Prepared by the University of Connecticut CTSRC For Use by Connecticut Law Enforcement

Training Police Officers in Investigating Large Vehicle Crashes CT's effort to improve CT's FMCSA's Safety Rating







2016

CT changed the method of collection from a 20 year old crash report to a fully electronic system.

MMUCC 4 Compliant System implemented on January 1, 2015

- New Form introduced with appendices to cover various aspects of crashes
 Introduced with appendices to cover various
 - 1. Heavy Vehicles/Commercial
 - 2. Bicyclist
 - 3. Passengers
 - 4. Witness
 - 5. Bus Passenger
 - 6. Non-Motorist

Motor Vehicle	-	Iop Validation						XML T	?
Page 1 of 12		CONNECTICUT		POLICE CRA	SH REPORT				
Number of M Automobiles, Moto		s: 1 Fo		Case Number:					
Number of N	on-Motorists	· 1 · · ·	rash Sum	mary (Front)		DOTIde			
Pedestrians, Bioyo	Ests, etc.					For DOT	use only		
		CRASH DATE,		VERITY, AND	LOCATIO				
Date of Crash (YYYYMMDD)		(0000-2359) Town N	ime			Town #	_	ash Severity	
2 0 1 4 0 7	1 4				*			∫Fatal ()Injur	y ⊖PDO
Latitude	Crash occu	rred on (street name or route #)	at its intersec	tion with (street nan	ne or route #)				
				at					
Longitude	If not at an i	intersection: distance	Feet	N, S, E, W n	ame of nearest i	ntersecting	road, town	line, or mile mark	er
			Tenths of Mile	of		-			
For all numeric fields: 99 = 'Unkno	wn'			AND CONDI					
TRAFFICWAY OWNERSHIP 01. Public Road		LOCATION OF FIRST HARME 01. On Roadway	ULEVENT	FIRST HARMFUL	EVENT		MANNER O	IF IMPACT multi-vehicle crash	
02. Private Road	-	02. Shoulder	-	Non-Collision:		-			
88. Not Applicable		03. Median		01. Overturn/Rollow			01. Front to		
TRAFFICWAY CLASS		04. Roadside		02. Fire / Explosion 03. Immersion, Full	or Partial	02. Front to	Front		
01. Trafficway, On Road		05. Gore 05. Separator	04. Jackknife			03. Angle 04. Sideswipe, Same Direction			
02. Trafficway, Not on Road	-	07. In Parking Lane or Zone	05. Cargo/Equipment Loss or Shift			05. Sideswipe, Opposite Direction			
03. Non-Trafficway		08. Off-Roadway Location Unkr	05. Fell/Jumped from Vehicle 07. Thrown or Falling Object			06. Rear to Side			
04. Parking Lot		09. Outside Right-of-Way (traffic	07. Thrown or Falling Object 08. Other Non-Collision			07. Rear to Rear 88. Not Applicable			
LIGHT CONDITIONS		97. Other					97 Other	licable	
01. Daylight		CRASH-SPECIFIC LOCATION		Collision with Per or Non-Fixed Obje	son, Vehicle,		er. ouini		
02. Dawn	-	01. Non-Junction		09. Pedestrian				TING CIRCUMST.	
03. Dusk 04. Dark- Lighted		02. Intersection 03. Intersection-Related	10. Pedal cycle/Pedal-cyclist			ENVIRONMENTAL (choose up to 3)			
05. Dark- Not Lighted		03. Intersection-Related 04. Entrance / Exit Ramp	11. Other Non-motorist			00. None 01. Weather Conditions			
06. Dark Unknown Lighting		05. Entrance / Exit Ramp-Relate	12. Railway Vehicle (train, engine) 40. Deer			01. Weather Conditions 02. Visual Obstruction(s)			
97. Other		06. Railway Grade Crossing	13, Animal Other TI	han Deer (live)		03. Glare			
		07. Crossover-Related	14. Motor Vehicle in			04. Animal(s) in Roadway			
		08. Driveway Access 09. Driveway Access-Related		15. Parked Motor V 16. Struck by Fallin		~	88. Not Appl	licable	
WEATHER CONDITIONS (cho 01, Clear	ose up to 2)	10. Shared-Use Path or Trail		Anything Set in	Motion by Motor	Vehicle	97. Other		
01. Clear 02. Cloudy		11. Through Roadway	17. Work Zone/Mail	intenance Equipm	nent	CONTRIBUTING CIRCUMSTANCES,			
03. Fog. Smog. Smoke		12. Acceleration / Deceleration	18. Other Non-Fixed Object			ROAD (choose up to 3)			
04. Rain		13. On A Bridge 14. HOV Lane	Collision With Fixed Object:			00. None 01. Backup Due to Prior Crash			
05. Sleet or Hail		14. HOV Lane 15. Service or Rest Area	19. Impact Attenuat	ton/Crash Cushior	n	02. Backup Due to Prior			
06. Freezing Rain/Drizzle 07. Snow		16. Weigh Station		20. Bridge Overhea 21. Bridge Dist of S	ed Structure		Non-recurring Incident		
08. Blowing Snow		17. Other Location Not Listed A	21. Bridge Pier or Support 22. Bridge Rail			03. Backup Due to Regular Congestion			
09. Severe Crosswinds		Within an Interchange Area	23. Cable Barrier			04. Toll Booth/Plaza Related			
10. Blowing Sand, Soil, Dirt		(median, shoulder and roadside 97. Other	24. Culvert 25. Curb			05. Road Surface Condition			
88. Not Applicable 97. Other			26. Ditch			(wet, icy; snow; slush, etc.)			
		TYPE OF INTERSECTION	27. Embankment			05. Debris 07. Ruts, Holes, Bumps			
TRAFFICWAY SURFACE CON	NDITIONS	01. Not an Intersection	28. Guardrail Face 29. Guardrail End			08. Work Zone			
01. Dry 02. Wet		02. Four-Way Intersection	-	30. Concrete Traffic	Barrier		(construct	fon/maintenance/uf	
02. wet 03. Snow		03. T-Intersection		31. Other Traffic Ba	arrier		09. Worn, Tr	ravel-Polished Sur	face
04. Slush		04. Y-Intersection 05. L-Intersection		32. Tree (standing)	1 C			tion in Roadway	and a Maria
05. Ice/Frost		06. Traffic Circle	33. Utility Pole/Light Support 34. Traffic Sign Support			11. Traffic Control Device Inoperative, Missing or Obscured			
06. Moving Water 07. Sand		07. Roundabout	35. Traffic Signal Support			12. Shoulder (none, low, soft, high)			
07. Sand 08. Mud. Dirt, Gravel		08. Five-Point, or More	36. Fence 37. Mailbox			13. Non-Highway Work			
09. Oil		SCHOOL BUS RELATED	37. Mailbox 38. Other Post, Pole or Support			88. Not Applicable 97. Other			
10. Standing Water		01. No	39. Other Fixed Object (wall building, tunnel, etc.)			er. other			
97. Other		02. Yes, a school bus was directly involved							
		03. Yes, a school bus was indire	ectly involved						
For all numeric fields: 99 = 'Unkno	an'						Complete	I for grashes occurrin	a ia a Work Zoo
WORK ZONE	LOCATION		TYPE			RKERS PRI	ESENT	ENFORCEMEN	NT PRESENT
01. No	01. Before the	First Work Zone Warning Sign	ure	01. N	ło		01. No		
02. Yes	02. Advance W		/ Crossover	Crossover 02. Yes			02. Yes		
	03. Transition A 04. Activity Are		houlder or Median at or Moving Work	oulder or Median 88. No			88. Not Applica		
•	05. Termination		able	*			-		
	88. Not Applica								

- Deficiency in Officer Training related to CV Crash Investigation
- Integrated limited CV training into MMUCC training
- CTDOT applied for a SADIP grant to improve Officer training related to Commercial/Heavy Vehicles

- Results of the new MMUCC Form
 - All aspects of crash reporting improved
 - Low error/warning rate
 - More crashes reported
 - CT DOT backlog reduced dramatically
 - Reports are more consistent
 - Information captured is more robust than previous versions

- Limitations of Basic MMUCC Course:
 - UCONN staff began to see the need for expanded training
 - UCONN/CT DOT was awarded the SADIP Grant from FMCSA
 - Staff met with Representatives of FMCSA to gain perspective of what CT was lacking

- While other aspects of Crash reporting were improving, CT's safety rating with FMCSA was declining dramatically
- CT was listed as "POOR" and was designated a "RED" state in FMCSA's rating system.

Current	History	Downloa	d PDF										
Current Results			Connecticut: SSDQ Overall Rating										
	Historical Results All SSDQ Results		Crash					Overriding Indicator					
Monthly Results/ MCMIS Run Date	Event Da	te Range	Overall State Rating	Crash Record Completeness	Fatal Crash Completeness	Crash Timeliness	Crash Accuracy	Inspection Record Completeness	Inspection VIN Accuracy	Inspection Timeliness	Inspection Accuracy	Crash Consistency	
→ Jul '16 07/22/2016	05/01/2015 -	- 04/30/2016	•	•	•	•	•	•	•	•	•	No Flag	
Jun '16 06/24/2016	04/01/2015 -	- 03/31/2016	•	•	•	•	•	•	•	•	•	No Flag	
May '16 05/27/2016	03/01/2015 -	- 02/29/2016	•	•	•	•	•	•	•	•	•	No Flag	
Apr '16 04/29/2016	02/01/2015 -	- 01/31/2016	•	•	•	•	•	•	•	•	•	No Flag	
Mar '16 03/25/2016	01/01/2015 -	- 12/31/2015	•	•	•	•	•	•	•	•	•	No Flag	
Feb '16 02/28/2016	12/01/2014 -	- 11/30/2015	•	•	•	•	•	•	•	•	•	No Flag	
Jan '16 01/29/2016	11/01/2014 -	- 10/31/2015	•	•	•	•	•	•	•	•	•	No Flag	
Dec '15 12/28/2015	10/01/2014 -	- 09/30/2015	•	•	•	•	•	•	•	•	•	No Flag	
Nov '15 11/27/2015	09/01/2014 -	- 08/31/2015	•	•	•	•	•	•	•	•	•	No Flag	
Oct '15 10/23/2015	08/01/2014 -	07/31/2015	•	•	•	•	•	•	•	•	•	No Flag	
Sep '15 09/25/2015	07/01/2014 -	- 06/30/2015	•	•	•	•	•	•	•	•	•	No Flag	
Aug '15 08/28/2015	06/01/2014 -	- 05/31/2015	•	•	•	•	•	•	•	•	•	No Flag	
Jul '15 07/24/2015	05/01/2014	- 04/30/2015	•	•	•	•	•	•	•	•	•	No Flag	
Good Minimum of 1 Good Crash Measure, 1 Good Inspection Measure, AND 0 Poor Measure, AND 0 Poor								Poor Poor OR Red Flagged					
Data Source: FARS records and MCMIS crash and inspection records.													

Data Quality Improvement Resources

> DataQs

> Technical Assistance

Connect with a **Data Quality Specialist** for insight on training and tools to understand and improve data quality.

Use **DataQs** to request and track a review of Federal and State data issued by FMCSA that you believe may be incomplete or incorrect.

- UCONN Staff researched the reports and determined:
 - Officers had never received any specialized training for CMV's
 - The previous report had a small "grey" section devoted to CMV's
 - Officers needed more information to properly document vehicles involved in crashes

- Started a dialogue with the CT DMV Commercial Vehicle Safety Division
 - 1. The division is responsible for performing the MICSAP Upload to FMCSA
 - 2. They monitor trends in reporting
 - 3. They were having issues filtering through the reports from the new MMUCC PR-1 forms
- Streamlined the upload process from CT DOT to CT DMV
- Utilizing National Institute for Safety Research (NISR) improved the exchange between CT DOT and CT DMV

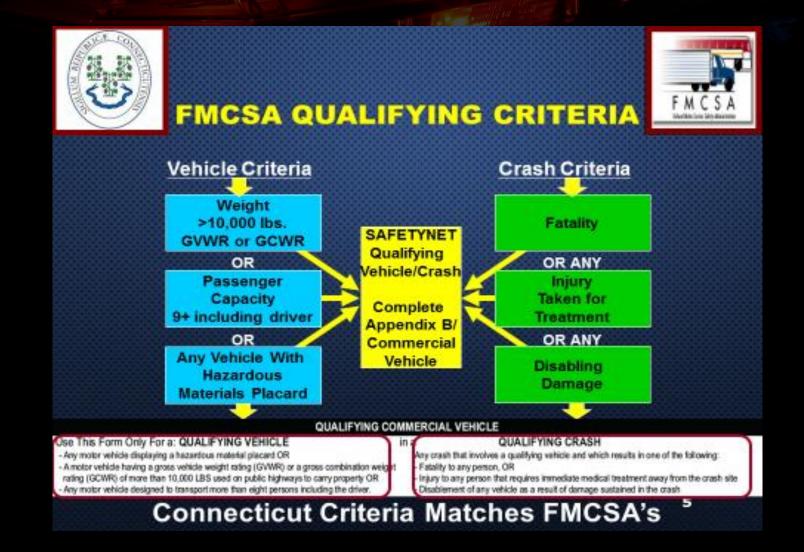
SADIP Project Overview:

- Targeted information that was incomplete from the CT Police reports
- Defined areas of concern that were lacking in the reports related to CMV
- Developed Training curriculum that was "Everyday Police Friendly" with NISR's assistance
- Presented and refined training presentation
- Review with Police training cadre with experience in crash training and with CMV background

- Training Class consisted of two parts:
 - Three one hour block of training
 - **1.** Properly identify Commercial Vehicle status
 - 2. Properly identify Motor Carrier Identification
 - 3. Properly identify Hazardous Materials

One hour of "hands on" with large vehicle and driver

- **1.** Collect Documents from driver/vehicle
- 2. Locate common areas where documents, VIN, and other safety paperwork may be placed.
- 3. Opportunity to meet a driver and ask questions under ideal conditions



Visor Cards Distributed to Officers

FMCSA OFFICER TICKET BOOK/VISOR CARD

Truck and Bus Crashes Reportable to FMCSA

REPORT A TRAFFIC CRASH IF IT INVOLVES...

... AND RESULTS IN

Any truck that has a gross vehicle weight rating (GVWR) of more than 10,000 pounds or a gross combination weight rating (GCWR) of more than 10,000 pounds used on public highways

OR driver's seat

OR

Any motor vehicle displaying a hazardous materials placard (regardless of weight)

A fatality: any person(s) killed in or outside of any vehicle (truck, bus, car, etc.) involved in the crash or who dies within 30 days of the crash as a result of an injury sustained in the crash An injury: any person(s) injured as a result of the crash

who immediately receives medical treatment away from the crash scene OR

A tow-away: any motor vehicle (truck, bus, car, etc.) disabled as a result of the crash and transported away from the scene by a tow truck or other vehicle

U.S. Department of Transportation www.fmcsa.dot.gov

Federal Motor Carrier Safety Administration





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ANY VEHICLE DISPLAYING A HAZARDOUS MATERIAL PLACARD

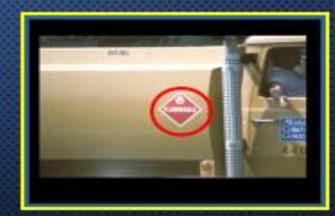
Use This Form Only For a: QUALIFYING VEHICLE

Any motor vehicle displaying a hazardous material placard OR

 A motor vehicle having a gross vehicle weight rating (GVWR) or a gross combination weight rating (GCWR) of more than 10,000 LBS used on public highways to carry property OR
Any motor vehicle designed to transport more than eight persons including the driver.

Any motor vehicle displaying a hazardous materials placard (regardless of weight)

Fuel or oil carried by the vehicle for its own use is NOT considered cargo and is not to be reported as HM Cargo or Spill







Officers Interacted with a Heavy Vehicle/Driver



Question and Answer with Instructor and CT DMV Commercial Vehicle Inspector

Document locations noted/ Other points of Interest on Vehicle

- Special Thanks!
 - CT DMV Commercial Safety Division was extremely helpful in assisting with the training
 - LT. Donald Bridge assigned an Inspector to attend every session
 - Made arrangements for a Commercial Truck and a Driver to be present for the hands on portion of the class



UConn Crash Data Liaison Contact Information



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