

Commercial Motor Vehicle (CMV) Crash Reporting Communications and Training Plan





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Background and Purpose

In 2017, the Texas A&M Transportation Institute (TTI) was funded by the Federal Motor Carrier Safety Administration (FMCSA) to complete a project addressing the reporting of commercial motor vehicle (CMV) crashes with a focus on large trucks.

The purpose of the "Commercial Motor Vehicle Crash Reporting Communications and Training Plan" is to communicate the importance of accurate CMV crash reporting to law enforcement officers and other stakeholders, as well as to communicate available training opportunities for law enforcement officers.

Goals and Intended Outcomes

The overall goals of this communication plan are to:

- Identify and describe available tip cards and educational materials for law enforcement officers
- Identify and describe available trainings on CMV crash reporting for law enforcement officers
- Improve law enforcement officers' understanding of the importance of accurate CMV crash reporting
- Promote training of law enforcement officers in CMV crash reporting

Audience

This document is intended to be used by several stakeholders, including:

- Law Enforcement Officers
 - Local Agencies
 - Municipal/County Police Departments
 - Sherrif's Offices
 - Texas Department of Public Safety (TxDPS)
- Crash Data Stakeholders
 - o Texas and Other State Departments of Transportation (e.g., TxDOT)
 - o TxDPS
 - o FMCSA
 - US Department of Transportion (US DOT)

Research Agencies

Messages

The following are messages featured in the communication plan and can be used to promote training. The following section groups messages by their key themes.

- Need for CMV Crash Reporting Training
 - o Accurate CMV crash reporting supports effective resource allocation
 - o CMV specific crash reporting training is needed
 - o All stakeholders benefit from accurate CMV crash reporting
 - o All officers should have a basic understanding of CMV crash reporting
 - CMV crash data is used to satisfy requirements listed in the Commercial Driver License Law
 - CMV crash data is useful for regulating carriers through the Motor Carrier Safety Program
- Addressing Barriers to Training
 - CMV crash training can be low or no cost
 - o CMV crash training can occur during roll calls
- Misperceptions (e.g., I do not handle CMV crashes)
 - All officers should have a basic understanding of CMV crash reporting
 - You never know when you will encounter a CMV crash

Methods

Available Tip Cards and Educational Materials

Federal and State Agency Review

Several past and current projects at TTI involved the identification of CMV configurations and hazmat placards; therefore, the first step was to collect available tip cards included in previously acquired resources. An extensive internet review followed. Multiple search term combinations were used to capture visor tip cards and other educational materials that could be beneficial to law enforcement during a CMV-involved crash. Search terms included:

- Commercial vehicle/CMV/truck incident/crash/accident visor/tip cards
- Commercial vehicle/CMV/truck incident/crash/accident reporting
- Commercial vehicle/CMV/truck incident/crash/accident reporting visor/tip cards
- Crash report visor cards for law enforcement
- State DOT crash report visor card
- Commercial vehicle/CMV/truck incident/crash/accident video
- Commercial vehicle/CMV/truck incident/crash/accident reporting video
- Commercial vehicle/CMV/truck incident/crash/accident reporting video cards
- Crash report video for law enforcement

Next, document searches were completed on federal agency websites. As part of the extensive internet search, several states appeared to be active in this topic area. For these states, a review and search of state agency websites were performed to capture any relevant tip cards.

Lastly, YouTube was searched for relevant training videos that could potentially be utilized for roll call trainings.

TTI Educational Materials

As part of this FMCSA funded project, TTI also designed two tip cards that are available to law enforcement officers which include information on how to identify CMVs, responsible carriers, and DOT numbers. In addition, TTI prepared example information plates and registration receipts for officers to familiarize themselves with identifying information found in the CMV crash section in Texas.

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Available Trainings

The training list was compiled by firstly identifying commercial motor vehicle (CMV) or large truck trainings provided by FMCSA as specified in their website. Secondly, trainings were identified from the International Association of Directors of Law Enforcement Standards and Training (IADLEST) website. IADLEST is an association of training managers and leaders with a focus on establishing common standards for criminal justice training. Trainings on crash investigation and reconstruction of CMVs and large trucks were identified. Next, relevant trainings provided or listed by organizations other than FMCSA and IADLEST were identified through Google search using specific keywords. Keywords included the following:

- Crash reconstruction
- Crash investigation
- CMV crash reconstruction
- CMV crash investigation
- Large truck crash reconstruction
- Large truck crash investigation
- Commercial vehicle crash reconstruction
- Commercial vehicle crash investigation

Lastly, the Texas Commision on Law Enforcement's (TCOLE) course list was searched for relevant CMV courses.

Results

The following sections highlight: 1) Available Tip Cards and Educational Materials and 2) Available Training Opportunities for Law Enforcement Officers.

Available Tip Cards and Educational Materials

The extensive search and review of state agencies revealed limited CMV visor cards outside those produced by the FMCSA. Table 1 contains the five visor tip cards produced by FMCSA that are directly beneficial to crash reporting. Often, state agency websites directed users to these tip cards instead of producing their own.

Table 1. CMV-Related Tip Cards Beneficial to Crash Reporting.

Sponsor	Classification	Title	Description
FMCSA	Federal	Truck and Bus Crashes	Provides criteria and thresholds
		Reportable to FMCSA	for reporting of a truck and bus
		(Blue)	crash. Includes a description and
			examples of CMVs.
FMCSA	Federal	How to Find the	Provides instructions and
		Responsible Carrier and	examples on how to identify the
		Correct U.S. DOT Number	responsible carrier and correct
		(Red)	U.S. DOT number.
FMCSA	Federal	Vehicle Configuration &	Graphically depicts 15 cargo body
		Cargo Body Type (Green)	types and nine vehicle
			configurations.
FMCSA	Federal	Nine Classes of Hazardous	Provides graphics of the nine
		Materials & Reporting	classes of hazardous materials
		Hazardous Materials	and instructions on how to
		Information (Yellow)	accurately report hazardous
			materials information.
FMCSA	Federal	Commercial Driver's	Provides graphics and
		License (CDL) (Orange)	descriptions of the different types
			of CDL endorsements and CMV
			groups.

Table 2 contains additional CMV-related tip cards from FMCSA, mostly presenting safe operational information to CMV operators. Additionally, one visor tip card from the Federal Highway Administration could be beneficial to law enforcement during the investigation of a CMV-involved crash.

Table 2. Other CMV-Related Tip Cards.

Sponsor	Classification	Title	Description
FHWA	Federal	Suspected Serious Injury	Provides a checklist of seven
		(A) Classifications	suspected serious injuries (A)
			classifications.
FMCSA	Federal	7 Steps for Safety	Lists seven safety tips for
		Highway-Rail Grade	operating CMVs over highway-
		Crossings	rail grade crossings.
FMCSA	Federal	What to Do if Your Vehicle	Provides instructions and
		Stalls or Hangs Up on the	emergency contact information
		<u>Tracks</u>	in the event that a CMV becomes
			stuck on a highway-rail grade
			crossing.
FMCSA	Federal	GPS Selection Guide for	Provides guidance in selecting
		<u>CMVs</u>	GPS systems for CMV use, along
			with tips for safe use of GPS
			navigation systems.
FMCSA	Federal	Commercial Tire Safety	Provides tire safety tips and
		<u>Tips</u>	graphics/tables for
			understanding proper tire
			inflation, selection, and speed
			rating.
FMCSA	Federal	Hours-of-Service (HOS)	Based on the regulation upon
		Regulations - Comparison	release (October 2013), provides
			a summary of the HOS rule and a
			comparison of current rule to
			prior rule
FMCSA	Federal	ELD Tip Card	Provides guidance for officers
			and drivers/carriers on ELDs.

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Table 3 and Table 4 describes additional educational documents and videos on commercial motor vehicle crash reporting that are publicly available and free. In addition to the resources described below, specific information on CMV crash reporting can be found in the CR-100 <u>State of Texas Instructions to Police for Reporting Crashes</u> which is publicly available at:

https://www.txdot.gov/government/enforcement/crash-records.html. Other state crash manuals may or may not have a specific section for CMV reporting.

Table 3. Publicly Available Educational Documents

Sponsor	Classification	Title	Description	Material Classification
FMCSA	Federal	Commercial Motor Vehicle Awareness Training	The nine-page document provides law enforcement officers with information for handling crashes and traffic	PDF
			stops involving CMVs.	
FMCSA	Federal	Tip Sheet: Education Related Transportation Understanding Federal Regulations for Passenger Carriers	The brief tip sheet provides information on passenger vehicles, including when these vehicles are regulated, commercial regulations, safety regulations, and exemptions.	PDF

Table 4. Publicly Available Educational Videos

Sponsor	Classification	Title	Description	Material Classification
FMCSA/ Baltimore County Police Depart- ment	Federal/State	Pull 'Em Over	The approximately 20-minute video discusses the importance of enforcing traffic stops with CMVs, as well as information to make stops safely. Tips could be applicable to responding to a CMV crash.	Video
FMCSA/ AAMVA	Federal	18 Wheels and BUSted	The approximately 13-minute video discusses the importance of enforcing traffic stops with CMVs, as well as information to make stops safely. Tips could be applicable to responding to a CMV crash.	Video

TTI Educational Materials

The following section provides tip cards designed as another task for this projet, as well as educational materials that may be used to assist in training law enforcement officers. All educational materials can be found at https://groups.tti.tamu.edu/cts/improving-the-collection-and-reporting-of-cmv-crash-data-in-cris/.

TTI Tip Cards

Identifying CMV Crashes and CMV Crash Criteria

Identifying Commercial Motor Vehicles (CMVs) for Crash Reporting in Texas











Understanding CMV Crash Criteria in Texas

8		CMV CRITERIA	DEFINITION	WHERE TO FIND THIS INFORMATION?
4		Weight	Vehicle with a GVWR, GCWR, or RGVW that is 10,0 to the Texas Department of Transportation (TxDC	
	WEIGHT	Gross Vehicle Weight Rating (GVWR) or Gross Combination Weight Rating (GCWR)	Max weight provided by vehicle manufacturer. GVWR is separate for truck and trailer; whereas, GCWR is the combined weight for both.	Information Plate on Door of Vehicle or on Trailer
		Registered Gross Vehicle Weight (RGVW)	Weight may be the same as GVWR/GCWR, but may differ under circumstances (e.g., vehicle modifications). If weights differ, you should use the greater weight value.	Vehicle Registration Receipt (towards the middle) Note: RGVW not available on vehicles with exempt license plates, older vehicles, or heavy equipment.
	HAZMAT	Hazmat Transportation	Vehicle transporting hazardous materials identified by the Hazardous Materials Transportation Act.	You should see a hazmat placard on the vehicle.
	PASSENGER	9+ Passenger Capacity	Vehicle with a passenger seating capacity of nine or more including the driver and used for transportation of passengers.	

Note: The Federal Motor Carrier Safety Administration (FMCSA) includes the same requirements for crash reporting, but excludes noncommercial purposes (e.g., recreational use).

Identifying Responsible Carriers and DOT and Other Important Numbers

Identifying the Responsible Carrier and DOT Number for CMV Crashes in Texas **START** Ask driver if Are they HERE Check vehicle side truck is leased. for DOT number. carrying a load? **Check shipping** Check lease agreement for Check record of DOT number and Carrier Info. papers for carrier *Do not get information from side of vehicle. duty or electronic logging device (ELD) for carrier info. *Important: Information on the truck or vehicle registration may not be the responsible carrier

FMCSA WEB SITE: http://safer.fmcsa.dot.gov/CompanySnapshot.aspx verify motor carriers' information (e.g., DOT number, name, address, phone).



DOT and Other Numbers Quick Reference

	WEIGHT A REQUIREMENT	HAZARDOUS MATERIALS	TRANSPORTATION OF PASSENGERS OR OTHER	COMMERCE	LENGTH
U.S. DOT Number	Over 10,000 lbs	~	9–15 passengers with driver for compensation, or More than 16 passengers	Interstate NM OK AK TX LA	8 characters with possible leading zeros to the US DOT Number
MC, FF, or MX Number (Needed in addition to a DOT Number; Formerly ICC Number)	×	X	When transporting passengers in interstate commerce, or When transporting federally- regulated commodities in interstate commerce	Interstate NM OK AK TX LA	6 to 8 characters with possible leading zeros
TxDMV Number (Formerly TxDOT Number) *A U.S. DOT Number is required to obtain a TxDMV Number	• Over 26,000 lbs, or • Farm vehicle over 48,000 lbs	~	Vehicle transports more than 15 passengers with driver, or Commercial school bus, or When transporting household goods for compensation	Intrastate	10 characters with possible leading zeros. The TXDMV last character may be the letter C or a numb

Note: 1. A carrier may have other registration number requirements dependent on state. 2. Reporting priority for carrier IDs on crash form is U.S. DOT, MC/FX/MX number, TxDMV, and Other State.

Other Educational Materials Registration Receipt

Figure 1 demonstrates an example registration receipt for a CMV. The red text highlights information requested on the Texas CR-3 crash form, including VIN, Vehicle Year, Body Style, Company Information, and Gross Weight.

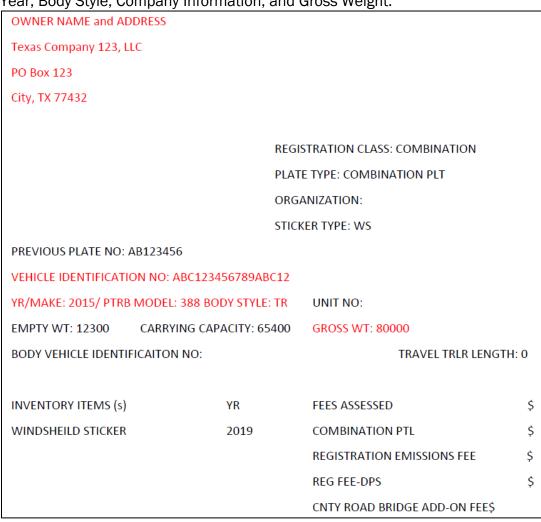


Figure 1.Example Registration Receipt

Vehicle Information Plate

Figure 2 demonstrates an example vehicle information plate for a CMV. The red text highlights information requested on the Texas CR-3 crash form, including Gross Vehicle Weight Rating, VIN, and Vehicle Type.

Manufacturer 5

MANUFACTURED BY 5 DE MEXICO S A. TIJUANA B. C. MEXICO

IMPORTED BY 5, INC. CITY, TX USA

DATE OF MANUFACTURE: 04/06 GVWR: 12345 KG

12345 LB

GAWR ALL AXLES TIRES – DIMENSION COLD TIRE INFL DUALS

5432 KG 321/87654.3 765 kPa

12345 LB RIMS 123 psi

8.76/23.4

THIS VEHICLE CONFROMS TO ALL APPLICABLE FEDERAL MOTOR VEHIBLES

SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE

V.I.N. - 3H3 A1B2C3D4E5F6G7

MODEL - ABC123456 - DEF TYPE - TRAILER - VAN

PARTS INFO 1-800-123-4567

Figure 2. Example Vehicle Information Plate

Available Training Opportunities for Law Enforcement Officers

Available courses that covered reporting of CMV crashes were identified. The following three sections provide a summary of training opportunities available through 1) FMCSA, 2) State Agencies or Governments, and 3) Other Agencies (e.g., nonprofits, academic universities, private companies).

FMCSA Training Opportunities

FMCSA has developed the Traffic and Bus Traffic Enforcement Training (TBTET) which largely focuses on providing officers with the knowledge and skills for stopping a truck or bus. These skills and knowledge can also be applied when responding to a CMV crash. However, it is important to note neither trainings are specific to crash reporting. TBTET includes promotional videos, FMCSA instructor-led officer training, and roll call curriculum. There are 8-short roll call curriculums available, as well as other materials online.

State Training Opportunities

Table 5 summarizes available trainings sponsored by state agencies (e.g., local law enforcement, department of transportations). The Virginia Department of Motor Vehicles (DMV) teaches a Commercial Vehicle Crash Investigation Course that covers the characteristics of CMVs and the dynamics at play when one is involved in a crash. The Minnesota State Patrol also has classes focused primarily on CMVs. This information also appears to be briefly addressed in trainings available through the North Carolina Justice Academy and the Tennessee Highway Safety Office.

Table 5. State Agencies CMV Reporting Training Opportunities

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
Colorado State Patrol	Law Enforcement	Level III - Traffic Accident Reconstructio n	N/A	Level III Accident Reconstruction and Level IV Computer Aided Accident Reconstruction are offered throughout the year. Advanced courses include information on CMVs.	Yes	No
Colorado State Patrol	Law Enforcement	Level IV – Computer Aided Traffic Accident	N/A	Level III Accident Reconstruction and Level IV Computer Aided Accident Reconstruction are offered throughout the year. Advanced courses include information on CMVs.	Yes	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
		Reconstructio n				
Minnesota State Patrol	Law Enforcement	Training and Outreach	N/A	Minnesota State Patrol offers classes and presentations focused on CMVs, including information on vehicles, hazardous materials, inspection procedures, and load securement.	No	No
TXDOT/IAD LEST	State / Non- Profit	Truck and Bus Traffic Enforcement Training	FREE	The Truck and Bus Traffic Enforcement Training Program is presented at no cost to participants and re-emphasizes the need for all sworn officers to engage large trucks and buses safely and effectively to reduce the rate of crash injuries and fatalities.	No	No
Virginia DMV	State	Commercial Vehicle Crash Investigation	FREE for VA Law Enforce -ment	This intensive course covers the unique characteristics of CMVs and the dynamics at play when one is involved in a crash. Detailed information about the nomenclature and operation of CMVs equips students with an adequate understanding of the mechanical components of CMVs and how they factor into the investigation. Hands-on exercises and vehicle testing is utilized to reinforce the concepts presented during the course.	Yes	No
North Carolina	State	Traffic Crash Reconstructio n 2.0	N/A	This course teaches participants to reconstruct traffic crashes using previously gained knowledge in combination with materials	Yes	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
Justice				learned in this course, including investigation of		
Academy				CMV crashes.		
Tennessee	State	Traffic Crash	N/A	This course discusses the effect of weight shift	Yes	No
Highway		Reconstructio		in braking involving large trucks and buses,		
Safety		n Course		including truck-tractor and semi-trailer		
Office				combinations.		

Other Training Opportunities

Table 6 summarizes available trainings sponsored by private agencies, non-profit organizations, and universities. These trainings largely address CMV crash investigation and CMV crash reconstruction. These trainings appear to be the most relevant to improving knowledge and skills associated with CMV crash reporting.

Table 6. Other CMV Reporting Training Opportunities

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
Accident	Private	<u>Investigating</u>	\$925	The course is designed for police officers,	Yes	No
Investigati		Commercial	plus	investigators and engineers who will be		
on and		Motor	travel	investigating collisions involving semi-		
Reconstruc		<u>Vehicle</u>		tractor/trailers, recreational vehicles, trucks		
tion		<u>Crashes</u>		and trailer combinations and other heavy		
Specialists,				equipment. It covers CMV types, part		
Inc.				nomenclature of large trucks and air brakes,		

Sponsor	Classification	cation Title C	Cost	Description	Pre- requisite Course(s) Required	Online Course
				brake systems, federal motor carrier regulations, brake force calculations for air brake systems, center of mass of articulated vehicles with loads, coupling devices, an introduction to engine control modules and other electronic data contained in CMVs, and collision dynamics.		
Accident Investigati on and Reconstruc tion Specialists, Inc.	Private	Traffic Collision Reconstructio n - Level III	\$1,080 plus travel	The course is another level of instruction for police officers, investigators and engineers who will be investigating automobile collisions. It covers energy, time and distance analysis, formula derivations, and advanced airborne equations in depth as each attendee works on several traffic collision reconstructions. Attendees will apply the information learned from the At Scene Collision Investigation (Level I) and Advanced Technical Collision Investigation (Level II) and learn to reconstruct vehicle collisions to provide answers as to what happened during a collision. Attendees will also be introduced to CMV and heavy truck collision reconstruction as well as event data recorder reports and their use in reconstructions.	Yes	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
Institute of Police Technolog y and Manageme nt - University of North Florida	Non-Profit / University	Commercial Vehicle Crash Investigation - Level I	\$795 plus travel	This intensive course covers the unique characteristics of CMVs and the special dynamics at play when one is involved in a collision. Detailed information of the nomenclature and operation of CMVs will provide a level of competence needed to have an adequate understanding of mechanical components, parts and pieces of the CMV and how they may factor into the investigation. To reinforce the concepts presented, "hands-on" exercises and vehicle testing will be conducted in the course.	Yes	No
Institute of Police Technolog y and Manageme nt - University of North Florida	Non-Profit / University	Commercial Vehicle Crash Investigation - Level II	\$825 plus travel	Designed to further enhance the knowledge and skills acquired in IPTM's Commercial Vehicle Crash Investigation—Level I course, this class focuses on a detailed analysis of CMV systems and dynamics, and the application of findings to crash reconstruction.	Yes	No
Institute of Police Technolog y and	Non-Profit / University	Event Data Recorder Use in Traffic Crash	\$795 plus travel	This course teaches how to analyze any event data recorder (EDR) data, regardless of the manufacturer. It also teaches how to analyze the EDR data which has been collected with	Yes	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
Manageme nt - University of North Florida		Reconstructio n - Level I		any imaging tools, including propriety manufacturer tools, as well as from future vehicles not yet released. The course demonstrates analytical tools techniques for heavy truck data.		
Institute of Police Technolog y and Manageme nt - University of North Florida	Non-Profit / University	Tire Forensics and Crash Reconstructio n	\$195 plus travel	This course provides the technical information needed to recognize and identify common evidence and causes of tire failure for different vehicle types, including CMVs.	No	No
Institute of Police Technolog y and Manageme nt - University of North Florida	Non-Profit / University	Heavy Vehicle Electronic Control Module Data Use in Crash Reconstructio n	\$1,195 plus travel	This course assists with the forensic collection and analysis of event data that is available in Heavy Vehicle Electronic Control Modules (HVECM), also referred to as Heavy Vehicle Event Data Recorders (HVEDR).	Yes	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
Northwest ern	University	Various	\$1,000 plus travel	This course offers an advanced crash reconstruction course on heavy vehicles.	Some courses have pre- requisites	Some courses are availabl e online
SRR Training	Private	Introduction to Commercial Motor Vehicle Crash Inspection, Investigation and Reconstruction	\$550 plus travel	This comprehensive 4-day course, consists of extensive classroom and "hands-on" training in the area of CMV crash inspections, investigations and crash reconstructions so that following the class, police investigators can focus on crash causation.	Yes	No
SAE Internation al	Private	Accident Reconstruction Certificate Program	N/A	This six-course certificate program focuses on the fundamental technical knowledge and skills required for practitioners of vehicular accident reconstruction. The primary objective of this certificate program is for the attendees to become more proficient at the practice of vehicle crash/accident reconstruction. This is accomplished through an understanding of the fundamentals of crash mechanics, vehicle dynamics and kinematics, and how vehicle	The certificate program coursework is offered as a package	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
				systems, subsystems and on-board technology influence that process. The required portion of the curriculum supports this objective by taking the attendees through crash reconstruction methods, vehicle dynamics and event data recorder (EDR) technology. The individual can then select three elective courses that best suit the individual's interest areas or engineering emphasis.		
Northcoast Polytechni c Institute	Private	Commercial Vehicle Accident Investigation, Enforcement and Airbags / Black Box Technology	N/A	This course familiarizes officers with basic CMV accident investigation principles. In addition, the course provides training in the federal and state regulations concerning CMV log books and CMV equipment. Basic mechanical systems of CMVs is also explained. In addition, the height, weight and length laws within the ORC is discussed. Finally, training is provided in airbags and black box technology issues to aid the officer in the investigative process.	No	No
Northcoast Polytechni c Institute	Private	Commercial Accident Reconstruction	N/A	This 3-day seminar is designed for experienced law enforcement officers who has had previous training in basic and technical (advanced) accident investigation. The officer does not have to be an accident reconstructionist to attend. The seminar	Yes, expected to have taken a basic and advanced accident	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
	how to investigate and reconstruct a CI accident. Topics to be discussed include federal motor carrier regulations, CDL licensing, log books and log book violat CMV air brakes, stroke measurement o brakes, obtaining data to perform brake efficiency calculations, rollover acciden minimum speeds from skid marks and evidence, trailer under-ride accidents, so loads and cargo, trailer swing out and jak knife accidents, mirror adjustments and		licensing, log books and log book violations, CMV air brakes, stroke measurement of air brakes, obtaining data to perform brake efficiency calculations, rollover accidents,	investigatio n course.		
Advantage Fleet Services	Private	Commercial Vehicle Incident Investigation Course (CVIIC)	N/A	CVIIC is developed specifically to assist private companies and organizations in analyzing the causes of motor vehicle collisions so that liability or financial responsibility can be determined. This critical analysis is part of a company's incident management system.	No	No
Infrastruct ure Health and Safety Association	Private	Commercial Motor Vehicle Collision Investigation	\$338 (inside facility) \$2,420 (out-	This intensive certificate course enables participants to better determine collision preventability, identify training needs, make logical recommendations for changes to ensure a safer vehicle operation, and build a database to understand how, where, and why	No	No

Sponsor	Classification	Title	Cost	Description	Pre- requisite Course(s) Required	Online Course
			side facility)	collisions are happening. Participants learn concepts and necessary information required to competently investigate CMV collisions.		
Missouri Safety Center	Non-Profit	Basic Heavy Truck Reconstruction	\$475 plus travel	This 40-hour course is designed to teach the unique skills required to gather, document, and preserve evidence needed for the reconstruction of heavy truck crashes. The course covers the following subjects: brake force calculations, acceleration and deceleration testing, pre-trip inspection familiarization, log book familiarization, push rod travel and measurements, as well as specific math formulas for heavy truck investigation. This course is math intensive course, and incorporate practical field demonstrations and data gathering exercises.	No	No
Missouri Safety Center	Non-Profit	Event Data Recorder Use in Traffic Crash Reconstruction	\$695 plus travel	This comprehensive course teaches how to operate the Bosch Crash Data Retrieval (CDR) system hardware and software to image crash data from supported car and light truck event data recorders (EDR's), as well as analyze the downloaded data and apply it to crash reconstructions.	No	No

Texas Commission on Law Enforcement Opportunities and Credit

The Texas Commission on Law Enforcement (TCOLE) establishes and ensures standards for law enforcement, corrections, and telecommunication employees. In addition, TCOLE facilitates trainings to ensure the standards are followed.¹

TCOLE offers trainings through approximately 2,250 courses which can be found on their website. Table 7 presents CMV courses available through TCOLE.

In addition, outside training can be completed with documentation that the course meets TCOLE requirements. These requirements include a roster, learning objectives, instructor bio-sketch, assessment instruments, and course evaluation. These courses should be advertised as eligible for TCOLE credit hours.

Course Number Course Title Maximum Minimum **Hours Hours** 4 3401 Commercial Driver's License Law Course 100 5487 Commercial Motor Vehicle Interdiction 8 24 786006 DPS - Commercial Vehicle Enforcement 1 100 786011 DPS - Basic Commercial Vehicle Enforcement 40 100 786021 DPS - Commercial Vehicle Safety Alliance 8 100

Table 7. CMV Courses Available through TCOLE.

Self-Assessment Quiz

The following short assessment can be distributed to officers to determine if they are familiar with the information needed for accurate CMV crash reporting. A printable copy of the assessment and an answer key can be found in the Appendix.

CMV Crash Reporting Self-Assessment

- 1. Which of the following indicates that a vehicle involved in a crash is a CMV in Texas according to federal and state crash reporting guidelines?
 - a) GVWR More than 10,000lbs
 - b) Transporting 9 or More People Including the Driver
 - c) Hazardous Materials Placard Required
 - d) All of the Above

¹ <u>https://www.tcole.texas.gov</u>

- 2. Which of the following weight is a combined vehicle weight?
 - a) GVWR
 - b) GCWR
 - c) RGVW
 - d) All of the Above
- 3. Which number is required in Texas for a truck weighing 26,001 pounds or greater conducting intrastate commerce?
 - a) US DOT Number
 - b) MC, FF, or MX Number
 - c) TxDMV Number
 - d) Both A and C
- 4. Where would you find the GVWR on a CMV?
 - a. Side of Vehicle
 - b. Lease Agreement
 - c. Information Plate
 - d. All of the Above
- 5. Where would you find the US DOT Number on a CMV?
 - a. Side of Vehicle
 - b. Lease Agreement
 - c. Both A and B
 - d. None of the Above
- 6. Where would you find the RGVW on a CMV?
 - a. Registration Receipt
 - b. Side of Vehicle
 - c. Lease Agreement
 - d. All of the Above
- 7. Where would you find the responsible carrier for a CMV?
 - a. Lease Agreement
 - b. Shipping Papers
 - c. Log
 - d. All of the Above
- 8. If a yellow school bus is involved, the crash should be reported as CMV-related.
 - a) True
 - b) False
- 9. A Texas truck weighing 26,001 pounds or greater conducting intrastate commerce is required to obtain a US DOT Number.
 - a) True
 - b) False

- 10. If a vehicle has both a US DOT Number and TxDMV Number, I should report the US DOT Number on the CR-3 form?
 - a) True
 - b) False
- 11.A CMV that operates in Louisiana and Texas is conducting intrastate commerce.
 - a) True
 - b) False
- 12.A CMV that only drives products in Austin that were produced locally is conducting interstate commerce.
 - a) True
 - b) False
- 13. Passenger capacity for a yellow school bus is determined by allowing one passenger for every 13 inches of seat space.
 - a) True
 - b) False
- 14. If an individual rents a U-Haul to move furniture for a day, the registered carrier for the vehicle is the individual.
 - a) True
 - b) False
- 15. If Company X leases a truck from Penske and one of their employees crashes the vehicle, the reported carrier should be Company X.
 - a) True
 - b) False

Scoring the Self-Assessment

The following recommendations are being made based on performance on the selfassessment.

- 11-15 Correct Answers: You are very familiar with the requirements of CMV crash reporting and may not need training unless you want additional information (e.g., <u>CR-100 Crash Instruction Manual</u>)!
- 8-10 Correct Answers: You are semi-familiar with the requirements of CMV crash reporting, but we recommend a refresher of available materials on CMV Crash Reporting in Texas (e.g., <u>CR-100 Crash Instruction Manual</u>). You may also want to look at training if you want additional information!
- 7 or Less Correct Answers: You should review available materials on CMV Crash Reporting in Texas (e.g., <u>CR-100 Crash Instruction Manual</u>) and we recommend you attend a training.

Performance Reporting

To understand the effectiveness of implementing the communication and training plan at your agency, it is recommended that a performance report be produced that measures and analyzes changes before and after implementation. The following are suggestions for methods to determine if changes have occurred:

- Time and cost-effective email survey using free surveying website (e.g., SurveyMonkey)
- Pre- and post-assessments to determine if knowledge changes have occurred
 - This can be done using the included self-assessment
- Track CMV reporting to determine if data are more accurate
- If you have a Commercial Vehicle Enforcement (CVE) Unit who may yield
 questions they may be able to provide verbal feedback on the implementation
 (e.g., qualitative data)

The next section describes potential performance indicators that could be used to assess for changes before and after implementation of the communication and training plan:

- Number of correct CMV-related CR-3 forms
- Number of inquiries to the CVE Unit
- Increase knowledge on CMV crash reporting requirements

Conclusion

This report presents a plan for communicating the importance of accurate CMV crash reporting and provides information on available trainings. During the process of developing the plan, it became apparent that CMV specific training opportunities for law enforcement officers are limited. This finding was supported by prior project work that involved conducting focus groups with law enforcement officers and data stakeholders. This project addresses educational needs through the development of this communication and training plan, as well as through the development of tip cards for law enforcement officers. However, future efforts could further address the limited availability of CMV specific training opportunities, such as through the development of CMV curriculum for multi-day trainings or short (3 to 5 minute) role call videos.

Appendix

Self-Assessment Answer Key & Printable Assessment

The following section provides the answers to the self-assessment. In addition, the printable self-assessment can be found on pages 27-28 and can be printed directly from this document.

- 1. Which of the following indicates that a vehicle involved in a crash is a CMV in Texas according to Federal and state crash reporting guidelines?
 - a) GVWR More than 10,000lbs
 - b) Transporting 9 or More People Including the Driver
 - c) Hazardous Materials Placard Required
 - d) All of the Above
- 2. Which of the following weight is a combined vehicle weight?
 - a) GVWR
 - b) GCWR
 - c) RGVW
 - d) All of the Above
- 3. Which number is required in Texas for a truck weighing 26,001 pounds or greater conducting intrastate commerce?
 - a) US DOT Number
 - b) MC, FF, or MX Number
 - c) TxDMV Number
 - d) Both A and C
- 4. Where would you find the GVWR on a CMV?
 - a) Side of Vehicle
 - b) Lease Agreement
 - c) Information Plate
 - d) All of the Above
- 5. Where would you find the US DOT Number on a CMV?
 - a) Side of Vehicle
 - b) Lease Agreement
 - c) Both A and B
 - d) None of the Above
- 6. Where would you find the RGVW on a CMV?
 - a) Registration Receipt
 - b) Side of Vehicle
 - c) Lease Agreement
 - d) All of the Above
- 7. Where would you find the responsible carrier for a CMV?
 - a) Lease Agreement
 - b) Shipping Papers
 - c) Log

- d) All of the Above
- 8. If a yellow school bus is involved, the crash should be reported as CMV-related.
 - a) True
 - b) False
- 9. A Texas truck weighing 26,001 pounds or greater conducting intrastate commerce is required to obtain a US DOT Number.
 - a) True
 - b) False
- 10. If a vehicle has both a US DOT Number and TxDMV Number, I should report the US DOT Number on the CR-3 form?
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CMV Crash Reporting Self-Assessment

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