

GUARDIAN

A Publication of the Commercial Vehicle Safety Alliance

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DRUG RECOGNITION EVALUATION POST-INCIDENT REVIEW: SOMETHING TO CONSIDER IN CASES WITHOUT AN EVALUATION

What to Do If You Suspect
a Staged Accident

U.S. DOT Releases
Comprehensive National
Roadway Safety Strategy

Mexico's SCT
Becomes SICT

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GUARDIAN

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Commercial Vehicle Safety Alliance



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PRESIDENT'S MESSAGE

Consider Leadership

By **Capt. John Broers**, South Dakota Highway Patrol, CVSA President

A couple of years ago, I started telling my now 7-year-old nephew "dad jokes." Mostly, these were over the phone or occasional video chat. When the jokes worked — when he got the reference and my timing was on — the laughs and giggles that came from him were contagious. Occasionally, he'd roll his eyes, as only a 7-year-old can, with sheer contempt at how silly he thought some of the jokes were. However, a few of my favorite dad jokes received little to no reaction. They would flow from me with what I thought was perfect execution, followed by eager anticipation of the infectious laugh that I thought was sure to follow but never came. I would repeat the punchline, thinking he just didn't hear it. He sometimes spared none of my feelings with his thoughts on a particular joke; other times, he quickly changed the subject to his favorite superhero.

The lesson? The right dad joke works for the right audience at the right time. The same goes for our organization.

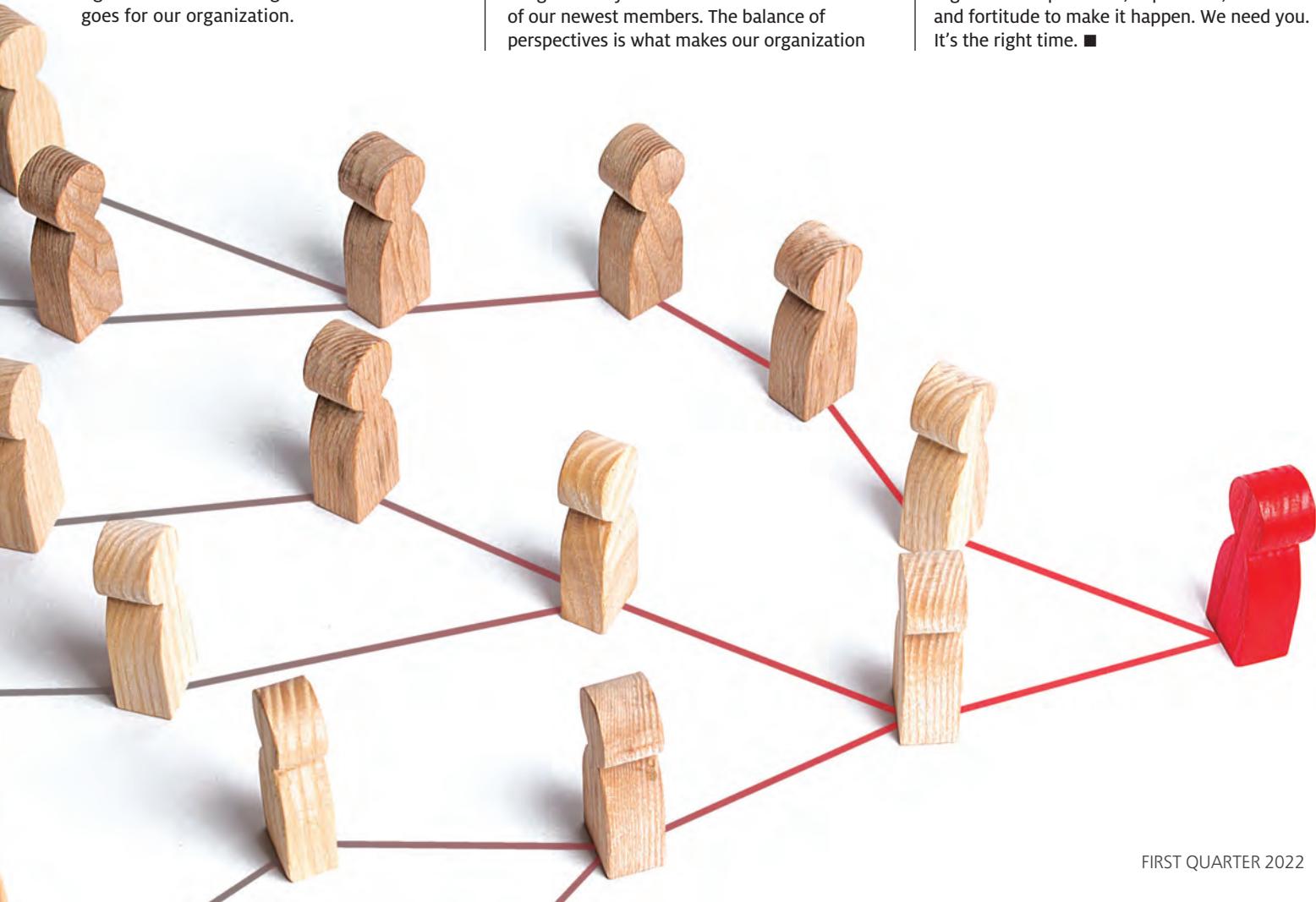
The experience that members of the Alliance bring to the organization varies widely. The veterans experienced the beginning of the Alliance and where we came from. They know the "why," the "when" and the "what for." Some of us remember removing worn horseshoes and a broken cinch from the out-of-service criteria. Our newest members may lack some of the historical perspective, but are eager, willing and excited for modernization. Some are curious as to why we aren't inspecting trucks virtually yet. We are all looking forward to the future and what it will bring.

To reach that future successfully, the Alliance needs participation from our next generation of leaders within our membership. Whether your experience is with wagons or the latest technology, the Alliance needs you to move us forward. Our newest members rely on the experience and knowledge of veteran members. In turn, those veterans are invigorated by the ambition and enthusiasm of our newest members. The balance of perspectives is what makes our organization

flourish. It's the dad joke that everyone gets; it just works.

So, whether the next conference is your first or your 50th, please consider one of the Alliance's many leadership opportunities. Encourage your coworkers to consider it, too. All it takes is the desire to be part of CVSA's future. We need all kinds of perspectives. We all have our strengths and weaknesses, our priorities and specialties. You don't need to have an agenda, prior leadership experience or endorsements from a superhero. We simply need you and your desire to be part of what comes next for the Alliance. You can start small, in a program, committee or your region.

Leaving your mark on the future of commercial motor vehicle safety is a legacy worth pursuing. The road to zero highway fatalities needs people like you to build it. We need a variety of people working on the project, bringing together our specialties, experience, new ideas and fortitude to make it happen. We need you. It's the right time. ■





EXECUTIVE DIRECTOR'S MESSAGE

The Importance of Effective CVSA-Certified Roadside Inspector Training

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

Effective, relevant training is the foundation of a uniform and impactful roadside inspection and enforcement program. In an ever-changing regulatory environment, each new rule or change in regulations requires in-service refresher training to bring seasoned enforcement personnel up to date. Each new exemption provided to the motor carrier industry and the various advancements in vehicle design and technology also necessitate ongoing training. Simply put, enforcement personnel must keep up with the latest industry developments to properly enforce the regulations and standards they are sworn to uphold. This new information must be presented to inspectors clearly, consistently and in a timely manner in order for them to effectively apply it roadside.

This has not been the case under the current process, where inspector training is delegated to a third-party administrator that is not substantively connected to the commercial motor vehicle inspection and enforcement community. For many years, the membership of the Alliance has expressed concerns over the quality of these training services, citing training materials that have not been updated in a timely manner, often containing outdated and inaccurate information. Outdated training leaves many state agencies struggling to ensure their inspectors and enforcement personnel have the information they need to effectively enforce the latest regulations in a consistent and uniform manner.

The problem is compounded when the administrator's lack of technical abilities, subject matter expertise and knowledge of inspection and enforcement practices supplants the dedicated work of the commercial motor vehicle roadside enforcement and inspection community. It makes little sense to continue

with this inefficient and ineffective process of delegating inspector training.

As the founding organization and entity responsible for the development and maintenance of all non-regulatory elements of the North American Standard Inspection Program, CVSA is uniquely qualified and well positioned to deliver state roadside inspector training. Over the years, the Alliance has developed the tools and equipment used in the roadside inspection process and has authored and produced the certification standards, inspection procedures, operational policies, inspection bulletins, training videos, safety standards, enforcement tolerances and North American Standard Out-of-Service Criteria referenced throughout the Federal Motor Carrier Safety Regulations (FMCSRs).

Enforcement of the FMCSRs and Hazardous Materials Regulations (HMRs) is a very specialized field that would be better served by the involvement of the organization directly involved in the foundational development and maintenance of the regulations. CVSA's understanding of the regulations, guidance and related policy will enable the Alliance to effectively deliver critical safety training to the enforcement and inspector community in a timely manner. CVSA also shares the Federal Motor Carrier Safety Administration's (FMCSA) commitment to providing the states and territories with the training resources they need to succeed and will do everything possible to make them successful.

The Alliance is a public-sector nonprofit association comprised of local, state, provincial and territorial commercial motor vehicle safety officials. In partnership with FMCSA, the membership of the Alliance has

a long history of strong collaboration with all parties working to improve commercial motor vehicle safety. CVSA and FMCSA service the same constituency and, as a result, often work together to help ensure the jurisdictions have the tools and resources needed to reduce crashes, injuries and fatalities on our nation's roadways, while ensuring accurate, uniform enforcement of the FMCSRs and HMRs.

The Alliance has an established history of producing quality training content, playing a leading role in the development and maintenance of all roadside inspection materials for the enforcement community in Canada, Mexico and the United States. Additionally, the Alliance has the technical abilities and subject matter expertise to effectively deliver the necessary training as well. Given that the Alliance is statutorily recognized as the organization that certifies roadside inspection and enforcement personnel to conduct on-road commercial motor vehicle safety inspections, it should be the organization that provides all services related to state inspector training and certification.

Consistency and uniformity in enforcement are the cornerstones of the North American Standard Inspection Program, and the enforcement officials that make up CVSA's core membership are responsible for the day-to-day execution of roadside inspection and enforcement activities. As the organization that represents the roadside inspection community and the entity that founded and maintains the inspection program, the Alliance has a vested interest in the continued success of both. ■

REGION II

NJDOT Implements Real-Time Traffic Alert System for Commercial Vehicles

The New Jersey Department of Transportation (NJDOT) implemented a real-time traffic alert system for commercial motor vehicle drivers, making New Jersey one of the first states in the country to offer this safety feature.

The system offers in-cab traffic congestion updates and slowdown alerts to commercial motor vehicle drivers on 647 miles of New Jersey's highways, including the New Jersey Turnpike, Garden State Parkway and Atlantic City Expressway. Commercial motor vehicle drivers will be alerted about two to three miles before the slowdown begins, giving them plenty of time to reduce speed to help prevent crashes.

"The ability to alert commercial vehicle drivers to unexpected traffic conditions will improve safety for everyone driving on New Jersey's highways," said NJDOT Commissioner Diane Gutierrez-Scaccetti. "By warning drivers of congestion that is miles ahead, drivers of large commercial vehicles will have the extra time needed to safely slow down."

The system was developed in partnership with Intelligent Imaging Systems – delivered to drivers through its wholly-owned subsidiary, Drivewyze Inc., provider of connected truck services – along with INRIX, a transportation data and analytics company. The alerts are available to all carriers and drivers using the Drivewyze PreClear software.

According to the trucking industry, a fully loaded tractor-trailer traveling at 65 mph takes 66% longer to stop than a passenger car. This can result in a collision if a truck does not have enough stopping distance. In the United States, nearly 30% of all collisions

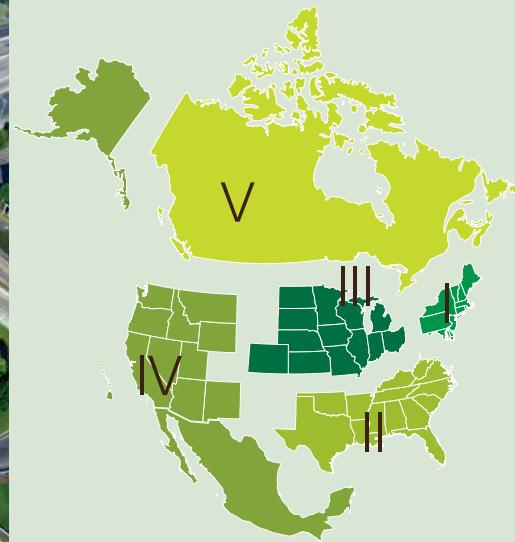
happen on interstates, with many being secondary crashes when a truck or car rear-ends a vehicle that was in a queue from an initial crash.

"The New Jersey Motor Truck Association applauds the efforts to provide advance safety alerts to commercial truck drivers via Drivewyze," said Gail Toth of the NJ Motor Truck Association. "These efforts will help to keep our workplace – the highways – safer for all."

The Drivewyze safety alert program is designed to help reduce commercial motor vehicle crashes and is a tool NJDOT has implemented as the state moves toward realizing its goal of zero deaths on its roadways.

The INRIX traffic and slowdown alerts will join other notifications that truck drivers already receive through Drivewyze's in-cab safety notification service, such as slowdown alerts when coming upon dangerous curves, and caution notifications when nearing a low bridge or mountain-corridor steep grades. The system will only send notifications to subscribed drivers within the geographical boundaries of New Jersey. Drivewyze is looking to offer similar geolocated services in other states.

Motorists are encouraged to check NJDOT's traffic information website, www.511nj.org, for construction updates and real-time travel information. For NJDOT news, follow the department on Twitter @NewJerseyDOT and Facebook. ■



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

Oklahoma's Delaware County Implements Virtual Weigh Station

By Matt G. Ingham, Point of Entry Program Administrator, Oklahoma Department of Transportation; and Peter Fedechko, Vice President, North America Sales, International Road Dynamics Inc.

The Oklahoma Department of Transportation (ODOT) and Oklahoma Highway Patrol (OHP) have implemented the state's first virtual weigh station (VWS) for weighing and e-screening commercial motor vehicles entering from Arkansas via U.S. Route 412. The new VWS is located on the westbound lanes of the divided highway in Delaware County.

The goal of the project is to improve road safety by identifying potentially overweight vehicles and out-of-service vehicles and carriers through an expansion of the state's electronic screening network. The VWS allows OHP to monitor U.S. 412 the same way as more heavily traveled port of entry (POE) sites and will support targeted mobile enforcement, when needed. This will advance the mission of removing unsafe vehicles from the highway.

The VWS system technology and implementation was carried out by International Road Dynamics (IRD). The site design, installation and operation conform to the same project requirements as the Oklahoma POE e-screening sites deployed in recent years.

Commercial motor vehicles in both lanes are weighed by weigh-in-motion (WIM) scales to determine their compliance with weight restrictions for the vehicle's type and class. Vehicles are also checked by an over-height detection system.

The WIM sensors are IRD-PAT Bending Plate® scales installed in a double-threshold configuration for greater accuracy. Initial calibration indicated that the scales were measuring well within the American Society for Testing and Materials Type III standard for WIM accuracy. Lane 1 was measuring gross vehicle weight (GVW) with a maximum error of -2.4% in the test runs, while Lane 2 had only 0.9% maximum error in GVW during the test runs.

The two lanes are also equipped with automated license plate readers (ALPR) and U.S. Department of Transportation (USDOT) cameras for vehicle identification. All commercially classed vehicles have digital photos taken of their license plates and passenger-side doors so that the license plate and USDOT numbers may be extracted using optical character recognition (OCR) technology. The ALPR also determine the jurisdiction where the plate was issued. The OCR results are then screened against federal and state databases to identify the truck and carrier, and to screen against any related safety information.

The site uses IRD's iSINC® WIM controller to provide WIM screening and an IRD Intelligent Roadside Operation Credentialing (iROC) system to provide e-screening against SAFER and PRISM databases. The iROC obtains its credential and safety information from a centralized off-site server. A cell modem provides remote access to the site by authorized users.

All commercial motor vehicles traveling through the VWS are assigned a pass or fail status depending on e-screening settings and their compliance with weight regulations. Vehicles without credential identification are automatically assigned a fail status. When that happens, highway patrol can make a well-informed decision to pull the vehicle over for additional review.

Through a web-based interface, mobile enforcement personnel can also identify and select vehicles for weight enforcement or citations. Officers can pull flagged vehicles off the road to a designated area for weighing on portable weigh pads. The SAW III portable scales used are capable of dynamic (WIM) or static weighing. The static weights are National Type Evaluation Program-certified accurate so they may be used to issue citations. Static weights from the portable scales can also be entered into the VWS software to automatically calibrate the Bending Plate® scales to ensure they maintain optimal performance.

Additionally, the VWS software enables the state to collect high-quality commercial motor vehicle weight and screening data 24/7. The site will also be integrated with ViM cloud-based central data reporting system in the near future to provide more options for data analysis. Additional daily reports will be sent to the Oklahoma centralized host operations computer. IRD's intelligent maintenance management service will provide a web-based interface for monitoring and reporting on maintenance service and equipment status.

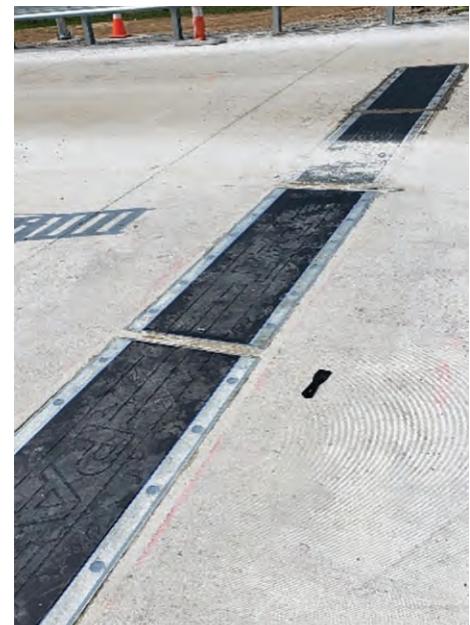
The new Delaware County VWS advances the state's commercial motor vehicle enforcement program and will help OHP and ODOT improve road safety and infrastructure protection. Obtaining the same information through the same interface from both the virtual site and previously deployed inspection stations enables OHP to efficiently monitor operations across the road network. ■



A test truck crosses the WIM scales at the U.S. 412 VWS site.



iSINC® WIM Controller.



IRD-PAT Bending Plate® WIM Scales.

REGION II

Florida Highway Patrol Conducts Post-Crash Training Course

By Sgt. Denise Meredith, Commercial Vehicle Enforcement, Training Unit, Florida Highway Patrol

The Florida Highway Patrol (FHP) Commercial Vehicle Enforcement Training Unit conducted a post-crash training course in Orlando, Florida, Jan. 3-14. Students were instructed how to conduct a post-crash inspection following a traffic crash involving a commercial motor vehicle. Staff members from the National Training Center (NTC) attended a portion of the training to produce a training video for roadside inspections and safety investigators, at which time Capt. Bryant Gay demonstrated how an air braking system operates on a commercial motor vehicle. ■



Above from left to right: Darrin Frison, multimedia specialist, NTC; Ben Werner, curriculum manager, NTC; Sgt. Tim May, FHP; Capt. Bryant Gay, FHP; Tpr. Dave Morrison, FHP; Margie Rodriguez McQueen, safety programs manager, NTC; and Ian Keldin, videographer, NTC. **Below:** Capt. Bryant Gay, with the Florida Highway Patrol, demonstrates the air braking system operation on a commercial motor vehicle.



MARK YOUR CALENDAR

2022 ENFORCEMENT INITIATIVES



INTERNATIONAL ROADCHECK
May 17-19, 2022



OPERATION SAFE DRIVER WEEK
July 10-16, 2022



BRAKE SAFETY WEEK
August 21-27, 2022



North Carolina State Highway Patrol Commercial Vehicle Enforcement Updates

By Monica Y. Greiss, Staff Development Specialist II, Commercial Vehicle Enforcement Section, North Carolina State Highway Patrol, North Carolina Department of Public Safety

Safe DRIVE – Fifth Wave

The North Carolina State Highway Patrol participated in Operation DRIVE (Distracted, Reckless, Impaired, Visibility Enforcement) during the fifth wave of the program, conducted Nov. 22-24, 2021. Operation DRIVE is a high-visibility, multi-state traffic enforcement effort on interstate corridors spanning from North Carolina to Florida. This operation is designed to eliminate traffic fatalities by reducing crashes involving large trucks, buses and passenger vehicles, with the primary goal of changing unsafe driver behaviors.

For this operation, the North Carolina State Highway Patrol partnered with the South Carolina State Transport Police, Georgia Department of Public Safety's Motor Carrier Compliance Division, Alabama Highway Patrol, Arkansas State Police, Kentucky State Police, Tennessee Highway Patrol, Virginia State Police and the Florida Highway Patrol. The North Carolina State Highway Patrol conducted 1,885 commercial motor vehicle inspections, identified 168 out-of-service vehicles and placed 90 drivers out of service. Collectively, participating states conducted 4,949 commercial motor vehicle inspections. Inspectors placed 400 drivers and 680 vehicles out of service during the fifth wave of Operation DRIVE.

CVE Seatbelt Initiative

Troop B District 9 of the Commercial Vehicle Enforcement Section conducted a seatbelt initiative the week of Sept. 27, 2021. Officers conducted 260 inspections, consisting of 37 Level I Inspections, 81 Level II Inspections and 142 Level III Inspections. Thirty-four citations were issued, specifically for seatbelt compliance violations. ■



REGION IV

UPDATES FROM Mexico

SCT Becomes SICT

As of Oct. 21, 2021, as stated in the Official Gazette of the Federation, the Secretariat of Communications and Transportation (SCT) has changed its name to Secretariat of Infrastructure, Communications and Transportation (SICT). The Mexican Congress approved the change of name.

The functions and offices that currently belong to the Secretariat will not undergo any change. Likewise, relationships with other institutions, both national and international, will continue to function without any modification.

The change is one more advance in the constant work of this Secretariat, which continues with its commitment to provide citizens with better and safer roads as well as technological advancements of instruments and equipment for road safety.

President of the Republic Appoints New Undersecretary of Transportation in the SICT

As of Jan. 11, Carlos Alfonso Morán Moguel left his position as SICT undersecretary of transportation to serve as general director of Benito Juárez International Airport in Mexico City. Architect Rogelio Jiménez Pons, who has extensive experience in the transportation sector in Mexico, assumed the undersecretary of transportation position.



Pictured left to right: New Undersecretary Rogelio Jiménez Pons, Secretary Jorge Arganis Díaz Leal and Former Undersecretary Carlos Alfonso Morán Moguel.

Official Standard on Signaling and Road Devices for Streets and Highways Posted for Public Consultation

For its conference in January, the SICT and the Secretariat of Agrarian, Territorial and Urban Development – through the National Consultative Committee for the Standardization of Land Transport in conjunction with the National Consultative Committee for the Standardization of Land Use and Urban Development – published the proposed Official Mexican Standard PROY-NOM-034-SCT2/SEDATU-2021 in the Official Gazette of the Federation.

This project focuses on signaling and road devices for streets and roads, as a mechanism to lay the foundations for the formation of a harmonized signaling system in the national territory.

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It is a mandatory regulation, applicable throughout the national territory that will allow, among other benefits, the standardization of horizontal and vertical signaling as well as different road devices, contributing to road safety.

One of the main objectives of the NOM (its acronym in Spanish) is to give priority to road safety in the streets and highways of the country, following the narrative of the mobility pyramid, which places people as a priority.

A 60-day public comment time follows the publication of this new technical regulation. During this time, any person in the national territory may submit comments and identify areas of opportunity.

It should be noted that the NOM project, once approved as a definitive NOM, will replace the current horizontal and vertical marking of highways and urban thoroughfares established by NOM-034-SCT2-2011. The current NOM project broadens its scope in urban areas, provides greater emphasis on vulnerable users and incorporates signals and devices for mainly urban use.

For more information on the NOM project, visit www.dof.gob.mx/nota_detalle.php?codigo=5640134&fecha=04/01/2022. ■



Montana Travel Team Saturates Locations and Focuses on Level I Inspections

By **Sgt. Matt Caudill**, Motor Carrier Services Enforcement Bureau, Montana Department of Transportation

While the idea of a team organized to focus on high-risk areas in a jurisdiction isn't new to law enforcement, Montana's Travel Team is a new organization within our agency. This team is staffed by highly motivated officers from around the state and conducts a high number of inspections in areas that are not typically worked and show high traffic.

The Travel Team spends one week every month or every other month focusing on Level I Inspections. As can be imagined by those that work the road, a high quantity of inspections generally yields compelling results. Violations range from intoxicated drivers to significant mechanical violations as can be seen in the photographs. Over the course of 2021, the Travel Team conducted about 800 Level I Inspections, 114 Level II Inspections and 30 Level III Inspections. Of these inspections, 182 vehicles were placed out of service.

As with anything in Montana, the weather was the biggest adversary faced by the Travel Team, with highs over 100 degrees and lows in the single digits. They also contended with high winds and snow at various points in the year; however, they persevered and continued to put up excellent numbers, regardless of the elements. For all of these reasons, every member of Montana's Travel Team deserves recognition for fulfilling the mission of Montana Motor Carrier Services and protecting the traveling public from commercial motor vehicles operating under dangerous conditions. ■





DRUG RECOGNITION EVALUATION POST-INCIDENT REVIEW: SOMETHING TO CONSIDER IN CASES WITHOUT AN EVALUATION

By Beth Barnes, Traffic Safety Resource Prosecutor, Arizona Governor's Office of Highway Safety and the Arizona DUI Abatement Council, and Assistant City Prosecutor, City of Phoenix Prosecutor's Office

Ideally, in any drug-impaired driving case, a complete drug recognition evaluation (DRE) is conducted during the initial investigation. Too often, however, a DRE is not called or is not available and no evaluation is performed. The absence of a contemporaneous DRE evaluation does not always mean the expertise of an experienced DRE officer cannot be beneficial. A DRE post-incident review (often referred to as a DRE reconstruction) may be worth considering.

DRE post-incident reviews are not new. Officers started conducting them in the 1990s. Yet, they have become a hot topic of late. Accordingly, the International Association of Chiefs of Police Technical Advisory Panel recently formed a working group that is preparing a list of considerations for those contemplating pursuing a post-incident review.

This group defined a DRE post-incident review as "a process utilized by certified drug recognition experts to provide follow-up investigative steps to collect, review, analyze, and interpret evidence and facts post-incident

to render articulable facts and information, which may include opinions related to impairment." In other words, a post-incident review is the use of a qualified, experienced drug recognition expert to conduct an after-the-fact investigation to determine if there is enough information available to develop an expert opinion. The drug recognition expert then reports those findings and often testifies to them in court as an expert witness.

A DRE conducted on the date of violation is always superior to, and much more likely to be admitted into evidence, than a DRE post-incident review. One should never fail to call a drug recognition expert on the date of violation on the assumption that a DRE post-incident review can be conducted later.

Whether to pursue a DRE post-incident review should be carefully considered and undertaken with caution. DRE post-incident reviews are not for every case – or even most cases – where a DRE was not conducted at the time of violation. While they are a very useful tool, post-incident DREs should only be used under ideal circumstances, especially if they

are new to a prosecutor's jurisdiction; do not risk creating bad law.

Below are some suggestions for deciding whether a DRE post-incident review is appropriate for a given case and tips for executing one.

Selecting a Drug Recognition Expert

Because the state will have to qualify the drug recognition expert, thought should go into determining who will conduct the DRE post-incident review and testify as a witness. When these reviews are performed, be sure to use a drug recognition expert with the extensive training and experience necessary to qualify him/her in court as an expert to conduct a DRE post-incident review.

To increase the likelihood the testimony will be admitted at trial, it is recommended that prosecutors use currently certified, long-serving DRE instructors who have conducted a large number of DREs. Their expertise and experience are much broader than just attending DRE school. These credentials better

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lend themselves to DRE post-incident reviews. Prior experience testifying as an expert is also beneficial.

Evaluating the Case

DRE post-incident reviews should not be casually embarked upon. The importance of scrupulously assessing the case to determine if it is appropriate for a DRE post-incident review cannot be overstressed. The likelihood that the review will be admitted in court should also be evaluated. A prosecutor should review his/her case to ensure there is sufficient information to allow the drug recognition expert to reliably form a supportable opinion. It is much easier to admit this type of testimony if toxicology results are available. In fact, trial courts often refuse to allow this type of testimony when toxicology results are lacking. If there are no toxicology results, there must be other, independent evidence of drug use, such as drugs, drug paraphernalia, admissions or witness statements.

If the drug recognition expert determines there is insufficient evidence for a supportable opinion, other parties must respect this decision. Avoid pressuring the drug recognition expert to do a post-incident review if he/she is not comfortable doing one. Do not pressure him or her to form an opinion. The drug recognition expert should not provide an opinion if there is not enough evidence to solidly support it.

Collecting Evidence

A common mistake made by parties new to DRE post-incident reviews is to rely only on the police report, toxicology results and other evidence from the initial investigation. The prosecutor and drug recognition expert also need to collaborate to collect as much additional evidence as possible to allow for a comprehensive review.

Just as in the case of traditional DREs, the drug recognition expert should interview the investigating officers and other witnesses. Not only does this provide the drug recognition expert with more information, but it is also one of the standard steps of the DRE protocol and, accordingly, something the trial judge may want. A review of trial and appellate

court rulings suggests that the more closely the DRE post-incident review resembles a typical DRE evaluation, the more likely it will be admitted during trial.

Customary additional sources of data to be obtained by the drug recognition expert or provided by the prosecutor include:

- Police reports
- EMT or paramedic observations and reports
- Doctor and nurse observations and records
- Medical records and test results
- Body-worn recordings of officer contact with the suspect
- 911 or dispatch recordings
- Civilian witness observations
- Relevant video recordings
- The suspect's statements
- Circumstantial evidence found on or near the suspect, such as paraphernalia
- Crash reports
- Jail booking information
- Toxicology reports

This list is by no means all inclusive. Much thought needs to be put into what relevant evidence might be available, and the drug recognition expert should be prepared to testify to all the evidence that he/she reviewed.

Prosecutors must comply with local discovery rules and decide if the drug recognition expert needs to complete a supplemental report. Reports, opinions and testimony should include an account of the relied-upon evidence as well as any limitations. They should also clearly state that the opinions are based upon a post-incident review, not the drug recognition expert's drug influence evaluation or personal observation of the defendant.

Court Preparation and Testimony

The limits of testimony and form of expressed opinions should be carefully thought out by the drug recognition expert and prosecutor to ensure consistency with local legal constraints. Testimony can impact the fact finder as well as the future admissibility of this type of evidence across the country. The drug recognition expert should be cautious about rendering an opinion that the defendant was actually impaired or under the influence of a drug category. Testimony that the defendant exhibited symptoms of impairment consistent with drug use of a category or consistent with the reported toxicology results is a safer option and much more likely to be admitted.

The prosecutor will have to lay sufficient foundation in court to qualify the drug recognition expert as an expert for DRE post-incident reviews. This foundational showing should address more than the usual training and experience testimony and be specifically tailored to the DRE post-incident review issue. Much of the training and experience obtained by drug recognition experts, and especially instructors, lends itself quite well to this issue. Be sure to point out during testimony how the drug recognition expert's training and experience help prepare for DRE post-incident reviews.

Examples of areas to explore include:

- The fact that incomplete DREs are included in the DRE curriculum and in appropriate circumstances allowed by the protocol
- Cases in which the drug recognition expert was not able to complete the entire protocol process but was still able to form an opinion
- The fact that during training, drug recognition expert students watch videos of DREs they did not conduct and review face sheets they did not prepare, from which they must then describe impairment and form opinions
- Experience serving as a scribe
- Drug-impaired driving cases where a DRE was not conducted but the drug recognition expert was able to form a relevant opinion

- Previous DRE post-incident reviews
- Any training received for DRE post-incident reviews
- All relevant experience or training that would assist with a DRE post-incident review, including training as an EMT, crash reconstruction training, etc.

If the witness is a drug recognition expert instructor or state coordinator, he or she should have experience reviewing DRE reports conducted by others to ensure the correct call was made based on the evidence presented. This experience is particularly helpful in DRE post-incident reviews.

Additionally, the prosecutor and drug recognition expert should prepare for testimony, putting thought into how to:

- Explain the expert's ability to give an opinion even though he/she did not conduct an evaluation on the date of violation.
- Discuss the general indicators of impairment observed by the witnesses and how those observations relate to driving. If there is documented evidence of indicators, such as the person's blood pressure or pupil size, discuss how that evidence is relevant to the analysis.
- Tie toxicology results, drugs, paraphernalia and witness admissions to the symptoms of impairment exhibited on the date of violation and demonstrate how these are relevant. If the drug recognition expert knew the toxicology results before forming the opinion, prepare for the defense argument that the expert merely relied on the toxicology results to form the opinion.

A prosecutor should create a good record and consider providing the court with a pleading that incorporates case law from his/her jurisdiction and others where DRE post-incident reviews have been admitted. Make sure the testimony provided by the expert is detailed and thorough and that the prosecutor establishes an adequate foundation for the case being made.

The drug recognition expert should avoid testifying that a person was impaired by certain drugs or categories of drugs based solely on the post-incident review, behavioral observations or a quantitative toxicology result. Instead, it is preferable to explain that the observed signs and symptoms are consistent with use of the various drug categories or impairment. This type of opinion should generally be limited to cases where toxicology results support the presence of a certain category. Polycategory drug use must also be taken into consideration.

It appears from a review of transcripts and case law that most courts only allow the drug recognition expert to testify that the signs and symptoms of impairment the defendant exhibited on the date of the incident are consistent with the drugs that were in the blood or urine sample, or something similar. Rarely is the drug recognition expert allowed to give an opinion regarding the defendant's ability to safely operate a motor vehicle.

If this testimony is new to a prosecutor's jurisdiction or if there is concern regarding the court's willingness to admit this type of testimony, a prosecutor may want to begin by using DRE post-incident review as rebuttal evidence rather than in the state's case-in-chief.

Case Law

The use of DRE post-incident review, or otherwise calling a drug recognition expert who did not participate in the investigation on the date of violation, has not been widely litigated. Published opinions allowing this type of testimony include *Wooten v. State*, 267 S.W.3d 289 (TX App.-Houston 2008); *State v. Wynne*, 182 CT App. 706 (App. 2018); *People v. Ciborowski*, 55 N.E.3d 259 (IL App. 2016); and *State v. Neal*, 267 NC App. 442 (2019). This type of testimony has also been used in a few additional states.

Conclusion

A DRE conducted at the time of the incident will always be preferable to a DRE post-incident review. The post-incident review should never be considered a replacement for the traditional DRE. However, if appropriately used, a DRE post-incident review can be an effective tool to strengthen a case where a contemporaneous DRE was not conducted. ■

The term "DRE post-incident review" has been recommended by the International Association of Chiefs of Police Technical Advisory Panel DRE Review Working Group in place of "DRE reconstruction" to avoid the potential of implying the standards used to admit crash reconstruction evidence should be applied to DRE post-incident reviews.



CVSA Welcomes Three New Staff Members



Rodolfo Giacoman joined CVSA in November 2021 as the fatigue management program specialist. He has collaborated with CVSA since 1993 as a contractor, associate member and sponsor. Most recently, Rodolfo served as general manager of Alertness.Pro for seven years, where he conducted education and training programs for motor carriers and commercial motor vehicle drivers on fatigue management, including the North American Fatigue Management Program. Rodolfo is a veteran program manager of mission-critical public safety programs and systems under federal and international contracts. During his two decades as a contractor for the U.S. Department of Transportation, Rodolfo developed his expertise in driver crash risk mitigation, enforcement information systems and international safety operations. He also performed periodic commercial motor vehicle inspections and maintenance for his family's trucking business. His first paying job was as a CDL driver of an articulated tow truck in intra-city and interstate operations. Rodolfo may be reached at rodolfov@cvsa.org or 301-830-6155.



Katie Morton joined CVSA in December 2021 as the hazardous materials specialist. She served 15 years with the Missouri Department of Transportation as an investigator, lead staff trainer and hazardous materials specialist, also acting as a subject matter expert on electronic logging devices and the 2020 hours-of-service rule changes. Additionally, she was a certified inspector who conducted safety audits, compliance reviews and complaint investigations. Katie has a Bachelor of Science degree in criminal justice and a master's degree in public affairs. She may be reached at katiem@cvsa.org or 301-960-1141.



Ariel Carter joined CVSA in January 2022 as the grants management specialist. She has years of experience administrating complex grant portfolios. Before joining CVSA, Ariel's professional background included designing, implementing and managing domestic and international grant programs as she worked as an intermediary on behalf of Fortune 500 companies, in addition to working with private foundations. Ariel has a Bachelor of Arts in criminology, Bachelor of Science in marketing and a master's degree in development studies. She may be reached at arielc@cvsa.org or 301-960-1142. ■

CVSA Offers Hazardous Materials Instructor Training

By **Bill Reese**, Director of Hazardous Materials Programs, Commercial Vehicle Safety Alliance

In fiscal 2021, CVSA received a Hazardous Materials Instructor Training (HMIT) grant from the Pipeline and Hazardous Materials Safety Administration. The purpose of this grant program is to provide training for hazardous materials (hazmat) instructors who train hazmat employees. That was the first time CVSA applied for that grant, which focuses on training the hazmat industry. The resulting training opportunity is open to anyone in the regulated hazmat community.

Last year, CVSA was able to hold four 40-hour HMIT courses, thanks to this grant. One in-person course was held in Salt Lake City, Utah, in September 2021. Due to the pandemic, three of the courses were held virtually. The 40-hour virtual courses were delivered in two different ways: either as five 8-hour days in one week or six shorter days over two weeks. We will continue to offer both formats for future virtual courses.

With either format, two days of the course are spent on team projects. Each team is given a hazmat training topic and required to develop a presentation on the assigned topic that involves all team members. Teams deliver their presentations to the rest of the course participants and are evaluated by the instructors and other participants.

Through this process, one of the things we've identified is the need for a more basic introductory course to hazmat instructor training. To address this issue, we are developing a 24-hour course that will address HMIT at a more basic level. The first course is tentatively scheduled for April.

Virtual and in-person training courses are scheduled throughout 2022. Visit www.cvsa.org/training for a list of training courses and dates.

You may also access an HMIT course and an archive of hazmat-specific webinars on CVSA Learning. Visit www.cvsa.org/memberportal to log in. Click on the CVSA Learning tab, then select "Hazmat." ■



Five Reasons Why Fatigue Is a Tough Cookie to Crack



By Rodolfo Giacoman, Fatigue Management Program Specialist, Commercial Vehicle Safety Alliance

Late last year, CVSA adopted a program that has little to do with enforcement and yet a lot to do with road safety: the North American Fatigue Management Program (NAFMP). NAFMP resulted from collaborative efforts by federal, state and provincial governments, along with industry organizations. It was developed by sleep and fatigue management scientists and field-tested by motor carriers from both Canada and the U.S., over the course of four development phases spanning more than a decade. Uniquely, it is sponsored by federal regulatory agencies but is entirely voluntary.

While the NAFMP seeks to reduce driver fatigue, it does not place the entire burden of fatigue management on drivers. It also considers the role played by drivers' families,

motor carrier executives, managers, trainers, dispatchers, shippers, receivers and brokers. While it is a free program, it does require an investment to implement its five major components:

1. Safety culture
2. Fatigue risk management system
3. Sleep disorder screening and treatment program
4. Trip scheduling practices and fatigue management technologies
5. Education and training via a Train the Trainer Course with PowerPoint slides or the eLearning platform, both of which are available at nafmp.org (while on the NAFMP website, check out the return-on-investment calculator)

Some may wonder, why all the fuss? Aren't hours-of-service (HOS) rules and a good night's sleep all you need to avoid fatigue? Please consider the following five reasons why fatigue is a tough cookie to crack without a comprehensive strategy to address this multifaceted issue.

REASON 1

Fatigue Cannot Be Regulated

HOS rules allow drivers to sleep and rest, and compliance with these rules is proven to lower crash rates. They are generally enforceable and encourage periods of rest to combat fatigue.

However, HOS rules are not a proactive approach, less a comprehensive one. In addition to the time on the job, several

[Continued on next page](#)



Continued from page 13

factors contribute to driver alertness (see more on these factors under Reason 4). It is impossible to regulate all fatigue risk factors or what drivers do in their free time. Being on a break does not necessarily mean a driver is resting. For these reasons, a proactive and comprehensive approach to address, optimize and manage all fatigue risk factors is needed in addition to HOS regulations.

REASON 2

Fatigue Is Hard to Measure

Accounting for fatigue-related crashes is difficult because fatigue can contribute to crashes in subtle ways. Drivers may not recognize that their responses were dulled by exhaustion or admit to falling asleep at the wheel. Drivers may not even recall what happened before the crash. Tragically, drivers may also be severely injured or killed in the crash, leaving few clues as to the cause. Also, it can be difficult to distinguish between fatigue, distraction and other crash factors.

However, we know what a typical fatigue-related crash looks like. It is usually a single-vehicle road departure crash occurring between 2-7 a.m. These crashes mostly happen when the driver is alone and often on monotonous roads. The worst part is that fatigue-related crashes are usually serious, resulting in injuries or death.

In a 1990 study, the National Transportation Safety Board (NTSB) estimated that fatigue was the principal factor in 31% of crashes resulting in a driver fatality. This 32-year-old study has long been considered the best estimate on fatigue-related crashes. More recently, the AAA Foundation for Traffic Safety found that the occurrence of crashes involving drowsiness is nearly eight times higher than federal estimates show, based on in-vehicle dashcam video research analysis. The AAA report stated that "the difficulty of detecting drowsiness following a crash makes drowsy driving one of the most underreported traffic safety issues."

To combat this risk, motor carriers need to establish a fatigue risk management system to monitor and deter fatigue-related incidents using fatigue management technologies as recommended by the NAFMP.

REASON 3

Fatigue Is Difficult to Identify

Realizing that we are fatigued is not always easy. Our self-assessment bias makes us believe that we are safe drivers even when we are not at full capacity. A driver fatigue and alertness study found that drivers overestimate their alertness. Self-ratings were often inaccurate compared to objective measures of alertness. Self-ratings tend to be based on expectations rather than reality,

such as "I just started driving, so I couldn't be tired." Additionally, most driving is a solitary activity, so we cannot directly compare our performance to that of others.

That's why the NAFMP includes driver training to identify objective signs of fatigue. Among others, these signs include eyelid drop, yawning, wandering thoughts, swaying or jerking head movements, reduced field-of-vision, fidgeting, adjusting the HVAC, crossing the rumble strip, drift and jerk steering, delayed or incorrect responses and, the worst, microsleeps.

REASON 4

Fatigue Has Supply and Demand Factors

Two general categories of factors affect alertness: supply and demand. Supply factors are also called internal factors. They include the amount and quality of sleep, time of day (which influences one's biological clock, aka circadian rhythm), time awake (which affects the biological stopwatch, aka sleep pressure or homeostatic sleep drive), use of stimulants or other drugs, overall health, genetic predispositions and mood. These supply/internal factors are what determine our individual fatigue susceptibility in any given moment. Having a good night's sleep is not that simple if you have the scheduling, job demands and sleeping conditions of a



» Still, the gold standard countermeasure is taking a break with a nap.

commercial driver; more so if you have a sleep disorder or chronic condition that increases fatigue, such as fibromyalgia.

That's why the NAFMP provides drivers with education on how sleep works and its effect on the supply factors. That's also why a sleep disorder screening and treatment program is one of the five critical components of a fatigue management program.

On the demand factors side, there are two subtypes – task factors and environmental factors. Task factors include time on task, task complexity and task monotony. Tasks that are too complex or too monotonous increase fatigue; the ideal is a "Goldilocks task," where the balance between complexity and monotony is just right. Environmental factors include road conditions, weather, heat, noise, vibration, vehicle design, light conditions, social interaction (increases alertness but may be distracting) and other stimulation.

So even if a driver has supply or internal factors covered, including getting a good night's sleep, the demand factors can still reduce alertness and cause fatigue-related crashes.

The NAFMP provides drivers with training on several countermeasures against fatigue regardless of the type of factors affecting

their alertness. Still, the gold standard countermeasure is taking a break with a nap.

REASON 5

Alertness is a Spectrum, Not a Switch

Alertness does not act like an on-and-off switch. We do not go from being fully awake to asleep or vice versa instantly. It is more like a spectrum. Think of it like a fuel tank indicator. In the full position, we are fully alert. In the empty position, we are asleep.

Fatigue management comes into play for what happens between fully alert and asleep. At three-quarters of a tank, we are less alert but still able to function. At the halfway mark we are in a state of reduced vigilance (aka hypovigilance). This is when we develop a reduced field of view or tunnel vision (aka highway hypnosis, white line fever and sleeping with your eyes open). Micronaps, drifting off for 30 seconds or less, sometimes without the driver realizing, occur at the quarter-full mark, when we become drowsy.

In this alertness vis-à-vis fuel-tank analogy, the big difference is that a vehicle will function perfectly fine until the indicator hits empty. Alertness, on the contrary, requires a full or an almost full alertness tank to function correctly.

How do you keep your drivers operating with a full alertness tank? Implement the five components of the NAFMP as mentioned earlier. If you are a driver, take advantage of the fatigue management education and training provided in module 3 of the NAFMP to learn more about the problem of fatigue, the science of sleep, how to objectively identify fatigue, what you can do to manage it, fatigue myths and practical dos and don'ts of fatigue management. And that – working together to employ comprehensive fatigue-reduction strategies that support our commercial motor vehicle drivers – is the way the driver fatigue cookie crumbles. ■

New NAFMP Resources

- **Webinars open to the public:** Go to nafmp.org/webinars to register for upcoming live webinars or watch previous recordings.

- **eLearning Forum:** When enrolling for free at lms.nafmp.org in any of the NAFMP courses, please join the conversation or ask questions in the fatigue management forum by navigating to the site home from the left-side menu.

CVSA's 2022 Out-of-Service Criteria Available for Purchase

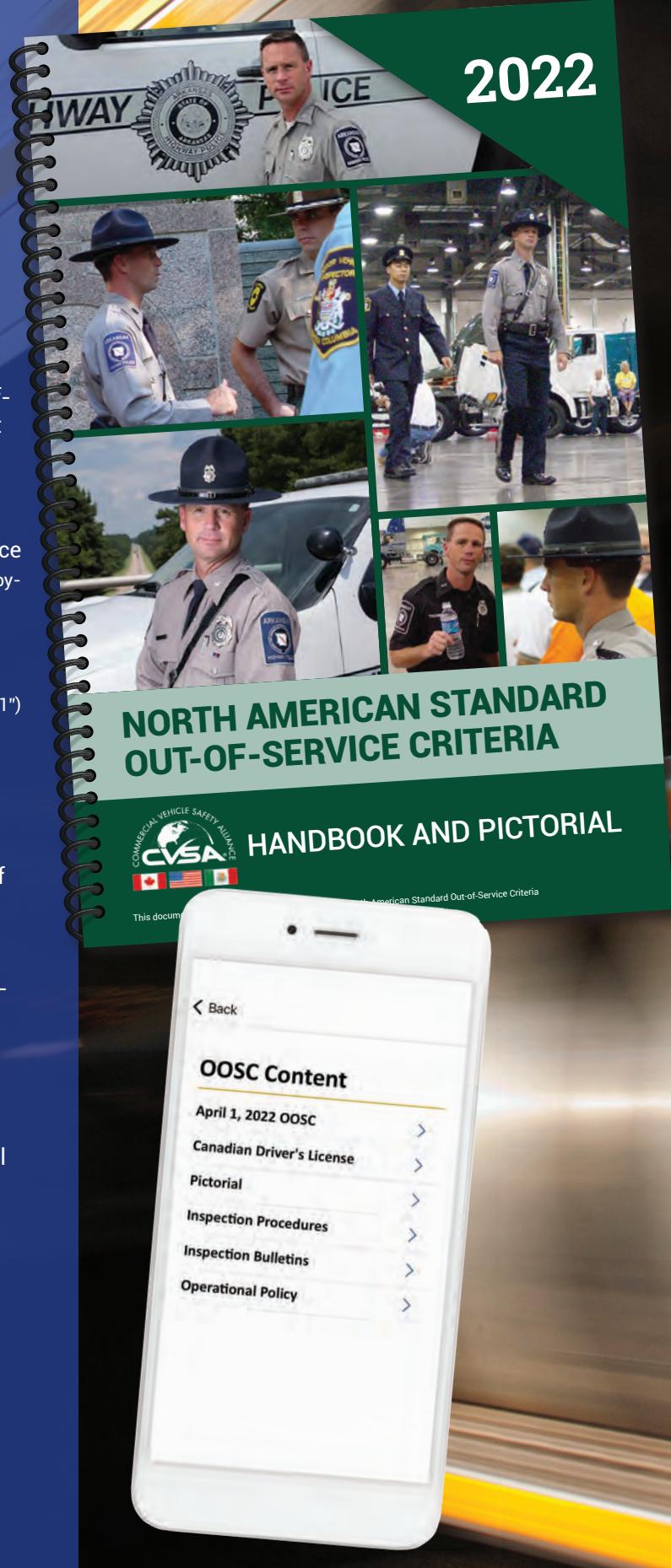
CVSA offers different formats of the new out-of-service criteria. Find the format that works best for you.

- Spiral-bound, hard-copy handbook
- Electronic PDF file with a restricted three device and/or web browser limit (cannot be printed or copy-and-pasted and is best viewed on a desktop computer)
- Spanish U.S. version (8.5" x 11")
- Bilingual English/Spanish U.S. version (8.5" x 11")
- French Canadian version (8.5" x 11")
- Bilingual English/French Canadian version (8.5" x 11")

To purchase one of the above-listed versions of the out-of-service criteria, visit www.cvsa.org/store.

If the app is more your style, it contains the out-of-service criteria, inspection bulletins, real-life photo examples of vehicle, cargo securement and hazardous materials/dangerous goods violations, access to the CVSA Learning portal for online training, inspection procedures, operational policies, inspection and educational videos, brochures, and more.

To download the app, search for "CVSA" in the Apple Store or Google Play. Select "CVSA Out-of-Service Criteria." Once you've downloaded the app, set up your account with your first and last name and email address. You'll then have the option to purchase the 2022 out-of-service criteria.





INSPECTOR'S CORNER

Competition

By Sgt. Benjamin Schropfer, Nebraska State Patrol; 2019 North American Inspectors Championship Grand Champion

It's been a long wait, but we are finally getting close. If anyone out there is still reading these articles, you are probably thinking, "Yes, this guy has been doing this for too long. It is time for someone new." However, my extended reign as North American Inspectors Grand Champion is only part of what I'm talking about.

As you read this, we are getting closer to CVSA's North American Inspectors Championship (NAIC) and the American Trucking Associations' National Truck Driving Championships (NTDC) and National Step Van Driving Championships, which were last held in person during August 2019 in Pittsburgh, Pennsylvania. The events are scheduled to return this August in Indianapolis, Indiana. So, we can all collectively hold our breath and knock on wood with the hope that nothing happens, or has already happened before this is published, to disrupt those plans.

By the time this article comes out, it may be too late for some of you to compete this year, as some states and companies have already chosen their competitors. If that is the case, there is always next year. Many of you, both inspectors and drivers, may have never considered throwing your hat in the ring for these championships. Others may have tried but may not have made it to the big show. Whatever the case may be, I encourage you to challenge yourself to enter the fray when the opportunity arises.

There are a wide variety of ways for you to be selected to participate in these events. Drivers need to compete in and win their state's competition to qualify for the national competition. Some of you may also need to compete in your company's own version of the competition to move forward to your state competition. The process varies for us inspectors as well. Many jurisdictions have their own competition in order to select who will represent them at NAIC, while others use a different selection process. Although many companies and jurisdictions have already made their selections, others are gearing up for state competitions as you read this. If you still have the opportunity to participate, I encourage you to take advantage of it.

These competitions are a great occasion to recognize the work we do each day. I cannot speak for the driving championships, but as an

inspector, there are always a lot of spectators there to cheer on the competitors. The awards ceremony is pretty amazing, too.

I can also say that NAIC is very family friendly. That is one of the things I've enjoyed most – the chance for my wife and family to see what I do and watch my success be recognized. Of course, I also enjoy the competition itself and the chance to test myself against some of the best inspectors in North America. So, if you are fortunate enough to represent your organization at NAIC or the NTDC, I would encourage you to take your family with you.

Earlier, I said to challenge yourself. When NAIC first began in 1993, it was referred to as "Challenge," and I think that's appropriate. Just trying to make NAIC or any of the national driving competitions requires challenging yourself. Then, if you do make it to the big competition, a whole new level of challenge awaits. While the staff and facilitators are there to challenge you, grade you and rank you among your peers, it all comes down to you challenging yourself.

Even when there's no championship title on the line, you should challenge yourself at everything you do each day. Every day, every inspection, every trip, every action — do it the best you can. Others can present you with a challenge, but it's how you react that truly matters. Do you take every opportunity to improve yourself, your skills and your knowledge? Or do you accept "good enough" and just get by? It may be a cliché, but I believe that if you are not getting better, you are probably getting worse.

Notice that I say challenge yourself to do the best you can. I would go even further and say this: do the best you can at that time. You can't always be the very best and win every competition or challenge presented to you. Sometimes, there is just someone better than you are – or better on that particular day.

I was fortunate enough to win NAIC in 2019. Now, I'm not trying to be too modest. I acknowledge that it took a lot of hard work to get myself there. However, I'm also not saying that means I'm the best ever. Any one of my fellow competitors that year had the ability to win that competition and every year there are new and worthy competitors. There had

been 26 champions before my win. Any one of those champions or any of the champions yet to come may have beaten me if they had been there in 2019. In fact, many of them had beaten me in prior competitions. Even some of the competitors I faced in Pittsburgh may have won on a different day or under different circumstances.

I was very fortunate to be given the opportunity to represent Nebraska in more than one NAIC, going a total of five times. Each time, I had to first win our state competition, and that in and of itself is something I am proud of. I had various levels of success in those earlier years at NAIC. I was proud of my accomplishments every time, but at the same time, I always had the nagging feeling that I could do better. I still had that feeling even in 2019. The difference was I just happened to have a better day than my fellow competitors that year.

That feeling that you can do better is what drives us. Not everyone is fortunate enough to have the opportunity to go to NAIC or the NTDC more than once (or to go even once, for that matter). Ultimately, it doesn't matter if it's NAIC, the NTDC or the inspection or trip you do every day – you should strive to do your best and challenge yourself to do even better the next time.

So, challenge yourself in everything you do and take the opportunity to compete either in NAIC or the NTDC. I guarantee you will not be disappointed. I hope to see you in Indianapolis. ■



Sgt. Schropfer's family attended and supported him at 2019 NAIC in Pittsburgh, Pennsylvania, where he won Grand Champion.



THE LEGISLATIVE AND REGULATORY RUNDOWN

States Face Opportunities and Challenges as They Tackle Safety Challenges on the Road

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

As this column highlighted in the previous edition of *Guardian*, last year, Congress and the Biden Administration came to an agreement on the Infrastructure Investment and Jobs Act, aka the Bipartisan Infrastructure Law. The legislation outlined a bold vision for national infrastructure investment over the next five years with a dramatic increase in funding for federal transportation programs, including those administered by the Federal Motor Carrier Safety Administration (FMCSA). That column also focused on the challenges jurisdictions will face in investing those new funds quickly and how best to have a measurable impact on combatting the alarming recent trends in roadway safety data.

Building on the historic investments included in the infrastructure bill and in response to the recent increase in crashes and roadway fatalities, in January the U.S. Department of Transportation launched its National Roadway Safety Strategy (NRSS) (see page 22 for more information). The NRSS represents a shift to the Safe System approach to transportation planning and marks the department's commitment to achieving the goal of zero roadway fatalities. The transportation safety community has a tremendous opportunity to capitalize on the current heightened attention on and commitment to roadway safety at the federal level.

With this renewed focus and the increase in federal funds, the states are faced with the expectation that they will implement policies and programs that will swiftly and effectively improve safety on our roadways, reducing the occurrence and severity of crashes. The jurisdictions stand ready to do just that, expanding existing solutions and exploring new ideas and opportunities. However, as the dust begins to settle and work gets underway, an old, familiar roadblock stands on the horizon – delayed access to and a lack of stability in federal funding.

As of press time, Congress had approved yet another continuing resolution for fiscal 2022 funding, this time through mid-March, extending programs and funding levels at the fiscal 2021 funding levels, which are well below what was envisioned for fiscal

2022 based on the passage of the bipartisan infrastructure bill. We will once again find ourselves midway through the year with no clear answer on when (or even if) the new approved funding levels will reach the jurisdictions.

CVSA has long written about, testified to and asked for assistance with the delays in getting federal funds out to the states each year. In order to maintain effective programs, states need to be able to plan long term. FMCSA cannot award funds until an appropriations bill is in place – a process that regularly sees delays well into the fiscal year. These delays leave states unsure of final funding levels, which makes it difficult to plan and structure a program. This is a challenge states have come to expect and around which program managers do their best to adjust.

However, this year, this longstanding problem is exacerbated by the tremendous discrepancy between the two possible funding levels. States are essentially being asked to develop and be prepared to implement two different sets of programs, depending on when or if the funds become available.

And the problem doesn't go away once the fiscal 2022 funding questions are answered. State program managers will have to decide how confident they are that the higher

funding levels are sustainable beyond the current bill cycle. Will Congress maintain these high funding levels when the next appropriations bill is passed or will funding drop down to more moderate levels? How do the states set up programs that are agile enough to respond to any future funding changes?

This uncertainty will continue to limit the ability of jurisdictions to fully realize the potential for increased road safety offered by the infrastructure bill. As mentioned, this uncertainty has long been a challenge for the states. It has merely been made more prominent this year. It is imperative that Congress and others work to find a long-term solution that allows states to refocus their efforts on meeting program goals rather than on figuring out how to sustainably structure programs without secure funding.

Like the challenges outlined in the last edition of this column, this challenge of planning for unpredictable funding levels and timing is real, but not unsolvable. It's imperative that those with the ability to address this challenge work to find a way to provide states with more stability and continuity. The commercial motor vehicle safety community does not want to miss this opportunity to serve the shared mission of reducing crashes, injuries and fatalities on our roadways. ■



On Nov. 15, 2021, President Joe Biden signed into law a \$1.2 trillion bipartisan infrastructure package.



U.S. DOT Provides More than \$27 Billion to Fix Bridges Nationwide

Earlier this year, the U.S. Department of Transportation launched the historic Bridge Replacement, Rehabilitation, Preservation, Protection and Construction Program (Bridge Formula Program). The program, to be administered by the Federal Highway Administration (FHWA), represents the single largest dedicated bridge investment since the construction of the interstate highway system – providing \$26.5 billion to states, the District of Columbia and Puerto Rico over five years and \$825 million for tribal transportation facilities. The total amount available to states, D.C. and Puerto Rico in fiscal 2022 is \$5.3 billion along with \$165 million for tribes. The FHWA also published initial guidance on the new program.

"The Biden-Harris Administration is thrilled to launch this program to fix thousands of bridges across the country," said U.S. Transportation Secretary Pete Buttigieg. "Modernizing America's bridges will help improve safety, support economic growth, and make people's lives better in every part of the country –

across rural, suburban, urban and tribal communities."

"This record amount of funding, made possible by the Bipartisan Infrastructure Law, will allow states and tribal governments to fix the bridges most in need of repair," Deputy Federal Highway Administrator Stephanie Pollack said. "It will also modernize bridges to withstand the effects of climate change and to make them safer for all users, including cyclists and pedestrians. Every state has bridges in poor condition and in need of repair, including bridges with weight restrictions that may force lengthy detours for travelers, school buses, first responders or trucks carrying freight."

Nationwide, the Bridge Formula Program is expected to help repair approximately 15,000 highway bridges. In addition to providing funds to states to replace, rehabilitate, preserve, protect and construct highway bridges, the Bridge Formula Program has dedicated funding for tribal transportation facility bridges as well as "off-system" bridges,

which are generally locally owned facilities not on the federal-aid highway system.

The Bipartisan Infrastructure Law includes an incentive for states to direct the new Bridge Formula Program funds to off-system bridges owned by a county, city, town or other local agency. While states generally must match federal funding with up to 20% state or local funding, the new guidance notes that federal funds can be used for 100% of the cost of repairing or rehabilitating such locally owned, off-system bridges.

The Bipartisan Infrastructure Law is a once-in-a-generation investment in infrastructure with the potential to grow the economy, enhance U.S. competitiveness in the world, create good jobs and make the U.S. transportation system more sustainable and equitable. Specific to the FHWA, the Bipartisan Infrastructure Law provides more than \$350 billion over five fiscal years for surface transportation programs. ■

FMCSA Creates Brochure on Recording the Correct Driver's License Number for CMV Drivers From Mexico or Canada

By David Yessen, Chief, Compliance Division, Federal Motor Carrier Safety Administration, U.S. Department of Transportation

Recording the Correct Commercial Motor Vehicle Driver's License Number

For Drivers from Mexico or Canada



U.S. citations issued to commercial motor vehicle (CMV) drivers from Mexico or Canada that result in a conviction found in the Title 49 Code of Federal Regulations § 383.51 tables are added to the driver's history in the Federal Motor Carrier Safety Administration's (FMCSA) Federal Convictions and Withdrawal Database – but only if the correct license alphanumeric/character format is recorded.

These convictions can result in drivers being prohibited from operating in the U.S., making it critical to accurately record the driver's first and last name, date of birth, licensing jurisdiction and commercial driver's license number following the appropriate jurisdictional licensing scheme.

FMCSA has developed a new informational brochure to increase U.S. law enforcement personnel's awareness of the correct driver's license number configurations when writing citations for drivers from Canada and Mexico.

The trifold brochure, titled "Recording the Correct Commercial Motor Vehicle Driver's License Number for Drivers from Mexico or Canada," should improve the foreign license and conviction data reported to the Commercial Driver's License Information System and Federal Convictions and Withdrawal Database.

Download a printable version of the brochure from the FMCSA International Safety webpage at www.fmcsa.dot.gov/international-programs/recording-correct-commercial-motor-vehicle-drivers-license-number-drivers.

If your state enforcement office would prefer hard copies of the brochures, please reach out to your local FMCSA division office. ■

FMCSA Registration Overview

By Jeff Secrist, Chief, Licensing and Insurance Division, Federal Motor Carrier Safety Administration, U.S. Department of Transportation

As of November 2021, more than 730,000 interstate motor carriers have an active USDOT number and are registered with the Federal Motor Carrier Safety Administration (FMCSA) to operate on our nation's highways. These motor carriers play a critical role in transporting goods, services and our loved ones throughout our country's roadways and are vital to the nation's economy.

Approximately 650 new applicants register through FMCSA's online Unified Registration System each day. This reflects a 53% increase in new applicants from fiscal 2020 to 2021, with numbers continuing to rise in fiscal 2022.

By providing carriers with resources and information they need to register and safely begin operating — highlighted by a series of new and upcoming videos for applicants — FMCSA's Office of Registration hopes to make life easier for those navigating the registration process.

"Our goal is to make sure new carriers are prepared to operate – and operate safely – on the roads we all share," said Kenneth H. Riddle, director of FMCSA's Office of Registration. "By offering helpful, easy-to-use resources that provide clarity on the registration process and addressing common questions we get directly from carriers, we can move one step closer toward this goal."

The latest FMCSA resource available to applicants is an instructional video, "How to Register: FMCSA Registration Overview for Motor Carriers." It is available online at www.fmcsa.dot.gov/registration.

Released in September 2021, this video walks users through the registration process with clear, need-to-know information so they fully understand the necessary steps. It also refers carriers to additional resources to answer questions pertaining to their unique operations.

Producing this and other videos that respond to real-world feedback is a priority for the Office of Registration, contributing to FMCSA's commitment to reducing crashes, injuries and fatalities involving large trucks and buses. Two additional videos are in development, focused on entity types and operating authority, aiming to provide tailored guidance and address common questions FMCSA has heard from applicants.

"We pay close attention to what we hear from our new registrants," Riddle noted. "If we can prevent confusion and streamline the process, we can make it easier for carriers to participate in our shared safety mission."

The latest video has been viewed more than 16,500 times since its fall release. The Office of Registration has received positive feedback, with users noting they are looking forward to upcoming videos.

"We are delighted that the video is resonating with our audiences," said Riddle, adding, "Stay tuned for more." ■



U.S. Bureau of Transportation Statistics Announces a Vehicle Inventory and Use Survey

The U.S. Bureau of Transportation Statistics (BTS) announced the return of its vehicle inventory and use survey (VIUS) after nearly 20 years. The VIUS has been the principal data source on the physical and operational characteristics of the U.S. truck population. Its primary goal is to gain an understanding nationally and statewide of how trucks are being utilized for various goods transport. The 2021 VIUS is being conducted in partnership with the Federal Highway Administration, the Department of Energy and the U.S. Census Bureau to better understand the characteristics and use of vehicles on our nation's roads. The data will be used to guide investments in our nation's infrastructure and vehicle technologies and parts, and to evaluate truck safety needs, emissions estimates and conservation practices.

The 2021 VIUS will collect data from 150,000 vehicle owners of class 1 through 8 trucks, which includes pickups, SUVs, minivans, light vans, straight trucks and truck tractors. Dependent on what type of vehicle a selected driver owns, they will receive either the heavy-vehicle or light-vehicle questionnaire. The survey will be conducted through October 2022 and will collect information on the selected vehicle's 2021 activity, uses and physical characteristics. Vehicles from all sectors of the economy, households and states will be included. BTS plans to release the results in the fall of 2023.

The VIUS will collect data on:

- Vehicle safety technologies, such as collision warning, parking assist and vehicle-to-vehicle communications
- Vehicle fuel types, including alternative fuel sources
- Vehicle maintenance and level of repairs
- Uses of vehicles, including frequency of use, their capabilities, how far they travel and why they travel
- Miles traveled and fuel economy by weight, type, configuration and age of vehicle
- Axle configurations, trailers hauled and operating weight
- Equipment added after manufacture of the chassis
- Business versus personal use and types of economic activity served
- Commodities carried
- And much more

Current VIUS estimates are of critical importance to federal agencies, state departments of transportation, metropolitan planning organizations, businesses and drivers alike.

Results from the survey will:

- Provide statistics for:
- Vehicle size and weight studies
 - Tracking the deployment of driver-assistance technology
 - Input to freight demand models and air quality models
 - Role of motor vehicles in the economy
 - Fuel efficiency of the nation's truck fleet
 - Analyses of fees and allocation of cost among highway users
 - Highway traveler exposure to potential safety risks

Guide investments into:

- Better roads, bridges, fueling stations and other transportation infrastructure at the local and state level
- Decreasing traffic congestion and energy usage on the nation's roadways
- Increasing safety and the ability to move goods more effectively ■

Milestones	Planned Completion
Survey Release	February 23, 2022
Survey Conclusion	October 2022
Data Release	Fall 2023



U.S. Department of Transportation Releases Comprehensive National Roadway Safety Strategy

In January, the U.S. Department of Transportation (DOT) released its new comprehensive National Roadway Safety Strategy (NRSS), a roadmap for addressing the national crisis in roadway fatalities and serious injuries. Almost 95% of the nation's transportation deaths occur on its streets, roads and highways. While the number of annual roadway fatalities declined for many years, progress plateaued over the last decade and now, alarmingly, fatalities have risen during the pandemic. The NRSS provides concrete steps that the department will take to address this crisis systemically and prevent these tragic and avoidable deaths and serious injuries. Bolstered by historic funding included in President Biden's Bipartisan Infrastructure Law, the NRSS is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities.

"We cannot tolerate the continuing crisis of roadway deaths in America. These deaths are preventable, and that's why we're launching the National Roadway Safety Strategy – a bold, comprehensive plan with significant new funding from President Biden's Bipartisan Infrastructure Law," said U.S. Transportation Secretary Pete Buttigieg. "We will work with

every level of government and industry to deliver results, because every driver, passenger and pedestrian should be certain that they're going to arrive at their destination safely, every time."

The department, as part of the NRSS, is adopting the Safe System Approach, which acknowledges human mistakes and vulnerability, and designs a redundant system to protect everyone by preventing crashes, while ensuring that if they do occur, they do not result in serious injury or death. The department will use a five-pronged model to address safety: safer people, safer roads, safer vehicles, safer speeds and post-crash care. Importantly, the NRSS also recognizes that reducing traffic fatalities will take sustained and concerted action from everyone across all sectors and levels of government.

The strategy was developed in coordination with the department's Executive Safety Council, led by Deputy Transportation Secretary Polly Trottenberg. The NRSS builds on and harmonizes efforts from across the department's three roadway safety agencies: the Federal Highway Administration

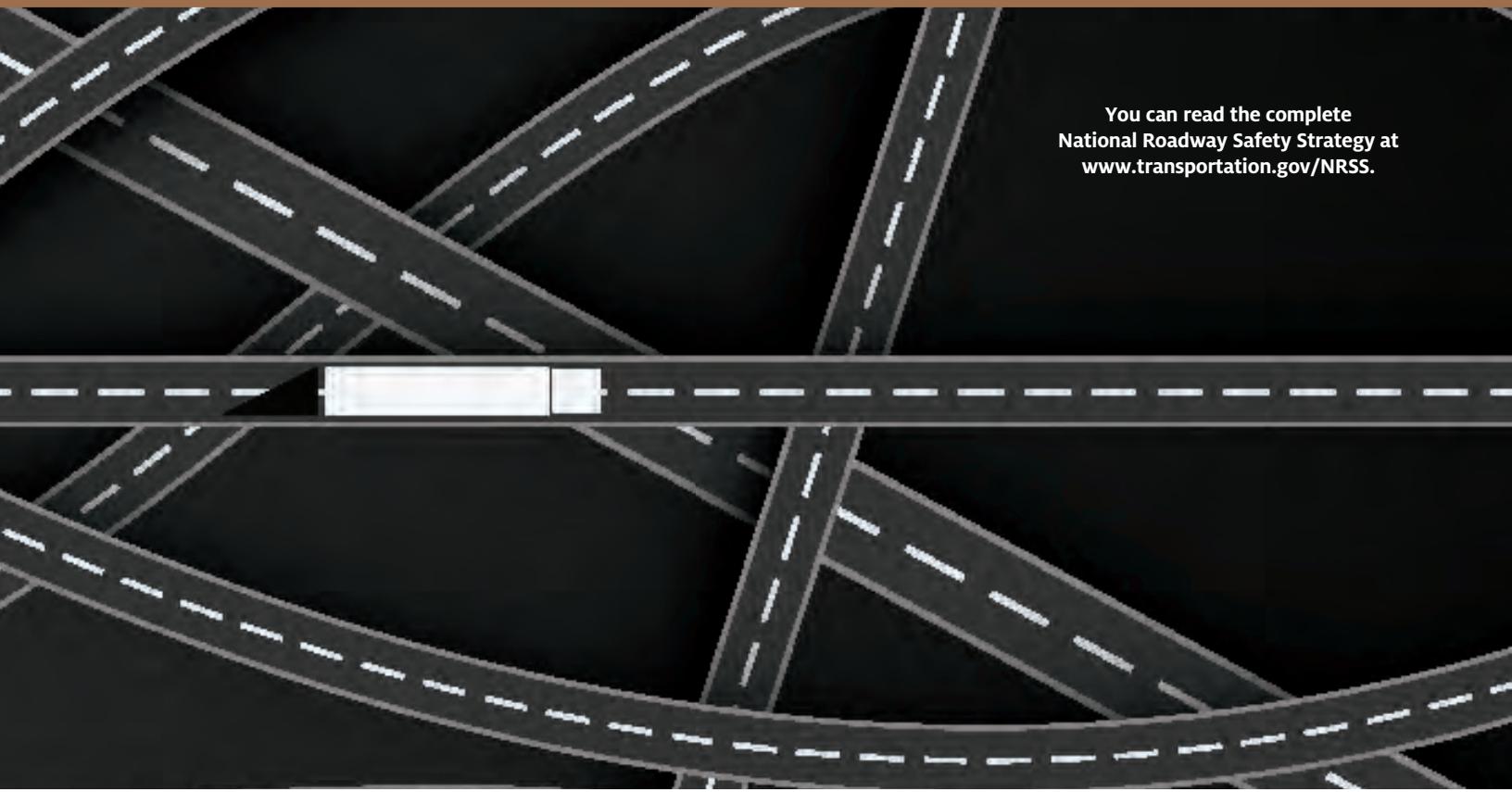
(FHWA), the National Highway Traffic Safety Administration (NHTSA) and the Federal Motor Carrier Safety Administration (FMCSA).

"This National Roadway Safety Strategy represents a collective effort across the Department, and under the leadership of Secretary Buttigieg, to embrace the Safe System approach, and to recognize that no loss of life on our nation's roadways is acceptable. As we move towards swift implementation, we look forward to partnering with every level of government, industry, advocacy, and all who will come together to address this crisis," said Robin Hutcheson, former U.S. DOT deputy assistant secretary for safety policy, and acting administrator for FMCSA.

A few of the key action items in the NRSS include:

- Working with states and local road owners to build and maintain safer roadways through efforts including: updates to the Manual on Uniform Traffic Control Devices, a Complete Streets Initiative to provide technical assistance to communities of all sizes, and speed limit setting.

You can read the complete National Roadway Safety Strategy at www.transportation.gov/NRSS.



- Leveraging technology to improve the safety of motor vehicles on our roadways, including rulemaking on automatic emergency braking and pedestrian automatic emergency braking, and updates to the New Car Assessment Program.
- Investing in road safety through funding in the Bipartisan Infrastructure Law, including a new \$6 billion Safe Streets and Roads for All program, hundreds of millions for behavioral research and interventions and \$4 billion in additional funding for the Highway Safety Improvement Program.

Additionally, the NRSS recognizes that roadway safety is inextricably linked with the Biden-Harris Administration's equity and climate goals. Fatalities due to traffic crashes disproportionately affect communities of color, people living in rural areas, people with disabilities and older adults. Also, traffic deaths among people who walk or bike are increasing more sharply than for people who drive.

"Unfortunately, many roads are not designed to ensure safe travel at safe speeds for everyone, especially the most vulnerable

road users," said FHWA Deputy Administrator Stephanie Pollack. "The Bipartisan Infrastructure Law provides a tremendous opportunity for FHWA to work closely with state, local and tribal partners to put increased transportation funding to work incorporating safety for all users into every federally-funded road project."

"FMCSA is committed to reducing commercial motor vehicle fatalities and overall fatalities. We will work across the department to coordinate proactive compliance and outreach programs and work collaboratively with all stakeholders," said FMCSA Executive Director and Chief Safety Officer Jack Van Steenburg. "Our goal is to prevent crashes and preserve the quality of life for all roadway users across America. Zero is our goal."

"No longer can we, as a society, accept traffic deaths as routine. Every life lost is a tragedy, and we all can, should, and must do more to change the culture. The National Roadway Safety Strategy and the Safe System Approach offer all communities a roadmap to save lives and reduce injuries," said NHTSA Deputy Administrator Dr. Steven Cliff.



SAFER PEOPLE



SAFER ROADS

Continued on page 25



CVSA OFFERS TRAINING THROUGH ITS ONLINE LEARNING PORTAL

CVSA's online learning management system, CVSA Learning, offers the flexibility for you to take a training course anytime, anywhere, at a speed that's comfortable for you.

Want to learn how to properly document a vehicle violation? We've got you. Do you know the properties of a Class 2 hazardous material? We'll teach you. Need some guidance on reporting and classifying motor vehicle crashes? There's a manual for that. Visit CVSA Learning to learn about these topics and much more.

Whether you're a law enforcement official, a motor carrier safety manager, a professional driver, a transportation safety advocate or an executive at a trucking organization, there is training in the CVSA Learning portal for you.



To access CVSA Learning, log into your CVSA member portal at www.cvsa.org/memberportal, then click on the "CVSA Learning" tab.

Continued from page 23

The Bipartisan Infrastructure Law provides new tools and resources that allow coordinated action both across the department and government. It also provides \$6 billion for the Safe Streets and Roads for All program, \$4 billion in additional funding for the Highway Safety Improvement Program and an additional infusion of \$4 billion for improved crash data and vehicle, behavior, and truck safety programs. The FHWA will share updated guidance on the Highway Safety Improvement Program.

"The Roadway Safety Action Plan is designed to focus all of U.S. DOT's resources, authorities and incredible expertise, working with our stakeholders, to combat the tragic number of fatalities and serious injuries we see on U.S. roadways – from our largest cities and towns to rural and tribal communities all across the country," said Deputy Secretary Trottenberg.

The Bipartisan Infrastructure Law, also known as the Investment in Infrastructure and Jobs Act, is the Biden-Harris Administration's plan for building a better America with a \$1.2 trillion investment in the nation's infrastructure and economic competitiveness.

The Bipartisan Infrastructure Law will rebuild America's roads, bridges and rails, upgrade and expand public transit, modernize the nation's ports and airports, improve safety, tackle the climate crisis, advance environmental justice and invest in communities that have too often been left behind. It will also drive the creation of jobs and grow the economy sustainably and equitably so that everyone gets ahead for decades to come. ■



CVSA Supports the U.S. DOT's National Roadway Safety Strategy

Some of the priorities identified in the NRSS specific to the commercial motor vehicle enforcement and motor carrier industry communities include:

- Implementation of the October 2021 final rule that requires state driver's licensing agencies to access and use information obtained through the Drug and Alcohol Clearinghouse and take licensing actions against commercial motor vehicle drivers who have drug or alcohol violations in the system and are not cleared to return to duty
- Improved accuracy of commercial driver's license (CDL) driver records and the identification of additional opportunities to use these more accurate records to take unsafe commercial motor vehicle drivers off the road more expeditiously
- Increased highly visible commercial motor vehicle traffic enforcement targeting risky driving behaviors, especially speeding – the department identified speed enforcement, deployed equitably and applied appropriately to roads with the greatest risk of harm due to speeding, as a tactic that may provide significant safety benefits and save lives
- Continued commitment to identifying high-risk companies and operators of commercial motor vehicles using a data-driven and performance-based approach, including roadside commercial motor vehicle safety inspections

"As we embark on this reinvigorated effort, we are relying on our partners to also identify and commit to near-term actions that will help make our collective efforts to reach zero a reality," said Transportation Secretary Buttigieg.

CVSA's membership is committed to supporting the U.S. DOT in its commitment to zero fatalities on our roadways through the implementation of identified safety priorities and the Safe System approach.

"On behalf of the Alliance, I'd like to thank Transportation Secretary Buttigieg and the U.S. Department of Transportation for their leadership and action in this undertaking," said CVSA Executive Director Collin Mooney. "We look forward to working together toward our shared vision of zero roadway deaths." ■



While the Country Slowed Down, Drivers Sped Up: *What This Means for Teens*

By Stacey Tisdale, CPPE, PMP, Project Manager, Youth Transportation Safety Program, Texas A&M Transportation Institute

Youth continue to be overrepresented in car crashes throughout the United States. According to data from the National Highway Traffic Safety Administration (NHTSA) and the Centers for Disease Control and Prevention (CDC), motor vehicle crashes continue to be one of the leading causes of injury and death for people under the age of 25 in the U.S., with young drivers having much higher crash rates than older, more experienced drivers.

In June 2021, NHTSA estimated crash fatalities for the 16 to 24 age group increased by 15% in 2020, challenging notable progress over the previous few years when we'd seen a downward trend. More recent NHTSA reporting, for early 2021, gives an even more disturbing early estimate of overall crash fatalities of 18.4%. They went on to attribute this overall increase to use of drugs and alcohol, lower uses of seat belts and riskier behavior, including extreme speeding (defined as 20 miles per hour or higher over the posted speed limit).

We at the Texas A&M Transportation Institute Teens in the Driver Seat (TDS) program wonder how young drivers have and will fare for the current time period and beyond. As we wait for all 2020 data and 2021 estimates to be released and hope for a decline in these numbers in 2022, the risks mentioned above have not subsided even though roadway travel has almost met pre-pandemic levels.

In a time when many of us may feel a lack of control, we know these are trends we can change. The first year of licensure is the most dangerous time for new drivers and bad habits can begin to show up during the first few months of driving on their own. For teens that have just begun driving during these past two years, we wonder if they are adopting these risks they see mirrored by many other drivers currently, such as speeding, low seatbelt use and impairment.

Additionally, while for many years these behaviors have been identified as top

driving risks for teens, they are outranked by distractions and nighttime driving. The idea that teens have completely stopped distractions and possibly adopted one of these other risky behaviors instead is far-fetched, so we may assume that they are accumulating a combination of risky habits which will place them at even greater crash risk.

Many teens, and even their parents/guardians, are unaware of the risks they face behind the wheel. Some of the most recent findings from knowledge surveys administered to TDS program schools (11,314 surveys from July 2019 to July 2021) demonstrated only 27% and 32% of teens identified talking on a cellphone and using social media as common risk factors for teen drivers, and only 9% identified driving at night.

The TDS program looks to teens to change trends of crashes through positive peer influence since we know that teens learn from each other and influence behaviors of their



A NHTSA attributes overall increase of crash fatalities to use of drugs and alcohol, lower uses of seat belts and riskier behavior, including extreme speeding (defined as 20 miles per hour or higher over the posted speed limit).

peers. We provide the research, materials and incentives for teen teams to conduct evidence-based outreach and activities in their school and community so their influence can include traffic safety.

The Federal Motor Carrier Safety Administration supports these efforts to keep all road users safe by providing funding for additional resources and education for driving safely around large trucks and buses and provides support for the You in the Driver Seat app, which rewards young drivers with gift cards for driving distraction-free and within speed limits – all behaviors that are national best practices and have been shown to work.

There are also other mitigating factors that work, including adult influence. Just as teens influence each other, seasoned drivers can demonstrate safe driving so teens develop better habits in this impressionable time. Whether you have a teen getting ready to enter the learning phase of driving or a young

adult with a license, there are a number of ways to help them stay safe:

- Be the driver you want your teen to be. Young children begin watching you drive well before they ever get behind the wheel.
- When driving with your teen in the car, talk through what you are doing and why, such as checking the mirrors, steps to changing lanes or looking both ways before accelerating at a green light.
- Make sure everyone in your family abides by zero tolerance for cell phone use while driving. If you know your teen is driving, don't call them.
- Know that each passenger, including siblings, in a teen's car increases the likelihood of a crash.
- Don't push a teen who, for whatever reason, is not ready to drive safely.
- Allow your teen as much driving practice as possible (at least 50 hours), with you present.

- The first year of licensing is most dangerous. Continue to check in with your teen by riding with them to look for any new bad habits.
- Shared family vehicles are safer for young drivers than having their own.
- Involved parents have safer teen drivers. Talk through each driving trip before your teen leaves – gauge their state-of-mind, know where they are going, how they will get there and their timeline. If your teen is stressed, tired, upset or even too excited, they shouldn't drive.
- Use your state's Graduated Driver Licensing (GDL) laws as only a baseline for rules. Many state GDL laws do not go far enough to protect young drivers.

It's difficult to add one more way this pandemic has negatively changed the world around us, but there is good news. Car crashes are preventable. They're controllable. We can't say that about a lot right now. ■

How the National Transportation Safety Board “Most Wanted List” Can Make Our Roads Safer

By Nicholas Worrell, Chief, Safety Advocacy, National Transportation Safety Board

Last year, the National Transportation Safety Board (NTSB) issued its Most Wanted List (MWL) of Transportation Safety Improvements. The list sets the board’s advocacy priorities for a two-year period and is designed to increase awareness of, and support for, the most critical changes needed to reduce transportation accidents and to save lives. It features 10 safety-critical focus areas. For this advocacy cycle, half of the priorities focus on critical improvements needed for highway safety.

Why does our list focus so much on highway improvements? Although the NTSB investigates accidents in all modes of transportation, without a doubt highway safety is our biggest concern – and advocacy challenge.

In 2020, as our nation struggled with the challenges of a worldwide pandemic, we also faced an ongoing and increasing public health crisis on our roads. While vehicle miles traveled were historically low, the country still saw a dramatic increase in traffic crashes, fatalities and injuries. Nearly 40,000 people died on our nation’s roads and millions more were injured that year. Unfortunately, early data indicates that another dramatic increase in roadway fatalities occurred in 2021. The National Highway Traffic Safety Administration (NHTSA) estimates that 20,160 people died in motor vehicle crashes during the first half of 2021 – an 18% increase over the same period in 2020.

Both NHTSA and the Federal Motor Carrier Administration (FMCSA) pointed to speeding as a significant issue in crashes involving trucks and passenger vehicles – a focus area for CVSA in 2021 during Operation Safe Driver Week. Other crash factors of concern included:

- Distraction
- Occupant ejection (up 20%)
- Unrestrained occupants of passenger vehicles (up 15%)
- Speeding (up 11%)
- Police-reported alcohol involvement (up 9%)

The NTSB’s 2021-2022 Most Wanted List focuses on addressing many of these crash causes – in particular, speeding, impairment, distraction, vulnerable road users, and collision-avoidance and connected-vehicle technologies.

For instance, “Implement a Comprehensive Strategy to Eliminate Speeding-Related

Crashes” is on the list. In deciding to include it, we noticed that between 2009 and 2018, speeding-related crashes resulted in nearly 100,000 fatalities – that’s close to one-third of all traffic fatalities in the United States. The true extent of the problem is likely underestimated because the reporting of speeding-related crashes is inconsistent. To address this pressing safety concern, we must make full use of all the tools and strategies at our disposal. Speed limiters on large trucks, automated enforcement, expert speed analysis tools and education campaigns remain underused.

The NTSB has called for a paradigm shift in how we address road safety. We believe in and strongly advocate for the adoption of the Safe System Approach, a key part of our advocacy in 2020 and an item on our current MWL. In September 2020, NTSB Chair Jennifer Homendy urged government and law enforcement officers – the entire highway community – to embrace this approach when tackling road safety.

The principles underpinning the Safe System Approach acknowledge that humans make mistakes that lead to traffic crashes, but no one should lose their life or be seriously injured because of a crash. The Safe System Approach also recognizes that:

- The human body has a limited physical ability to tolerate crash forces
- Road safety is a shared responsibility
- All parts of the system must be strengthened so that if one part fails, road users are still protected

NTSB has held several roundtables with experts on the Safe System Approach, which may be viewed on our YouTube page.

The NTSB cannot improve highway safety alone. We need every voice and authority on the ground. Highway safety advocates, government organizations and law enforcement officers have a big task ahead. After all, effective road safety advocacy requires three parts: legislation, education and enforcement.

Addressing the causes of fatal accidents and reversing the emerging crash trends will be a challenge, but we know that we are not alone in this fight; together we can and will make a difference. ■

2021-2022 NTSB MOST WANTED LIST

NTSB’s 2021-2022 Most Wanted List highlights transportation safety improvements needed to prevent accidents, reduce injuries and save lives. NTSB urges lawmakers, industry, advocacy and community organizations, and every American to learn more about what they can do to implement and champion the 2021-2022 Most Wanted List recommendations.

The list has four categories: aviation, highway, marine and rail, pipeline and hazardous materials. The highway recommendations are:

- Implement a comprehensive strategy to eliminate speeding-related crashes.
- Protect vulnerable road users through a Safe System approach.
- Prevent alcohol- and other drug-impaired driving.
- Require collision-avoidance and connected-vehicle technologies on all vehicles.
- Eliminate distracted driving.

View NTSB’s Most Wanted List at www.ntsb.gov/mwl.





What to Do If You Suspect a Staged Accident

By Jim Angel, Vice President of Video Telematics, EROAD

"In-cab video for commercial vehicles is the single best tool to protect a commercial operator and a commercial driver from insurance fraud on the highways."

Research shows that commercial drivers are at fault for serious truck-car accidents far less often than passenger car drivers. Still, large accident-related verdicts against motor carriers – many exceeding \$1 million – have become increasingly frequent in recent years, according to the American Transportation Research Institute's (ATRI) 2020 report, *Understanding the Impact of Nuclear Verdicts in the Trucking Industry*.

The trend toward larger verdicts against carriers has attracted the attention of criminal groups that target commercial trucks with staged-accident schemes, an issue that was brought to the forefront last year when the federal indictments of dozens of people charged with participating in staged accidents in Louisiana made headlines.

Staged accidents can be devastating to individual carriers. But the impact of staged-accident fraud and the general trend toward larger verdicts are also felt industry-wide in the form of skyrocketing insurance rates.

The ATRI report referenced above, for instance, cites one motor carrier that was forced to cease operations in 2019 after its insurance premiums more than doubled year over year. "Multiple other fleets, many decades-old family businesses, experienced similar outcomes," ATRI concluded.

Given the far-reaching impact of staged accidents on the trucking industry, it's crucial that motor carriers take steps to protect their

businesses and the industry overall. The first step is for carriers and drivers to get educated on common staged accident scenarios and indicators.

Common staged accident scenarios include:

- **Swoop and squat:** One perpetrator vehicle cuts off the victim and slams on the brakes after a second vehicle has pulled up alongside the victim, blocking them in and preventing them from swerving to avoid the collision.
 - **Start and stop:** The fraudster slams on their brakes in front of the victim, causing a crash. This scenario may play out during stop-and-go traffic.
 - **Sideswipe:** A perpetrator vehicle swerves into the victim and claims that the victim crossed over into their lane. This staged crash may occur at busy intersections with dual left-turn lanes.
- Other indicators that an accident might be staged include:
- **Multiple passengers:** Staged accident perpetrators want to maximize the profits, and that means cramming as many people into the car as possible to increase the number of fraudulent injury claims.
 - **Jump-ins:** Sometimes "passengers" may enter a vehicle after the collision and later claim that they were injured in the accident. So-called "jump-ins" are a huge red flag for fraud.

• **Pre-existing damage:** Perpetrators often use beat-up cars for staged accidents. Look for vehicle damage that is not consistent with the crash.

• **Vehicle condition:** Look for things like heavy dust and dirt on the vehicle, weathered tires, and old windshield wipers. These are all signs that the car isn't regularly used and was only brought out for the staged accident.

If a staged accident is suspected, it's crucial that drivers immediately share any relevant information with responding law enforcement and their safety supervisor to ensure that fraud is considered during the accident investigation.

Matthew J. Smith of the Coalition Against Insurance Fraud, who participated with EROAD in a webinar series on staged accidents, suggests that commercial drivers also use a smartphone to photograph the aftermath of an accident – the position of the vehicles on the road, the conditions of the vehicles, the debris field – and provide that information to responding officers.

Smith also suggested a technology solution that can help protect carriers against fraud: video-based onboard safety management systems.

"In-cab video for commercial vehicles is the single best tool to protect a commercial operator and a commercial driver from insurance fraud on the highways," he said. ■

How Carriers Can Lead with Lagging Indicators

By **Dave Elniski**, Industry Advisor, Alberta Motor Transport Association

In the field of occupational health and safety (OHS), indicators of a workplace's performance can be broadly divided into two categories: lagging indicators and leading indicators. Lagging indicators are measurements of incidents that have occurred in the past, whereas leading indicators are predictive of future OHS incidents.

Organizations are usually most familiar with lagging OHS indicators, such as injury rates and incident reports in the workplace. For a motor carrier's highway safety program, examples of lagging indicators include collision rates, incident reports and violations/fines from law enforcement.

While leading indicators can be more complicated to use than lagging indicators, they are valuable measurements for proactive motor carriers. Examples of workplace leading indicators include number of workplace inspections performed and worker training rates. For a carrier's on-highway safety performance, leading indicator examples could be pre-trip frequency and quality, hours-of-service (HOS) performance and ongoing driver training activities.

Generally speaking, using lagging indicators is reactive while using leading indicators is proactive. However, proactive and reactive are connotation-loaded words, with many considering proactive safety superior to reactive safety. It is true that being proactive can prevent a loss (such as from a collision), whereas reactive safety management typically kicks in once a loss (be it an accident or fine) has occurred. However, all indicators are valuable to a carrier; even a highly proactive company can experience a loss. When that happens, it should go into reactive mode, investigating and implementing any warranted corrective actions.

Focusing only on one type of indicator while neglecting the other isn't the best approach. Carriers should develop a system for monitoring both lagging and leading indicators, use all available information to improve safety and stay abreast of best practices to improve proactivity, along with creating processes for reacting to any incidents.

On-road law enforcement provides carriers with an external inspection system into the workplace, driver behavior and carrier safety practices. Any negative feedback from law enforcement is a lagging indicator. Examples include fines for unsafe driving, out-of-service declarations for violations of CVSA's North American Standard Out-of-Service Criteria and noted defects on an inspection report.

In this way, on-road law enforcement is a generator of lagging indicators for carriers, flagging existing problems in a manner that results in a loss for the carrier and driver.

While it's best to prevent a violation-laden inspection report or fine, once a carrier receives one, it is time to be strategically reactive. First, carriers must work to meet any reporting requirements for the cited defects and pay or dispute any incurred fines. Second, the carrier should implement its internal processes for correcting the problems that led to the violation. These corrective actions may include driver discipline, driver or technician training and internal evaluation. Remember, being reactive is not intrinsically bad; reacting and responding are the only options once a carrier learns of a negative incident.

Still, being reactive does come at a cost. There is a benefit to becoming more proactive by learning from lagging indicators, which typically have a corresponding leading indicator that could influence future rates of the respective lagging indicator. Here are some examples:

Lagging indicator: A driver was placed out of service for an HOS violation.

Corresponding leading indicator: The carrier's internal HOS monitoring frequency, depth and follow-up.

Lagging indicator: A roadside inspection report identified rubbing air lines and a drum brake pushrod measuring over its brake adjustment limit.

Corresponding leading indicator: The carrier's frequency of routine vehicle inspections and maintenance for those components.

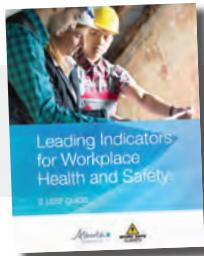
Lagging indicator: A carrier was ticketed for being overweight on an axle group.

Corresponding leading indicator: The frequency and depth-of-knowledge by which drivers are trained in legal weights and loading procedures.

Carriers are capable of monitoring and measuring each of the above leading indicator examples. The key takeaway is this: examples of past poor performance provide opportunities for systematically improved future performance.

By identifying and paying attention to leading indicators, a carrier will see a decrease in the corresponding lagging indicators, reducing the risk of a future negative event. For example, a carrier can monitor HOS records and proactively notify drivers of issues, preventing drivers from receiving HOS-related violations from law enforcement, as well as reducing the risk posed by driving without rest. In this way, carriers can take more control of their future safety performance.

When carriers understand, track and value both leading and lagging indicators, they can learn from a bad day and discover a pathway to better, safer days ahead. ■



Reference: Government of Alberta. 2015. "Leading Indicators for Workplace Health and Safety: a user guide." Accessed Jan. 7, 2022, from <https://open.alberta.ca/publications/9781460120941>.

Training, Research and Education for Driving Safety Program Offers Train the Trainer Workshops to Increase Driving Safety Awareness and Decrease Distracting Driving Behaviors Among Commercial Drivers

By Jill Rybar, MPH, Deputy Director, Training, Research and Education for Driving Safety, University of California, San Diego

With fiscal 2019 High Priority Grant program funding from the Federal Motor Carrier Safety Administration, the Training, Research and Education for Driving Safety (TREDS) program at University of California, San Diego has developed an educational program to reduce the risk distracted driving poses to the commercial motor vehicle industry and all roadway users.

The "Just Drive: Deliver Distraction-Free" course is a one-hour class designed to increase driving safety awareness and decrease distracted driving behaviors among commercial motor vehicle drivers, specifically addressing the use of cell phones and electronic communication devices. The curriculum can be delivered in-person or virtually and utilizes a variety of engagement methods such as PowerPoint®, polling, case examples and video.

Over the past year, TREDS has delivered 11 "Just Drive" train the trainer programs at no-cost to Florida, Georgia, Kentucky, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas and Washington, preparing 180 commercial motor vehicle industry and law enforcement professionals to become course instructors. Comments and feedback from the workshop participants have been overwhelmingly positive with many expressing enthusiasm for delivering classes in their respective states.

Additionally, 100% of the instructor students agreed that the curriculum adequately covered the risks and consequences of distracted driving and 97% agreed that they planned to use the program.

TREDS has developed support materials to augment the "Just Drive" curriculum, including:

- Social media posts
- Newsletter copy
- Video clips that highlight risks and reinforce safe driving
- A four-minute video comprised of testimonials from commercial driver's license holders that addresses a variety of distracted driving topics (can be viewed on the TREDS website)

Two train the trainer programs, held virtually, will be available in 2022. If you are interested in becoming an instructor, visit the webpages listed below to register.

- Tuesday, May 3, 9-11 a.m. PST
bit.ly/JustDriveMay2022
- Wednesday, July 13, 10 a.m.-12 p.m. PST
bit.ly/JustDriveJuly2022 ■

For more information, visit treds.ucsd.edu or email TREDS at treds@ucsd.edu.



Just Drive
DELIVER DISTRACTION-FREE





FROM THE DRIVER'S SEAT

Winter Weather Can Be Messy

By **Byron Bramwell**, Professional Driver, Yellow; America's Road Team Captain

As a Smith System defensive driving instructor and an America's Road Team Captain, I know the importance of sharing safe-driving techniques with all kinds of drivers. I am a city pickup and delivery driver for Yellow. I have been a professional truck driver for more than 44 years, accumulating 3.3 million safe driving miles.

In my experience, one of the biggest challenges to safe driving that everyone can use more knowledge of is winter weather conditions. As a Missourian, I deal with inclement winter weather several times a year. Here are some tips that have worked well for me year after year:

1. It's all about YOU. Getting you to your destination safely is the most important task. You need to be on top of your driving game when taking on bad weather and traffic.

Before getting in your vehicle, evaluate your readiness and ask yourself the following:

- Am I alert?
- Have I had enough sleep?
- Do I feel well?

2. Plan your route and have a Plan B. Winter weather can make certain roads dangerous, especially if they have not been plowed or properly treated for ice. Plan a backup route. Your normal route may be blocked. When route planning, consider the following:

- Do I have a good route and a backup planned?
- Is there terrain that could be challenging in winter weather conditions? For example, is there a big hill on your route? Do you know how to get to your location without having to deal with that dangerous hill?

3. Give yourself plenty of time to get to your destination. Leave early so you're not in a rush. Keep as much distance as possible between yourself and other vehicles. The extra time and following distance will allow more time to react to road conditions and keep your stress levels down, allowing for better driving decisions.

One of the ways I teach this to my students is by challenging them to pretend they are driving on ice during the summer. I have them pretend it is icy and see how far they



can go before having to touch their brakes. This makes them look ahead, pace traffic lights and have a large following distance, all while keeping track of their surroundings. Brakes should be carefully applied – just the way you need to drive in bad winter weather. This not only prepares drivers for winter weather driving conditions but also forces them to be better drivers year round.

4. Make sure your vehicle is in the best condition before hitting the road. There may not be a safe place to pull over during your trip, so ensuring your vehicle is working properly before leaving will keep you safer. Before starting your vehicle, run your own pre-trip inspection:

- What is the condition of your car or truck?
- Is your fuel tank full?
- Is everything working properly? Lights? Wipers? Tires?
- Are your windows and mirrors clean?

5. Stock your vehicle with essential winter weather supplies. As we saw in early January on I-95 in Virginia, lack of supplies can make a huge emergency worse. People were in a 40+ mile backup for 24 hours or more.

Before the winter weather hits, stock your vehicle with emergency supplies just in case you get stuck in a similar situation. You never know when you will get caught in a storm. Here are some things I keep in my car and truck:

- Bottled water
- Snack food — only keep things that don't perish like granola bars so that supplies can last in your vehicle for a long time
- Heavy coats, winter hats, blankets, flashlight (check those batteries and keep spares), cell phone and charger, ice scraper, snow shovel, road salt, tow strap, safety vest and safety triangles

If you do get stuck, be very careful of the other traffic around you. They probably don't have full control of their vehicles either.

Remember, the main goal of your trip is to get you there safely. If state and local officials ask you to stay off the roads, it is for your safety and the safety of those working around the clock to make sure our roads are clean, clear and safe to drive on. Follow their guidance.

No trip in winter weather is worth your life. Safe travels and I will see you down the road. ■

Avoid Wheel-Offs with Proper Wheel Maintenance

By Jennifer Smith, e-Commerce Digital Content Specialist, JIT Truck Parts

While it may sound like something out of Hollywood, road incidents involving wheel separation are all too common. In a 2015 report, the National Transportation Safety Board (NTSB) estimated that an average of 750-1,050 tractor trailer wheel-separation accidents occur per year. This is a real problem. Truck wheels can weigh more than 300 pounds and can cause fatal injuries if they hit other vehicles. According to the NTSB, most trucking wheel-off incidents are due to faulty wheel fasteners, and failing wheel bearings are a prominent secondary cause.

Most manufacturers recommend replacing wheel end components on big rigs every 85,000 to 100,000 miles. Keep reading to learn about the anatomy of a wheel end system, causes of wheel-off conditions, warning signs of failing parts and best-practice maintenance techniques to avoid these potentially dangerous incidents.

The Components of a Wheel End System

Though the main components of a truck wheel end system consist of seals, tapered bearings and a hubcap, there are other bits and pieces, such as spindle nuts and wheel nuts. Those smaller components are equally important and work in unison to provide sufficient lubrication and protection from premature failure while also keeping out unwanted pollutants.

One of the most critical components of the wheel end system is the seal, as it helps to keep grease and oil in the hub. Meanwhile, the hubcap – with or without a center fill plug – side plug and sight window, keep the elements out of the hub (thanks to the seal) and helps to grease the bearings. The bearings consist of a cup, rollers, cage and inner race that must be regularly maintained to avoid misalignment issues under heavy loads. The wheel nuts are designed to provide clamp force while maintaining torque and tension. There are different types of wheel nuts and choosing the right one can help reduce fuel costs, increase the life of the wheel seals and bearings and, most importantly, keep the wheel from loosening and causing wheel-off conditions.

What Causes Wheel-Off Conditions?

The most common cause of incidents is improper installation of wheel nuts which results in a lack of clamping force. If wheel nuts do not have enough torque, they can loosen the wheel. Different nut designs have different requirements, but, when working on hub-piloted wheels, a general rule of

thumb is to use a typical M22 x 1.5 stud and 33-millimeter flange nut torqued at 450-500 pounds; however, please consult your manufacturers' manuals for the proper nuts and torque for your truck. The tension between the two materials, called pre-load, can make the difference between movable joints or a clamped force. If a mechanic over-torques nuts, the studs can overstretch and break as well.

Another source of wheel-offs is lack of bearing maintenance. Dried lube or contaminants such as water, road salt or sand in hubcaps can quickly wear out bearings.

Warning Signs of Failing Wheel Ends

Drivers will need to listen, look and feel for the signs of failing wheel bearings, the first of which are hearing squealing, clicking or humming sounds near the tires. These noises could imply that there is a problem with the hub assembly. Uneven tire wear could be another telling sign but could also indicate that the tires are underinflated. Vehicles tugging to the left or right when brakes are applied is another symptom of a bad wheel bearing, as well as a vibrating steering wheel when accelerating at higher speeds. Watch for other signs of issues that can ruin bearings, including heat discoloration from preload, frail rollers and races, and spinning cups and cones.

Wheel End Maintenance

There is a limited service life for any moving truck part. While wheel bearings and other key components may last the vehicle's lifetime, that is hardly ever the case without proper maintenance. This makes servicing hub assemblies a must to avoid bearing issues and wheel separation.

In order to increase longevity, major wheel bearing manufacturers suggest properly lubricating bearings with a clean axle solvent as a starting point for installation. The grease lubricant should have a temperature range between -20 degrees and 325 degrees Fahrenheit. During installation, take care of cups and cones at the same time. While cups and cones may not both fail at once, it is always recommended to replace the components together when one shows signs of damage. Purchasing these products from the same manufacturer will ensure the components are compatible and equipped with the same bearing ratings, material and quality.

A torque wrench should be used if installing manually adjusted wheel ends, whereas preset wheel ends will have established factory calibrated endplay measurements. The proper endplay measurement for tapered roller bearing adjustment using single or double nut systems on Class 6, 7 and 8 trucks is .001 to .005 inch (.25 to .127 millimeters) in accordance with Technology and Maintenance Council Recommended Practice 618. A dial indicator can determine if adequate endplay was achieved. There should not be much preload, either, as too much could result in excess heat, causing discoloration – one of the symptoms of a failing wheel bearing.

"There is not much room for error in bearing adjustments," said Russ Kolany, heavy-duty key account manager of bearing and seal manufacturer SKF. "Around the thickness of two human hairs is the margin." (*Maintenance Practices to Prevent Wheel-Off Conditions, Fleet Maintenance*)

If the industry standard measurement is not achieved, technicians will need to try again.

Summary

Truck wheel-off incidents cause costly downtime and can be a danger to the driving public. However, they are largely preventable. To reduce the number of these incidents, commercial motor vehicle operators must learn the signs of failing wheel end components and how to properly maintain them for the safety of drivers, passengers and nearby vehicles. ■



The focus area for this year's International Roadcheck, scheduled for May 17-19, is wheel ends. Visit www.roadcheck.org for more information.



Addressing the Nation's Driver Shortage by Cultivating a Driver-First Safety Mindset

By Jill Snyder, Compliance and Safety Director, Zonar

Even with continued supply chain disruptions throughout 2020 and 2021, the trucking industry's commitment to delivering essential loads as safely and efficiently as possible remains a top priority. These disruptions have been compounded by an all-time high lack of truck drivers. The American Trucking Associations estimates that the U.S. has about 80,000 fewer drivers than it needs— and that by 2030, the gap could be upward of 160,000.

To meet this challenge, the Biden Administration announced its Trucking Action Plan in December 2021, providing an outline to help recruit top talent in trucking while addressing obstacles to driver retention. The plan streamlines the processing of commercial driver's licenses (CDL), establishes task forces to advance women in trucking (which builds on the recently passed Infrastructure Investment and Jobs Act provision to create a Women of Trucking Advisory Board) and implements additional driver apprenticeship programs – including veteran-focused outreach – to build a strong talent pipeline.

Through the proposed DRIVE SAFE ACT, Congress is also lowering the age requirement for hauling cargo across state lines, allowing drivers to start at age 18, rather than 21. However, this poses yet another challenge: safety-first education for the next generation of drivers along with the continued safety education of veteran truck drivers.

Often fatigue and distracted driving are noted as major causal factors of truck accidents. Truck driver fatigue was found to be associated with 13% of crashes evaluated as part of the Federal Motor Carrier Safety Administration's (FMCSA) Large Truck Crash Causation Study. While lesser known, complacency on the job is another leading factor affecting truck driving safety. In fact, data shows that truck drivers with five to 10 years of experience have more accidents than new drivers due to a complacency mindset.

Therefore, as fleets recruit and train new drivers, they must remember to check in with the veteran drivers too. The trucking industry needs to cultivate a driver-first safety mindset that empowers drivers to follow safety guidelines and checkpoints thoroughly each and every day,

providing them with the training, tools and support that builds job satisfaction and keeps our drivers and roads safer.

Put Drivers in the Fleet's Driver Seat

To retain current talent, fleets should find ways to put the driver first in organization-wide decisions. Companies are typically structured with the CEO at the top of the pyramid; however, in the trucking industry, this structure should be inverted to put drivers at the top. Without them hauling deliveries safely and efficiently, no one else would have a job.

Ensure that drivers feel valued and recognized for a job well done. If fleet and safety managers put more emphasis and attention on drivers, these essential workers will likely feel more motivated and experience less monotony on the job.

Technology to Support Driver Rewards

In recent years, more fleets have been providing this type of recognition through high-performer reward and gamification programs. At the end of each trip, the driver's performance is automatically captured from the vehicle's telematics technology. That data is then saved to a scorecard tracked by the fleet manager and the driver. This technology brings the idea of the popular "American Truck Simulator" reward system to the real world.

Alternatively, some fleets are changing their payment models to drive more incentive among employees. Rather than payment on a per-mile basis, organizations are shifting to a per-hour basis or a salary base to accommodate for stall time if a load isn't ready for a truck. Previously, issues with stall time would lead to reduced pay and result in a higher turnover rate as drivers looked elsewhere for more consistent payments for each hour they work. Another example is an auto carrier fleet that would pay drivers per car loaded. At the end of the year, the drivers were able to keep whatever money was left after damages were paid.

Reducing False Accusations for Drivers

Carriers are also using technology to better protect drivers from false accusations in the case of a crash. When any commercial motor vehicle is involved in an incident, the ramifications are complicated. Commercial



drivers' safety records are examined, legal resources are rallied and many drivers feel on the defense from nearly every direction – even if they did nothing wrong.

In the event of an accident, vehicles with smart dashcam technology, such as coaching systems, can capture video evidence in real-time to see when, where and how the incident occurred. There is also a challenge feature to exonerate drivers with safe-driving behavior.

No matter how safe or experienced a driver is, one bad day can ruin a career. Commercial fleets are especially vulnerable to lawsuits. We all have seen stories of the nuclear verdicts against commercial carriers involved in accidents and the impact it has on the industry. Telematics and dashcam footage provide objective evidence that can help protect a driver's career, and a carrier's bottom line, by proving who is at fault. Receiving this level of protection from an employer can further increase driver loyalty, making it more likely that they will stay on for the long term.

Safety Is a Full Fleet Responsibility

Finally, remember that safety isn't just the responsibility of the drivers, but also the dispatchers and management. Open the dialogue across the organization about safety expectations and procedures – and ask the drivers themselves what works best for them on the job. Management should consult drivers on any new telematics, in-cab coaching solutions or other devices they are considering implementing across the fleet.

According to FMCSA, large truck-related accidents have steadily increased by as much as 20% since 2015 and the World Health Organization projects that by 2030 road crashes are expected to become the fifth leading cause of death worldwide. To change these statistics, we need to make a change in the trucking culture to cultivate a driver-first safety mindset. This will not only reduce accidents and keep drivers safe, but it will also help to retain driving talent, which is key to limiting the growing truck driver shortage. Through initiatives like the Trucking Action Plan, the federal government is taking action to strengthen America's trucking workforce. Fleets and vendor organizations must also do their part to support our drivers every step of the way. ■

Kodiak Robotics Names Brett Fabbri as Head of Law Enforcement Policy and Roadway Safety

Brett Fabbri, former chair of CVSA's Enforcement and Industry Modernization Committee and former California Highway Patrol (CHP) assistant division commander for the Enforcement and Planning Division, joined Kodiak Robotics Inc., a self-driving trucking company. He now serves as the head of law enforcement policy and roadway safety.

Fabbri will oversee Kodiak's relationships with law enforcement agencies across all 50 states, while helping to ensure Kodiak trucks continue to meet the company's rigorous standards and rules of the road prior to driverless deployment on the highway. Additionally, Fabbri will work with national law enforcement leaders to adapt to trucking regulations and policies, making certain that Kodiak autonomous trucks are safe and well-maintained vehicles.

"Brett's role is vital to Kodiak as we work to launch autonomous truck operations across the United States," said Don Burnette, founder and CEO of Kodiak Robotics. "Brett brings valuable highway safety insights and experience to the Kodiak team which will be crucial to the commercial launch of self-driving trucks. Working closely with law enforcement is critical to making autonomous driving technology available at scale."

Fabbri spent more than two decades working for the CHP. Most recently, he served as the assistant division commander for the Enforcement and Planning Division at CHP headquarters. In this role, he oversaw the Commercial Vehicle Section and Collision Investigation Unit, which are responsible for autonomous vehicle technology for heavy-duty, light-duty and passenger vehicles.

"I joined the Kodiak Robotics team because I believe in autonomous trucking's potential to save lives," said Fabbri. "During my 23-year tenure at California Highway Patrol, I witnessed the safety hazards on our public roads and the resulting devastation that rippled throughout the nation. Autonomous trucking will make our roads safer for all drivers and Kodiak Robotics is at the forefront of this innovation."

Prior to his retirement from CHP, Fabbri also chaired CVSA's Enforcement and Industry Modernization Committee, which identifies technological advancements that can be leveraged to improve commercial motor vehicle safety. In April 2021, he was appointed to the American Transportation Research Institute as a research advisory committee member. This advisory committee is composed of government officials, independent scientists, labor union officials, academics and trucking company executives and suppliers from a diverse cross-section of the industry, all who understand the importance of sound science to an industry as complex as the trucking industry.

Fabbri is one of several new team members Kodiak has added as the company aims to double its staff in 2022. ■

Kodiak Robotics Inc. was founded in 2018 to develop autonomous technology that carries freight forward so that people, partners and the planet can thrive. Kodiak is making the freight industry safer and more efficient by building and operating self-driving trucks designed to operate on highway routes. Kodiak delivers freight daily for its customers between Dallas-Fort Worth and Houston, operating autonomously on the highway portion of the route. In January 2021, Kodiak became the first company in the autonomous trucking industry to announce disengage-free customer deliveries, releasing footage of more than 1,000 miles of disengage-free driving. Learn more about Kodiak on the web at www.kodiak.ai.

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. Since January 2007, it has run as a section inside CVSA's "Guardian." ■

Waste Isolation Pilot Plant 2021, at a Glance

By **Bobby St. John**, Deputy Manager, Communications, WIPP

The Waste Isolation Pilot Plant (WIPP) is the only operating deep geologic repository for transuranic waste in the world and has been a key component of the cleanup of the U.S. Department of Energy (DOE) Environmental Management's (EM) legacy sites throughout the U.S.

During 2021, WIPP continued to provide support for the EM mission, while at the same time making significant progress on major infrastructure and recapitalization projects onsite. WIPP averaged approximately five shipments per week during 2021, receiving 210 shipments throughout the calendar year. This included safely transporting transuranic (TRU) waste more than 230,000 miles from generator sites to the WIPP facility for disposal.

WIPP reached other transportation-related milestones during 2021, receiving the 13,000th shipment of TRU waste since beginning operations in 1999 and traveling more than 15.5 million loaded miles safely, since the beginning of the program (see page 37 for more information). WIPP plans to increase the number of shipments received in 2022, targeting an average of 10 shipments per week.

WIPP continues to be the cornerstone of the DOE cleanup mission and WIPP workers managed several other significant accomplishments during 2021, one of the most important being the completion of mining in Panel 8. Panel 8 is expected to be fully outfitted and ready for waste emplacement approximately three months prior to Panel 7 being filled, ensuring no interruption in the flow of TRU waste shipments to WIPP.

In addition, contractors for the two major capital asset projects – the utility shaft and safety significant confinement ventilation system – continued to make significant progress on construction work. In late 2021, WIPP received approval from the New Mexico Environment Department for a Class 3 permit modification needed to complete the mining of the new utility shaft which, in conjunction with the safety significant confinement ventilation system, will provide a much-needed increase in airflow to the WIPP underground, allowing mining, maintenance and waste emplacement to occur simultaneously, which is not possible under the current airflow rates. ■



Waste Isolation Pilot Plant Receives 13,000th Shipment

The U.S. Department of Energy (DOE) Environmental Management's Waste Isolation Pilot Plant (WIPP) received its 13,000th shipment of transuranic (TRU) waste in November 2021. This marks an important milestone in DOE's mission to clean up the country's Cold War legacy.

"This accomplishment reflects the hard work and dedication of our workers and contractors," said William "Ike" White, acting assistant secretary for DOE's Office of Environmental Management. "It also demonstrates the department's commitment to future generations as we continue our cleanup mission as safely and quickly as possible."

The 13,000th shipment, which consisted of defense-generated contact-handled TRU waste, arrived at WIPP on Nov. 11, 2021. The shipment came from DOE's Advanced Mixed Waste Treatment Project in Idaho, which has accounted for about half of the shipments – more than 6,605 to date – WIPP has received. Eight shipments arrived at WIPP in one recent week, including two from Los Alamos National Laboratory in New Mexico.

TRU waste, a byproduct of the nation's nuclear defense program, consists of tools, rags, protective clothing, sludge, soil and other materials contaminated with radioactive elements that have atomic numbers greater than uranium. Most of the 13,000 shipments were of contact-handled TRU waste, which does not require shielding to safely handle, transport and emplace. A total of 775 remote-handled (RH) waste shipments have been shipped to WIPP. The majority of RH waste containers are handled in shielded facility casks and emplaced in the walls of the underground repository due to their higher radiation dose rates.

Every WIPP shipment of TRU waste meets all U.S. Department of Transportation requirements and WIPP's drivers must pass stringent training requirements. Shipment protocols were developed through cooperative efforts with states, tribal governments and the DOE. Shipments are also monitored via satellite at all times. To date, WIPP drivers have logged more than 15.5 million safe miles without a serious injury or release of radioactive material.

WIPP's first shipment came from Los Alamos National Laboratory on March 26, 1999. Other milestone shipments have included the final shipment from the Rocky Flats Environmental Technology Site in 2005, the first shipment of remote-handled waste in 2007 and the 10,000th contact-handled waste shipment in 2011, also from Idaho. Since TRU waste disposal operations began at WIPP, 22 sites in the DOE complex have been cleaned up, reducing risk to millions of Americans.

"WIPP continues to be the cornerstone of DOE's efforts to reduce the defense legacy TRU waste footprint," said Reinhard Knerr, manager of the Carlsbad Field Office that oversees WIPP and the National Transuranic Program. "WIPP's transportation program has been a tremendous success and I congratulate everyone involved on a job well done."

WIPP is a DOE facility designed to safely isolate defense-related TRU waste from people and the environment. Waste temporarily stored at sites around the country is shipped to WIPP and permanently disposed in rooms mined out of an ancient salt formation 2,150 feet below the earth's surface. WIPP is located 26 miles outside of Carlsbad, New Mexico. ■

2022 Level VI Certification Training Schedule

Under a cooperative agreement with the U.S. Department of Energy, CVSA offers Level VI Inspection certification courses for inspectors to become trained and certified to conduct inspections of drivers and vehicles transporting transuranic waste and highway route controlled quantities of radioactive material. Level VI Inspection certification training is available to jurisdictional inspectors who are certified in North American Standard Part A (driver) and Part B (vehicle) and General Hazardous Materials.



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Based on demand, CVSA will host virtual Level VI Inspection certification classes, as needed.

Any jurisdiction interested in Level VI Inspection certification training or with facilities to host a course is asked to contact CVSA Director of Level VI Inspection Program Carlisle Smith at carlisles@cvs.org or 301-830-6147.

Longtime Level VI Inspection Program Advocate Gaylon Fuller Passes Away

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

The Level VI Inspection Program lost a true friend and advocate last December with the passing of Gaylon Fuller. Fuller's involvement with the Level VI Inspection Program spanned more than 15 years while serving as the Waste Isolation Pilot Plant project manager for CAST Transportation.

Fuller loved music and the outdoors, and made good use of his Harley to see as much of the latter as he could. He was always quick to assist the Level VI Inspection Program in any way. His warm and gregarious personality made him a perfect fit with many of the Level VI national instructors and directors over the years.

Fuller is survived by his parents, Charles Phillip and Lois; siblings Wesley and Lara Ann; and his children Gentry and Shaylee. Nieces and nephews include Makayela, Dustin, Chase, Bailee, Cortlin, Caleb, Abigail and great-niece Danielle.

Fuller attended Cloudcroft Municipal School, New Mexico State University and the Firefighter's Training Academy in Socorro, New Mexico.

After graduating the police academy in Silver City, his first post in law enforcement was as a patrol officer in Hurley, New Mexico. Fuller next accepted a position with the Roswell Police Department, and while there, he married Lacey Huffmon in 1995. He soon transitioned from the police force to work as a U.S. Department of Transportation law enforcement officer for the state of New Mexico.

He later accepted a project/terminal manager position with CAST Transportation, which in 2018 led to his role as a training specialist with Nuclear Waste Partnership LLC.

Throughout his life, Fuller's passion and enthusiasm for volunteer fire prevention touched every aspect of his being. First volunteering at the Mayhill Volunteer Fire Department (VFD), Fuller later helped establish the Upper Cox Canyon VFD. Once settled in Carlsbad, Fuller re-entered the volunteer fire department field when he joined the La Huerta VFD. This led to his recruitment as Happy Valley VFD chief.

His legacy will live on in the hearts and minds of everyone he interacted with, as well as the communities he was so dedicated to serving. The Level VI Inspection Program shall truly miss you, old friend. ■



Level VI Roadside Inspections (2022 - Fiscal)

LEVEL VI INSPECTIONS	Federal	State	Total	% of Total
Number of Level VI Inspections	0	176	176	100%
Point of Origin	0	98	98	55.68%
En Route	0	78	78	44.32%
Point of Destination	0	0	0	0%
Unknown Location	0	0	0	0%
Level VI Inspections with No Violations	0	172	172	97.73%
Level VI Inspections with Violations	0	4	4	2.27%
Level VI Inspections with Out-of-Service Conditions	0	2	2	1.14%

Level VI Roadside Inspection Violations (2022 - Fiscal)

Violation Code	Violation Description	# of Inspections	# of Violations	% of Total Violations	# of OOS Violations	OOS %
393.45B2	Brake Hose or Tubing Chafing and/or Kinking	2	2	50.00%	2	66.67%
177.817A	No or Improper Shipping Papers (carrier)	1	1	16.67%	0	0%
397.101D	No or Incomplete Route Plan for Radioactive Materials	1	1	16.67%	0	0%
172.310D	Type B, B(U), B(H) Package Not Marked with Radiation Symbol	1	1	16.67%	0	0%

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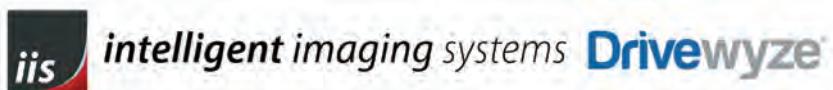
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AUGUST 15-19, 2022



After two years off due to the pandemic, CVSA is excited to resume its North American Inspectors Championship, the only event that tests, recognizes and awards commercial motor vehicle inspector excellence. This year's championship is scheduled for Aug. 15-19 in Indianapolis, Indiana.

Visit www.cvsa.org/events/north-american-inspectors-championship for more information.