficiency," said Andrew Johnson, HELP Inc. chief marketing officer. "Eyes on the Road supports our safety mission by providing information that helps fleets and drivers improve their operation through voluntary compliance."

The first episode of "Eyes on the Road" examines the different safety data programs used by the Federal Motor Carrier Safety Administration (FMCSA) to rate trucking operations and how each of these datasets affect scores.

The second episode is the first of a two-part series titled "It's Not My Fault." Part one

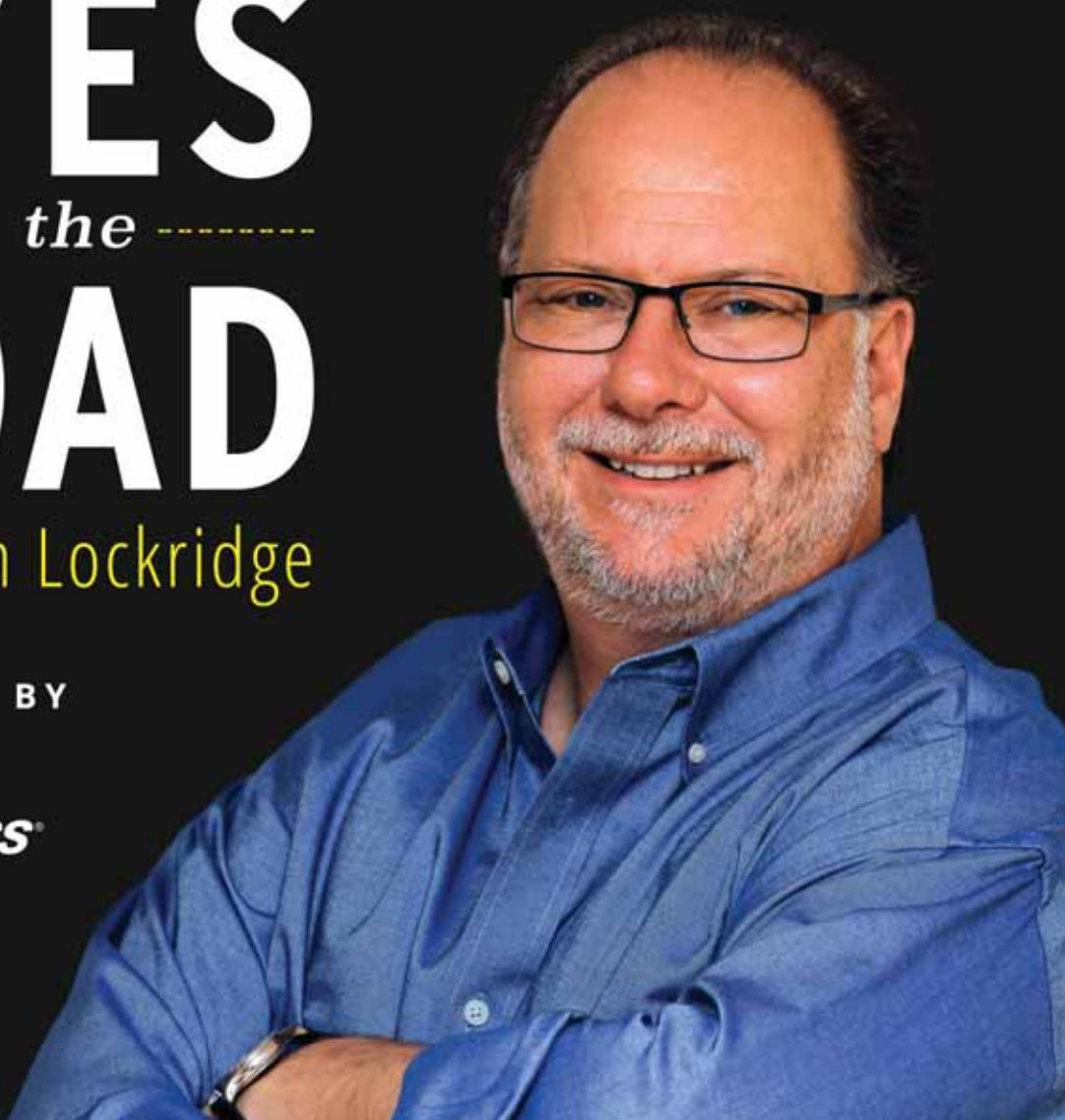
explores how trucking operations can challenge what they feel are unfair inspection results that negatively impact their safety records. Part two looks at a program currently being evaluated by FMCSA that allows fleets to remove non-preventable crashes from their safety records, ensuring their safety scores are more accurate.

"Eyes on the Road" will explore a range of topics including trucking automation, traffic congestion, regulatory changes, economic trends and much more.

To listen or download the podcasts, search for "PrePass" on SoundCloud, Apple iTunes, Google Play, Stitcher or Player FM. ■

EYES ----- on the ----- ROAD with Evan Lockridge

PRESENTED BY



Don't Look Away

The consequences of distracted driving can be deadly.

By Joe Doerr, Program Manager, NBIS

This likely doesn't come as a surprise to anyone, but distracted driving is one of the biggest and deadliest issues facing drivers today – of both commercial and passenger vehicles. Whether talking on the phone, texting, fiddling with a GPS, eating, changing the radio station, trying to get the Bluetooth to connect to Spotify, or simply engaging in any other non-driving activity, distractions abound. And the consequences of those distractions are serious. Doing anything other than devoting every bit of your attention to operating your vehicle increases the risks of crashing.

Most experts agree that texting is the most alarming distraction drivers face. It has been estimated and widely reported that sending or reading a text message while driving causes a driver to take his or her eyes off the road for approximately five seconds. At 55 miles per hour, that's the equivalent of driving the length of an entire football field with your eyes closed.

The reality is that you cannot drive safely unless you give the task of driving your full attention. Any non-driving activity you engage in is a potential distraction and increases your risk of crashing – and the statistics prove it. According to the National Highway Traffic Safety Administration, 3,477 people were killed, and 391,000 people were injured, in motor vehicle crashes involving distracted drivers in 2015 alone. The Insurance Institute for Highway Safety (IIHS) reports that observation surveys indicate the rate of drivers texting at any

moment during the day is rising, especially among younger drivers. According to IIHS, in 2016, 2.1 percent of all drivers, and 4.5 percent of drivers estimated to be 16-24 years old, were observed texting or otherwise manipulating hand-held devices. Comparing this data to data from 2009, this is an astounding 250 percent increase for all drivers and a 309 percent increase for drivers 16-24 years old. While those statistics don't refer specifically to commercial drivers, and perhaps your tendency is to dismiss it, it's important to remember that we all share the road, so what affects only some of us actually affects all of us.

Since 2010, the Federal Motor Carrier Safety Administration (FMCSA) has prohibited texting by commercial motor vehicle (CMV) drivers while operating in interstate commerce and imposes sanctions, including civil penalties and disqualification from operating CMVs in interstate commerce, for drivers who fail to comply with this rule. Drivers should also be aware that:

- Talking on a hand-held cellphone while driving is banned in 15 states and the District of Columbia.
- The use of all cellphones by novice drivers is restricted in 38 states and the District of Columbia.
- Text messaging is banned for all drivers in 47 states and the District of Columbia. In addition, novice drivers are banned from texting in one state (Missouri).

Remember that many localities have enacted their own bans on cellphones or text messaging. In some (but not all) states, local jurisdictions need specific statutory authority to do so. Additionally, most school bus drivers are banned from texting and using hand-held cellphones by state code, regulation or school district policy. So be sure to look at the laws of state you live in and be aware of what they are.

Limiting Distractions

Publicly available research from IIHS shows that there is growing evidence that talking on a cellphone increases crash risk, though the connection hasn't been firmly established. Researchers have consistently linked texting or otherwise manipulating a cellphone to increased risk. However, it's not clear that banning hand-held phone use and texting reduces crashes.

This is the case even though IIHS research has documented that bans on hand-held phone use reduce overall phone use. Crashes have increased in recent years, but overall cellphone use has not. It's worth noting that drivers are distracted by things other than cellphones, so prohibiting phone use will not eliminate distracted driving. Broader countermeasures that keep drivers from becoming distracted, or that mitigate the consequences of distracted driving, such as crash avoidance technology, may be more effective than outright cellphone bans.



Crash avoidance technologies can eliminate or mitigate the effects of distraction. They can provide safety-relevant warnings to redirect wandering attention, reduce attentional demand or increase safety margins to reduce the consequences of cognitive distraction. In some cases, they can even prevent or mitigate crashes by taking action when a driver fails to act appropriately to prevent a crash (e.g., automatic braking, electronic stability control).

What Can You Do?

For starters, don't put pressure on your drivers to be available every second of the day. After surveying over 1,000 employees who drive in the U.S., Travelers Insurance Company gained valuable insight into common driving habits and the work-related distractions that affect those habits. They found that of those employees who drive to or for work, 43 percent will answer or make work-related communications while driving, including texting, emailing and calling. The reasons those drivers gave for doing so were:

- They felt they needed to always be available. (38 percent)
- They feared missing out on something important at work. (37 percent)
- They did not want to upset the boss. (17 percent)

Employers should also understand that they have a duty to exercise reasonable care to control the activities of their employees when they are acting on their behalf and/or using company vehicles. Even if the employee is off duty, they are still acting under the scope of employment if they are in the company vehicle, and the company can be held liable if something happens. To that end, it's important that employers put together a list of guidelines regarding mobile device usage and require employees to abide by it. Know the laws in the states your company does business and develop a policy that fits. The stakes are far too great not to.

For more information, call 877-860-RMSS or visit www.nbis.com. ■

CSA Violations



392.80A

Driving a CMV while texting

2014	2015	2016	2017
562	669	734	728



392.82A1

Using a hand-held mobile telephone while operating a CMV

2014	2015	2016	2017
19,137	20,310	21,204	21,609

Technology in Trucking and the Changing Role of Drivers

By **Joe Doerr**, Program Manager, NBIS

Recently, I made a presentation to the membership of the Specialized Carriers and Rigging Association at their Specialized Transportation Symposium, titled “In-Cab Technology: Changing the Role of Drivers.”

As the title suggests, I’ll be taking a deep dive into some of the ways in which technology is changing the role of truck drivers. I’ll be talking about how companies are implementing new technology, the return on investment of that technology, its positive safety implications, and some of the long-term effects I see technology having on the transportation industry. Technology, as we all know, is a hotly debated subject.

Fleet-Monitoring Technology and the Internet of Things

The “Internet of Things” – connecting virtually any device with an on/off switch to the internet – has dramatically changed the world we live in. We now have Wi-Fi-enabled refrigerators, televisions, coffee makers, lamps, washing machines and a whole slew of other items – and all these connected devices have completely changed the way we operate inside our homes. However, it doesn’t stop there. The Internet of Things isn’t limited to household items or what we do inside our homes. It extends to the trades and businesses and has completely changed the way trucking companies operate. Perhaps the clearest example of this can be seen in the adaptation of fleet-monitoring technology.

Fleet-monitoring technology comes in a variety of forms, including:

- Telematics, which uses a combination of GPS and telecommunications systems to give trucking companies real-time data about their fleet’s location, drivers’ behavior and vehicle diagnostic information
- Collision-avoidance systems, which use technology to sense vehicles and other hazards, and either warns the driver or autonomously avoids the collision by braking or returning the truck into its proper lane
- Advanced driver-assistance systems, which automate certain driver tasks (examples include adaptive cruise control, adaptive exterior lights and blind-spot detection)

All of these systems use the internet, sensors, cameras, cellular-baseband radios and complex algorithms to monitor things like driver

performance, a truck’s mechanical status and other critical truck safety issues. Fleet management technology certainly isn’t meant to replace human decision making, but it is meant to enhance it. Which is almost always the case with technology – and almost always leads to discussions about outcomes, both positive and negative.

Embracing the Good – and the Bad

In its 2017-2018 Most Wanted List of safety improvements for the trucking industry, the National Transportation Safety Board (NTSB) called for increased use of technology-based safety measures in the trucking industry.

The positives are pretty easy to see. Advancements in trucking technology often deliver substantial benefits almost immediately upon implementation. The return on investment for adopting these tech tools is often significant, with the technology paying for itself by helping to improve compliance issues with government regulations and eliminating the cost associated with being out of compliance. This, on top of the increased efficiency and productivity the company often realizes, combines with an improved safety profile, which can then lead to a reduction in expenses like insurance premiums, vehicle downtime and the costs associated with litigation.

According to the NTSB, collision-avoidance technologies can reduce fatalities and injuries over the long term. In 2012, the National Highway Traffic Safety Administration (NHTSA) predicted that autonomous emergency braking, meeting certain requirements, could prevent 13,000 to 28,000 minor injuries and 500 to 700 serious injuries from rear-end crashes – and could save as many as 65 lives each year.

In a 2015 study by the University of Michigan Transportation Research Institute, researchers found that in the large motor carriers they surveyed, lane-departure warning systems reduced crashes by 14 percent, electronic stability control by 19 percent, forward-collision warning systems by 14 percent, blind spot detection by 5 percent and vehicle communications systems by 9 percent.

On the flip side – and there’s always a flip side – the biggest detriment I see with all this new technology comes with what I call “technology complacency,” which is when an organization implements new technologies and then doesn’t do anything with all the data that is captured as a result.

Each of these new systems is emitting a steady stream of data – and all that data is discoverable in court. If a company finds itself in the midst of litigation, all that data can be harmful if it hasn’t been dealt with appropriately. Turning data into action items, addressing the harmful behaviors that are discovered during data analysis, and providing the proper training and coaching as a result of what is learned, can help favorably position an organization in court should something happen, rather than having to rush and play defense when unexpected events occur. The ability to leverage data to help proactively manage risk is one of the great benefits technology gives us.

For more information, call 877-860-RMSS (7677) or visit www.nbis.com. ■

When it comes to technology in trucking:

Address the “big brother bias” at the start of planning process. People are often reluctant to change and the idea that someone is monitoring their actions can set off alarm bells. Everyone within your organization must buy in to the new technology being adopted for the effort to be successful. Don’t wait.

If you collect the data, use it. Having the ability to monitor the performance of your fleet is a very powerful thing. But monitoring alone doesn’t cut it. Take the lessons your data is teaching you and make the necessary adjustments within each area of your business. Coaching and open communication are the keys to having a successful program.

Be the one who embraces change first. Lead by example. Have answers to the inevitable questions that will come, especially the ones that stem from a “this is how it has always been done” mindset. Embrace the change technology brings and use these new tools as a catalyst for growth within your organization.

Truck Drivers: Know the Most Severe Violations to Avoid Being Cited

By **Fred Fakkema**, Vice President of Compliance, Zonar,
and **Ron Cordova**, Compliance Manager, Zonar



Today, there are 5 million trucks and bus drivers sharing the road with more than 250 million motorists. With so many people on the highways at one time, it's essential that everyone get road smart. Luckily, the Federal Motor Carrier Safety Administration (FMCSA) created the Safety Measurement System (SMS), which is a public motor carrier safety database used to identify driving violations that pose the greatest risk on the roads.

This year, FMCSA released 900+ violations used in the SMS for which a driver can be cited. FMCSA divides each violation into Behavior Analysis and Safety Improvement Categories (BASIC) and assigns each individual violation a severity rating (1-10). The scale is based on the vehicle's relevant risk of crashing and consequences of the crash after it occurs, with one representing the lowest crash risk and 10 representing the highest crash risk.

It's important for drivers to be aware of all potential violations, but especially those which have the highest crash risk and carry the most severe penalty. At right are six of the most severe violation categories of which every truck and bus driver should be made aware.

These are generally the most severe violations but certainly not all of them. To keep the roads safe, it's important that drivers review ALL safety violations so they can avoid being cited.

Unsafe Driving

A driver must exhibit safe driving behavior at all times. This means that a driver cannot be caught texting, talking on the phone, exceeding the speed limit or driving recklessly. FMCSA weighs each of these behaviors as the most severe (10) on the SMS scale.

Hours-of-Service Compliance

Drivers need to be particularly aware of two factors to stay hours-of-service (HOS) compliant: driving while ill or fatigued and HOS violations. A driver who is caught driving while ill, impaired or fatigued will be cited. Driving beyond the maximum allowable hours is of high severity within the HOS BASIC violations. If someone drives after being declared out of service, he or she can expect the maximum violation severity.

Vehicle Maintenance

Maintaining a vehicle is one of the most important things a motor carrier and driver can do to avoid violations. Tires, wheels, lighting/reflectors and improper load securement are some of the highest severity rated violations. Conducting a proper pre-trip inspection can prevent vehicle maintenance violations during a roadside inspection.

Controlled Substances/Alcohol

This may seem obvious but the commercial trucking industry has a zero-tolerance policy for operating a commercial motor vehicle under the influence. Drivers on duty in possession of or under the influence of a drug which renders them incapable of safe operation and drivers who fail an alcohol test with a blood alcohol concentration level of .02 or greater will be cited to the most severe level.

Hazardous Material Compliance

Drivers need to know how to secure their loads. Major violations can arise if packages are not secured or leaking. Packages also cannot exceed the bulk package outage or weight limit. It's important for drivers to know what they are transporting because if they are caught with inappropriately marked hazardous materials packages, the violation will fall on the driver.

Driver Fitness

During a roadside inspection a driver must be able to produce a valid license to avoid being cited and placed out of service. Additionally, their license must prove they are qualified to operate the commercial motor vehicle in use with the proper endorsements, if required. Driving while disqualified or with a suspended license for a safety or unknown reason will result in major penalties. The severity of operating a commercial motor vehicle with a fraudulent medical certificate is also very high. ■

Better Tire Condition Enforcement Through the Application of Non-Intrusive Automation

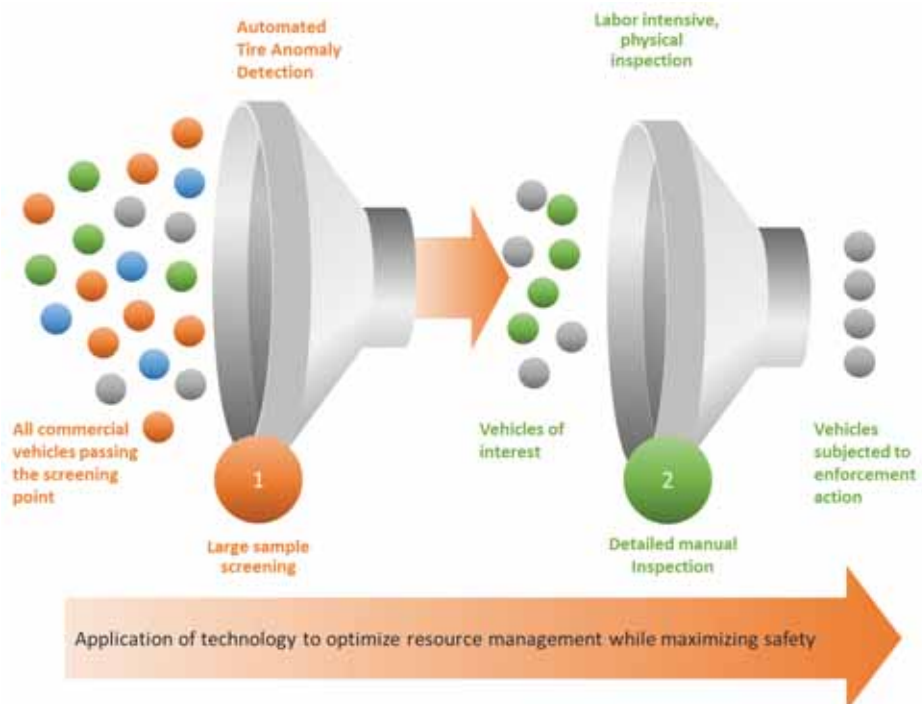
By **Bob McQueen**, Advisor, International Road Dynamics Inc.

Automated screening approaches make it possible to manage the safety of high volumes of traffic by screening at high speed and low cost. Manual inspections, being more costly, may be reserved for vehicles of interest rather than the entire vehicle population. New technology approaches like tire anomaly detection are the next step in the evolution of these systems, playing a vital role in the delivery of the highest levels of safety at reasonable cost. This article describes how tire anomaly detection can be applied and the kind of results we can expect.

Tires are a crucial element in vehicle safety. They literally represent the point at which the rubber hits the road, the only component of the commercial vehicle that comes into direct contact with the pavement surface.

According to Federal Motor Carrier Safety Administration (FMCSA) Office of Research and Analysis's Large Truck Crash Causation Study (Publication No. FMCSA-RRA-07-017, July 2007): "Vehicle-related factors were coded for 6 percent of the large trucks involved in fatal crashes and 3 percent of the passenger vehicles involved in fatal crashes. 'Other Working Vehicle' and 'Tires' were the most common vehicle-related factors for large trucks in fatal crashes, at 2 percent and 1 percent, respectively. 'Tires' was the most frequently coded vehicle-related factor for passenger vehicles in fatal crashes, at 1 percent."

Mismatched, under-inflated and missing tires result in vehicle imbalance, improper load distribution, degraded braking performance and other potential safety issues. That is why it is particularly important to ensure that tires are in good condition by providing a high level of compliance monitoring. Of course, such high levels of compliance monitoring come at a price in terms of the resources required to monitor the large number of commercial motor vehicles on our nation's roads. It would be impossible to conduct detailed inspections of every commercial motor vehicle tire. However, the use of advanced technology allows the adoption of an automated two-step approach to the identification of vehicles of interest.



As illustrated in the above graphic, a non-intrusive automated scan of a large number of commercial motor vehicles at normal road speeds can identify vehicles with tire anomalies that require further detailed inspection. This lets an inspector detect tire anomalies remotely and in a non-intrusive manner, at full highway speeds. This real-time assessment of all passing commercial motor vehicles enables much more effective compliance enforcement. Adopting a two-step approach, many vehicles can be monitored safely and efficiently to identify those that require further attention. This occurs at step one, as shown above. In step two, the vehicles of interest are subjected to further manual inspection, focusing precious resources on the target vehicles. The use of technology can achieve a powerful balance between the cost of compliance checking and the extent of the sampling.

It seems intuitive that two factors will heavily influence driver and fleet manager behavior – the probability of a tire anomaly being detected and the consequences of non-compliance. The

challenges lie in increasing the probability of detection while managing the cost of resources required.

Recent advances in technology have enabled the development of an automated approach to condition monitoring and evaluation. This can help enforcement agencies identify commercial motor vehicles with tire problems that need further inspection. This is done by automatically comparing footprints between adjacent tires and tires on the same axle. Tires that are flat or missing or which have a significant tire diameter mismatch can be identified at mainline or ramp speeds. Such tire monitoring and evaluation can be added as an additional feature to existing weigh-in-motion stations or implemented as a stand-alone system.

This automated approach was recently demonstrated as part of the CVSA Workshop held in Portland, Oregon, in April 2018. Live application of a Tire Anomaly and Classification System (TACS) was demonstrated at the Woodburn weigh station site. Special tours of

the facility enabled workshop participants to see the technology in action, identifying commercial motor vehicles with tire anomalies, generating appropriate alerts and signaling to weigh station operators when further detailed inspection is required. This system has the advantage of enabling compliant vehicles to proceed, and minimizing added delay and disruption in their travel schedule.

The photograph to the right shows an example of one of the tire anomalies detected. The screenshot illustrates how the alert is generated and shows that in addition to a simple alert, the location of the tire in question is highlighted. The photograph shows the actual anomaly, with the tire having come off the wheel rim.

Tire anomaly detection can have a significant impact on road safety. Statistical analysis of the vehicles processed at the Kay County Port of Entry in Oklahoma indicated that at that site between January and March 2018, 1.5 to 2.1 percent of commercial motor vehicles had tire problems that were serious enough to put those vehicles out of service.

If a larger proportion of tire problems can be detected through more widespread and effective monitoring and enforcement of tire anomalies, road safety will be improved. The use of technology to improve the efficiency of tire anomaly detection is a wonderful “do more with less” story. Through the application of automation, less resources are required to make a wider scan regarding the condition of tires and general commercial motor vehicle compliance.

This effect is at the heart of the application of advanced technology to tire condition monitoring and assessment. Effective design and engineering enables these technologies to be applied in a way that directly addresses known problems and creates better results with greater efficiency. It is now possible to raise the bar on tire anomaly classification and detection while continuing to manage enforcement resources in a more effective manner.



The successful demo of automated, non-intrusive tire monitoring and evaluation at the Woodburn weigh station demonstrated detection of these types of tire problems to the delegates (e.g., a commercial motor vehicle was flagged with a tire problem right before the tour buses showed up on-site). The Woodburn weigh station tours also provided direct evidence that this is not some future vision of the application of advanced technology. The system is available now and is already at work detecting tire anomalies and saving lives.

So, the question for drivers and fleet managers is “Do you know what your tires are up to?” While the question for compliance agencies is “Do you have a complete picture of tire anomalies in your jurisdiction and is your reach as wide as it could be?” TACS can provide some great answers to these important questions. ■

Mismatched, under-inflated and missing tires result in vehicle imbalance, improper load distribution, degraded braking performance and other potential safety issues.

How Fleet Managers Can Fight Driver Fatigue

By **Chris L'Ecluse**, *Solutions Specialist, Teletrac Navman*

Drowsy or fatigued driving is a serious problem in the transportation industry, claiming more than 846 lives per year, according to the National Highway Traffic Safety Administration (NHTSA). Naturally, it's a major concern for fleet managers.

When drivers are fatigued, they have a harder time focusing, meaning their reaction times slow. It's more likely they'll brake too late to avoid a collision or miss an important road sign or signal. In serious cases, driver performance plummets and some even experience tunnel vision. For this reason, fatigued driving can be as deadly as drunk driving. And the especially dangerous thing is that a driver can be fatigued enough for it to impair his or her performance and yet not even feel tired, and therefore not be aware their driving is affected.

It's important to clarify that while fatigue often stems from insufficient sleep, it's not the same as being tired. While it's possible for drivers to (attempt to) combat sleepiness by drinking coffee or rolling down the window, fatigue is harder to fight as it often stems from things truckers must do on a regular basis, like driving long distances, driving alone and driving overnight. As an addendum, the chemical caffeine found in coffee acts as a stimulant for only 15 minutes. The physiological changes leading to fatigue behind the wheel are a lack of visual stimulants (monotonous landscape or night driving) and lack of physical movement by being behind the wheel for extended periods,

leading to a slowing of breathing; thus, lowering the body temperature and heartbeat, which are all signals to the brain that it's time to sleep.

It's no wonder, then, that many fleet managers feel driver fatigue is an insurmountable problem. The good news is, it isn't. There are steps fleet managers can take to reduce both fatigue itself and the likelihood of collisions resulting from it.

Technology solutions are a good start. Fortunately, most managers have already taken a key step by using electronic logging devices, which prevent fatigue by keeping track of drivers' hours of service and sending alerts when they're due for breaks. Fleet safety and GPS fleet tracking solutions also can pick up on driver behavior that can indicate fatigue, like erratic or harsh braking, and alert drivers in real-time to prevent collisions. Lane departure warning systems, which alert drivers if they veer off into another lane, are also a valuable tool in preventing fatigue-related crashes.

But tech is only part of the equation, as it doesn't address the physical factors impacting fatigue. The realities of life on the road (sporadic sleep, little sleep and little opportunity for exercise or eating fresh, nutritious food) take their toll on truckers and can cause or exacerbate conditions that lead to fatigue. For example, fatigue is a common symptom of medical issues like diabetes and

sleep apnea, which affect U.S. truckers at a disproportionately high rate. There is a 50 percent higher occurrence of diabetes in truck drivers than the national average, and 28 percent of truckers have sleep apnea.

While there's no cure for either condition, proper treatment, regular exercise and eating a balanced diet help control symptoms and help to tackle some of the root health causes of driver fatigue. To help drivers stay on track with health and fitness goals, many fleet owners are introducing wellness programs for their drivers. Some offer incentives to improve health, whether it's encouraging yearly physicals or providing access to smoking cessation programs and rewarding those who participate. Others subsidize regular vision checks (to prevent eye strain) and sleep apnea equipment. To encourage exercise in a sedentary career, other fleets distribute wearable fitness trackers to encourage as much exercise as possible, with some fleets even holding competitions to see who can get the most steps in during a week.

Even though driver fatigue is a tough problem to fight when many of the risk factors are par for the course with driving long distances, it can be reduced through a multi-pronged approach, including both technology and promoting wellness. Not only will investing in safety technology and drivers' health improve fatigue-related safety outcomes, your drivers will feel valued. ■



FROM THE DRIVER'S SEAT

Texting and Driving

By **Mike Sheeds**, Professional Driver, Werner Enterprises, America's Road Team Captain

As a truck driver, you see dangerous behaviors on the highway pretty frequently, especially when it comes to texting and driving. On my way from Dallas to San Antonio, I saw something that I would never forget.

I had just picked up a brand-new truck driving student who I was going to mentor for a few days. It was a regular hot afternoon in Texas with no traffic (which is always nice). Next to my tractor-trailer was a car with a young lady in her mid-20s; in the backseat was her daughter. The young lady was texting while driving which was immediately a red flag. She passed me on the left and got ahead of me a little bit. The next thing you know, her car crossed the median and flipped into the ditch. Instantly, I pulled over on the side of the road and the driving student and I got out of our truck and rushed over to the car accident. We called 911 and noticed the smell of gas surrounding the area. We rushed to get the woman and her daughter out of the car. We got the mother out safely and she walked away with just a concussion. Her daughter was not wearing a seatbelt, which resulted in a fractured arm. Her bone was sticking out of her skin. Because of first-aid training, I knew to put pressure on the wound to stop the bleeding while we waited for the ambulance to get there. Thankfully, both the mother and daughter survived. It could have been much worse.

With increased mobile phone usage in today's society, its use has played a significant contribution to road accidents, injuries, crashes and deaths in countries throughout the world. Thousands of deaths and injuries are caused from distracting driving, all rising from road accidents involving drivers using their cell phones. Unfortunately, the numbers of deaths and injuries caused by this has grown massively. Thankfully, several companies have made devices that prevent people from using their phones. For example, there are pouches you can attach to your vehicle dashboard that block all signals to and from phones. Inventions like this can save thousands of lives.

Sending a text while driving has been found to be six times more likely to cause a road accident compared to being drunk while driving. Replying to a message while driving

has also been found to draw away drivers' attention by at least 5 seconds each time he or she types. Now, assuming a speed of 55 miles per hour, that provides enough time to cover a distance equivalent to the length of a football field without looking at the road.

My oldest daughter, who is 16 years old, is beginning to learn how to drive. I cannot stress to her enough how dangerous texting and driving is and to reinforce the message, I decided to show her. We hopped into my truck. Living in rural Texas, our driveway is about 600 yards. I told her to text her sister and when she was done sending that text I'll stop the car. I had one hand on the wheel and the other on a timer. The truck was going 35 miles per hour. She finished her text and within a couple of seconds we had covered 150 feet in distance. Her face was just in shock when she saw how far we went within the time she was texting.

Nowadays, it has become a common scenario to see a car consistently swerving from one lane to another, and hit or narrowly miss hitting pedestrians and other vehicles. Only later do we realize the involved drivers are on their cell phones sending or reading messages. Drivers should avoid sending messages while driving for their safety, the safety of other drivers and the safety of all road users. In some states, legislation has been passed prohibiting drivers from using their phones while driving. Currently, 14 states have passed laws banning mobile phone use while driving. Among these, four states have banned sending or replying to text messages while driving.

As truck drivers and law enforcement, we see things on the road that are shocking. Phone usage continues to be a main cause of road accidents, claiming the lives of thousands. But if we keep driving home this message to everyone we encounter, maybe our message will be received, instead of the dangerous and distracting texts, notifications, buzzes and beeps. Everyone deserves to be safe on the roads. The trucking industry thanks the law enforcement community for recognizing this problem and helping us put safety ahead of convenience. ■

Sending a text while driving has been found to be six times more likely to cause a road accident compared to being drunk while driving.



About 'RAD Inspection News'

'RAD Inspection News' features news and other stories pertaining to the North American Standard Level VI Inspection Program for transuranic waste and highway route controlled quantities (HRCQ) of radioactive material. This inspection is for select radiological shipments that include enhancements to the North American Standard Level I Inspection Program and the North American Standard Out-of-Service Criteria with added radiological requirements for transuranic waste and HRCQ of radioactive material.

Learn more about the Level VI Inspection Program at www.cvsa.org.

'RAD Inspection News' is made possible under a cooperative agreement with the U.S. Department of Energy (DOE). Since January 2007, it has run as a section inside CVSA's "Guardian." ■

The History of the Level VI Inspection Program

In 1986, the U.S. Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM) requested that CVSA, under a cooperative agreement, develop an inspection standard for future shipments of spent nuclear fuel and high-level radioactive waste. The goal was to develop a standard to ensure the protection and safety of people and the environment by setting and enforcing rigid inspection standards and safeguards for the transportation of radioactive materials.

CVSA brought together a wide range of officials to develop the Level VI standards. Four committees on research, design, inspection, training and data analysis were established to conduct the major elements of the research and development process. The make-up of the committees consisted of CVSA members from the various U.S. states and Canadian provinces, industry personnel, nuclear industry control officials, government officials, representatives from a research firm and CVSA staff.

The Level VI standards were originally developed for specific OCRWM shipments. A pilot test was conducted of the procedures and standards, using shipments of cesium, LSA-nitric acid and spent nuclear reactor research fuel. It was determined that the Level VI standards were appropriate for all shipments of highway route controlled quantities (HRCQ) of transuranic waste. Today all shipments of transuranic waste shipped to the Waste Isolation Pilot Plant (WIPP) outside of Carlsbad, New Mexico, are subject to Level VI inspection standards. This determination had the concurrence of DOE and an overwhelming majority of the affected states, regional organizations and the motor carrier radioactive material transporters.

In July 1999, CVSA membership adopted the use of the Level VI (enhanced North American Standard) Inspection Procedures and North American Standard Out-of-Service Criteria on all shipments of HRCQ of radioactive materials as defined by Title 49 CFR Section 173.403 and all transuranics.

As of Jan. 1, 2005, all vehicles and carriers transporting HRCQ of radioactive materials are required to pass the North American Standard Level VI Inspection. Previously, the U.S. DOE voluntarily complied with the North American Standard Level VI Inspection Program requirements. Select radiological shipments include HRCQ of radioactive materials as defined by Title 49 CFR Section 173.403. And, because only a small fraction of transuranics are HRCQ, DOE decided to include its transuranic waste shipments in the North American Standard Level VI Inspection Program. ■

Definitions

Transuranic (TRU) waste is defined in the Waste Isolation Pilot Plant Land Withdrawal as an alpha-emitting transuranic isotope containing concentrations more than 3.7 MBq/kg (100 nCi/g). Elements having atomic numbers greater than that of uranium are called transuranic. Elements within TRU are typically manmade. In the United States, TRU waste is a legacy waste from weapons production during the Cold War.

TRU waste is categorized as contact-handled (CH) and remote-handled (RH) on the basis of the radiation field measured on the waste container's surface.

- CH TRU waste has a surface dose rate not greater than 2 mSv per hour (200 mrem/h)
- TRU waste has rates of 2 mSv/h or higher

HRCQ of radioactive material as defined in 49 CFR 173.403 means a Class 7 material within a single package which exceeds:

- 3,000 times the A1 value of the radionuclides as specified in 49 CFR 173.435 for special form Class 7 (radioactive) material
- 3,000 times the A2 value of the radionuclides as specified in 49 CFR 173.435 for normal form Class 7 (radioactive) material
- 1,000 TBq (27,000Ci), whichever is least



EPA e-Manifest Goes Online

The Environmental Protection Agency (EPA) established a national system for tracking hazardous waste shipments electronically. This system, known as e-Manifest, facilitates the electronic transmission of the uniform manifest form, which accompanies shipments of hazardous waste. e-Manifest has modernized the nation's cradle-to-grave hazardous waste tracking process while saving time, resources and dollars for industry and states.

By enabling the transition from a paper-intensive process to an electronic system, the EPA estimates e-Manifest will ultimately reduce the burden associated with preparing shipping manifests by 300,000-700,000 hours, saving state and industry users \$75-\$90M annually.

Benefits of the e-Manifest system include:

- Cost savings
- Accurate and more timely information on waste shipments
- Rapid notification of discrepancies or other problems related to a particular shipment
- Creation of a single hub for one-stop reporting of manifest data for use by EPA and states
- Increased effectiveness of compliance monitoring of waste shipments by regulators
- The potential for integrating manifest reporting with the Resource Conservation and Recovery Act (RCRA) biennial reporting process and other federal and state information systems

EPA established the e-Manifest system according to the Hazardous Waste Electronic Manifest Establishment Act, enacted into law on Oct. 5, 2012. The e-Manifest Act authorized the EPA to implement a national electronic manifest system and required that the costs of developing and operating the new e-Manifest system be recovered from user fees charged to those who use hazardous waste manifests to track off-site shipments of their wastes. In January 2018, the EPA published its final methodology for setting user fees based on the costs of processing manifests.

To learn more about and to access the e-Manifest system, visit www.epa.gov/e-manifest. ■

Join EPA's e-Manifest Listserv

The e-Manifest listserv provides an open forum for the posting and discussion of news and information related to the e-Manifest program. This listserv can also be used to facilitate e-Manifest conversations amongst the stakeholder and user community.

To subscribe, send a blank message to eManifest-subscribe@lists.epa.gov. To contribute to the list, send a message to eManifest@lists.epa.gov.

Level VI Inspection Basic Certification Courses



CVSA Attends U.S. DOE National Transportation Stakeholders Forum in Nebraska

Director of Level VI Inspection Program Carlisle Smith attended the U.S. Department of Energy's (DOE) 2018 National Transportation Stakeholders Forum (NTSF) in Omaha, Nebraska, June 5-7, 2018. Smith provided Level VI Inspection Program updates to breakout session meetings of the Council of State Governments' Midwest Radioactive Materials Transportation Committee and the Southern States Energy Board's Radioactive Materials Transportation Committee. Level VI National Instructor Kelly Horn of the Illinois Emergency Management Agency, who is a former co-chair of the Council of State Governments' Midwest Radioactive Materials Committee, moderated the NTSF general session. CVSA members from

Georgia, Indiana, Michigan, South Carolina, Idaho, Washington, Wyoming and New York were also in attendance. ■



CVSA National Instructor Kelly Horn presented at the general session of the NTSF.



Registration is required. To register for a CVSA Basic Level VI Inspection Course, contact CVSA Director of Level VI Inspection Program Carlisle Smith at carlises@cvsa.org. ■

WIPP Breaks Ground for New Ventilation System

On June 14, 2018, U.S. Department of Energy officials joined with local Southeast New Mexico community leaders to celebrate the groundbreaking of a new and improved underground ventilation system for the Waste Isolation Pilot Plant (WIPP). The Safety Significant Confinement Ventilation System (SSCVS) is key to increasing waste shipments to WIPP by allowing mining, waste emplacement, rock bolting and maintenance activities to occur simultaneously.

"In my first trip to WIPP as the assistant secretary for environmental management, I am pleased to have the opportunity to participate in breaking ground on this new ventilation system," said Anne White. "The new system provides WIPP with state-of-the-art air handling capabilities, which will be a significant improvement to WIPP in support of its critical role in our national mission."

"The new ventilation system will provide WIPP more than 500,000 cubic feet per minute of air to the WIPP underground, while running in a filtration mode that will be protective of the public and environment," said DOE Carlsbad Field Office Manager Todd Shrader. "It allows us more flexibility while performing waste emplacement and mining activities."

The SSCVS provides a modern air supply system designed to run continuously in HEPA filtration. The system will provide approximately 540,000 cubic feet per minute of air to the WIPP underground, significantly more than the current ventilation system in place at the facility. The new system also allows easier filter replacement and preventative maintenance activities. At an estimated cost of \$288 million, construction of the new ventilation system is expected to be completed by early 2021.

"This is a significant improvement for WIPP in support of its important national mission," said Bruce Covert, president and project manager of Nuclear Waste Partnership, the WIPP management and operations contractor. "I am appreciative of the unwavering support from our local, state and federal elected officials and stakeholders who ensure we have the proper funding to make infrastructure improvements, like the new ventilation system." ■

CVSA Holds Level VI Certification Classes 168 and 169

Level VI Certification Class 168 was held May 14-17 in Jefferson City, Missouri. Inspectors from the Missouri State Highway Patrol, Kansas Highway Patrol, Indiana State Police, Kansas City Police Department, St. Louis Police Department and the Public Utilities Commission of Ohio were in attendance.

Joining CVSA Director of Level VI Inspection Program Carlisle Smith, the other instructors were Rob Rohr of the Public Utilities Commission of Ohio and Juel Lewis from the Federal Motor Carrier Safety Administration.

Level VI Certification Class 169 was held June 18-21 in Springfield, Illinois. Inspectors from the Illinois State Police, Iowa Department of Transportation, Wisconsin State Patrol and the New Jersey State Police were in attendance. Instruction was provided by Ofc. Rion Stann of

the Pennsylvania State Police, Kelly Horn of the Illinois Emergency Management Agency and Carlisle Smith of CVSA. CVSA Level VI Inspection Program Chair M/Sgt. Todd Armstrong provided assistance during the practical exercises held on one of the days of training. ■



Level VI National Instructor Kelly Horn provides instruction on radioactive materials packaging.



Level VI Inspection Program Chairman M/Sgt. Todd Armstrong instructs students on the Ludlum 14-C survey meter.

NRC Issues Construction Permit for Northwest Medical Isotopes Facility

Northwest Medical Isotopes LLC recently received a construction permit from the Nuclear Regulatory Commission (NRC) to build a molybdenum-99 production facility. The proposed facility will be located at the Discovery Ridge Research Park in Columbia, Missouri.

Molybdenum-99 is used to generate technetium-99m, which is utilized commonly in the U.S. for nuclear medicine procedures. NRC staff determined that the application, submitted in 2015, successfully satisfied safety and environmental review. ■

Source: Council of State Governments Radioactive Materials Transportation Committee Newsletter

CVSA Level VI National Instructor Tom Fuller Retires

By **Carlisle Smith**, Director of Level VI Inspection Program, Commercial Vehicle Safety Alliance

Technical Sgt. Tom Fuller of the New York State Police has retired after more than 31 years of service as the program administrator for the New York State Police's Hazardous Materials, Radiological and Technology Enforcement Program.

Tom became a Motor Carrier Safety Assistance Program (MCSAP) trooper for the New York State Police in 1998 and joined the Hazardous Materials Team in 2003. In 2005, Tom became a CVSA Level VI Inspection Program national instructor. Tom also served as the CVSA Level VI Inspection Program secretary for seven years, as well as chair of the CVSA Hazardous Materials Committee. In addition, Tom taught for the Federal Motor Carrier Safety Administration's National Training Center. In 2012, Tom was elected as CVSA vice president, becoming president in 2013-14.

Tom, "Tommy" to his friends, has been an invaluable asset to the CVSA Level VI Inspection Program and the greater hazardous materials enforcement community. He has given countless hours to training on the national level. Tommy's dedication and service has been an integral part of the success of the Level VI Inspection Program and to CVSA as well. His fellow Level VI instructors appreciate his insight, commentaries and his friendship, and wish him and his wife, Patty, the very best. ■



At the CVSA Workshop in Portland, Oregon, CVSA President Capt. Christopher Turner (left) presented Tom Fuller (right) with an engraved plaque.



CVSA Director of COHMED Program Bill Reese (left) and CVSA Director of the Level VI Inspection Program Carlisle Smith (right) had a special Level VI jacket made for Tom Fuller and presented it to him at the CVSA Board of Directors Meeting on April 12, 2018.



Tom Fuller is featured on the cover of the April 1, 2017, Level VI Inspection Procedures and Out-of-Service Criteria Handbook.



Tom Fuller led his final class in July 2018, in Forsyth, Georgia. Pictured left to right: Tom Fuller; CVSA Director of Level VI Inspection Program Carlisle Smith; and Ofc. Rion Stann.

Some CVSA enforcement members and staff attended Tom Fuller's retirement party in Albany, New York, on June 29, 2018.

Pictured left to right:

Jonathan Bates, Tpr. Scott Maguire and Tpr. Michael Tucker with Massachusetts State Police; CVSA Director of COHMED Program Bill Reese; Ofc. Rion Stann with Pennsylvania State Police; Lt. Donald Bridge Jr. with the Connecticut Department of Motor Vehicles; Tom Fuller; CVSA Director of Roadside Inspection Program Kerri Wirachowsky; and Sgt. Raymond Weiss with New York State Police.



Level VI Roadside Inspections (2018 - Fiscal)

LEVEL VI INSPECTIONS	Federal	State	Total	% of Total
Number of Level VI Inspections	0	565	565	100%
Point of Origin	0	310	310	52.34%
En Route	0	253	253	47.35%
Point of Destination	0	2	2	0.31%
Unknown Location	0	0	0	0%
Level VI Inspections with No Violations	0	547	547	95.95%
Level VI Inspections with Violations	0	18	18	4.05%
Level VI Inspections with Out-of-Service Violations	0	9	9	2.18%

Level VI Roadside Inspection Violations (2018 - Fiscal)

Violation Code	Violation Description	# of Inspections	# of Violations	% of Total Violations	# of OOS Violations	OOS %
393.9A	Inoperative Required Lamps	3	3	13.64%	1	33.33%
393.48A	Inoperative/Defective Brakes	2	2	9.09%	0	0%
396.3A1	Inspection, Repair and Maintenance of Parts and Accessories	2	2	9.09%	1	50%
393.207F	Air Suspension Pressure Loss	1	1	4.55%	1	100%
393.207A	Axle Positioning Parts Defective/Missing	1	1	4.55%	1	100%
393.45D	Brake Connections with Leaks or Constrictions	1	1	4.55%	1	100%
393.45B2	Brake Hose/Tubing Chafing and/or Kinking	1	1	4.55%	0	0%
393.45PC	Brake Tubing and Hose Adequacy – Connections to Power Unit	1	1	4.55%	1	100%
393.201A	Frame Cracked/Loose/Sagging/Broken	1	1	4.55%	1	100%
392.2IRP	IRP Apportioned Tag or Registration Violation	1	1	4.55%	0	0%
393.50	Inadequate Reservoir for Air/Vacuum Brakes	1	1	4.55%	0	0%
393.110D	Large/Odd-Shaped Cargo Not Adequately Secured	1	1	4.55%	0	0%
393.11	No/Defective Lighting Devices/Reflective Devices/Projected	1	1	4.55%	0	0%
396.5B	Oil and/or Grease Leak	1	1	4.55%	1	100%
395.22A	Operating with a Device Not Registered with FMCSA	1	1	4.55%	0	0%
393.75A3	Tire – Flat and/or Audible Air Leak	1	1	4.55%	1	100%
393.75BOOS	Tire-front Tread Depth Less Than 2/32 of Inch on a Major Tread Groove	1	1	4.55%	1	100%
396.3A1T	Tires (General)	1	1	4.55%	1	100%

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JAN. 29-31, 2019
San Antonio, Texas

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