

The Road to Results: Successful Partnerships Used to Access Funding



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UMassSafe
Commercial Vehicle Safety Research Summit

UMassSafe

Multidisciplinary traffic safety research program

Housed in ...

- University of Massachusetts Amherst
 - College of Engineering
 - Civil & Environmental Engineering
 - University of Massachusetts Transportation Center



About UMassSafe

Support highway safety through combined approach

- Scientific data-driven problem identification, program design, and evaluation
- +
- Traditional highway safety practices (engineering, enforcement & education)



Resources

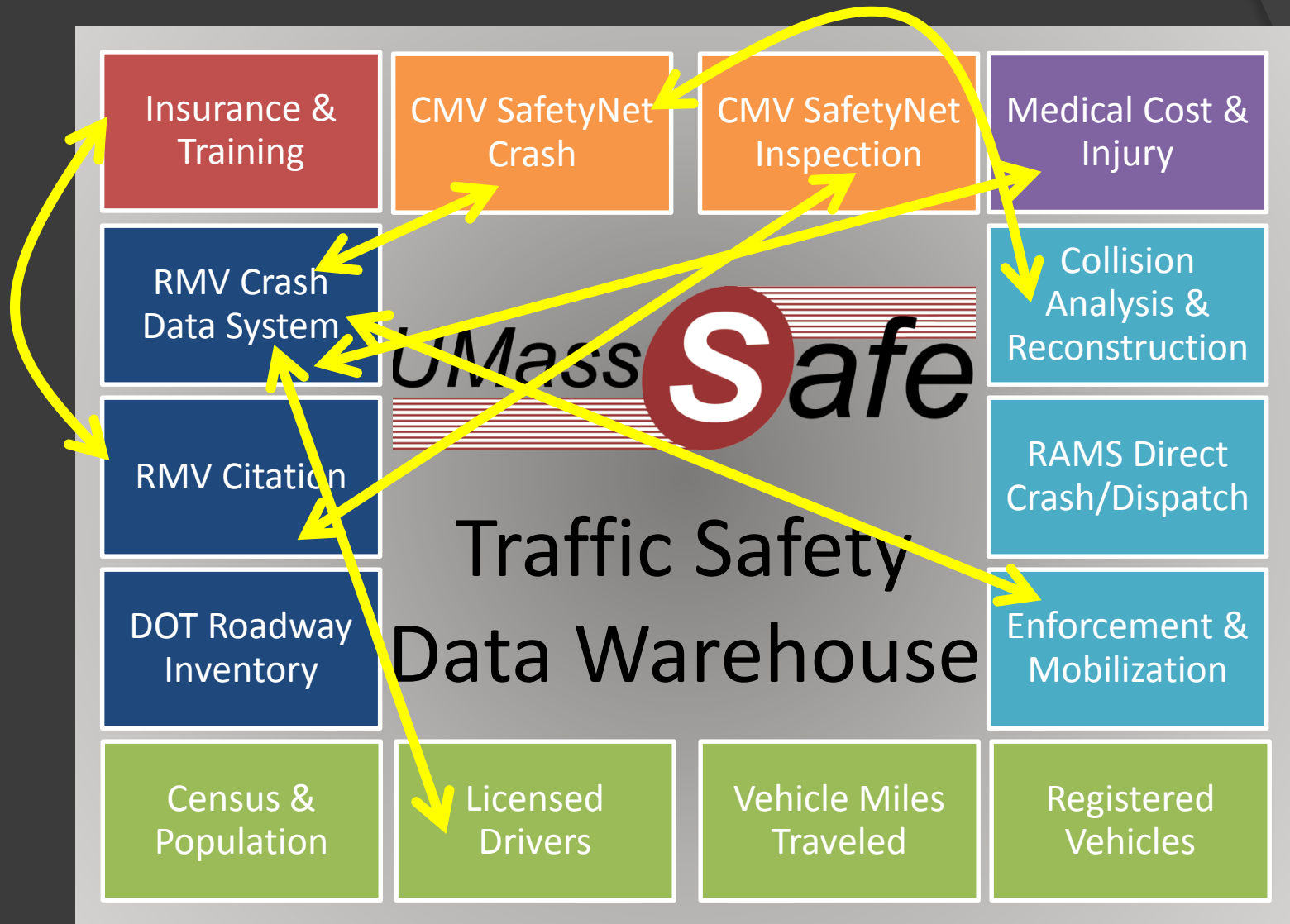
Multidisciplinary

- School of Public Health
- Mechanical and Industrial Engineering / Human Performance Lab
- Civil Engineering
- Computer Science

Staffing

- UMassSafe Staff
- Consultants/Specialists
- Graduate Research Assistants
- Undergraduate Research Assistants

UMassSafe Data Warehouse



Types of Funding & Partnerships

Partnerships with State Agencies



State
Resources



Highway Safety
Division
&
MA State Police



High Priority
Grants



MA State
Police



SaDIP
Grants



MA State Police
&
MassDOT
Registry of
Motor Vehicles

Federal Grants



CDL Program
Improvement

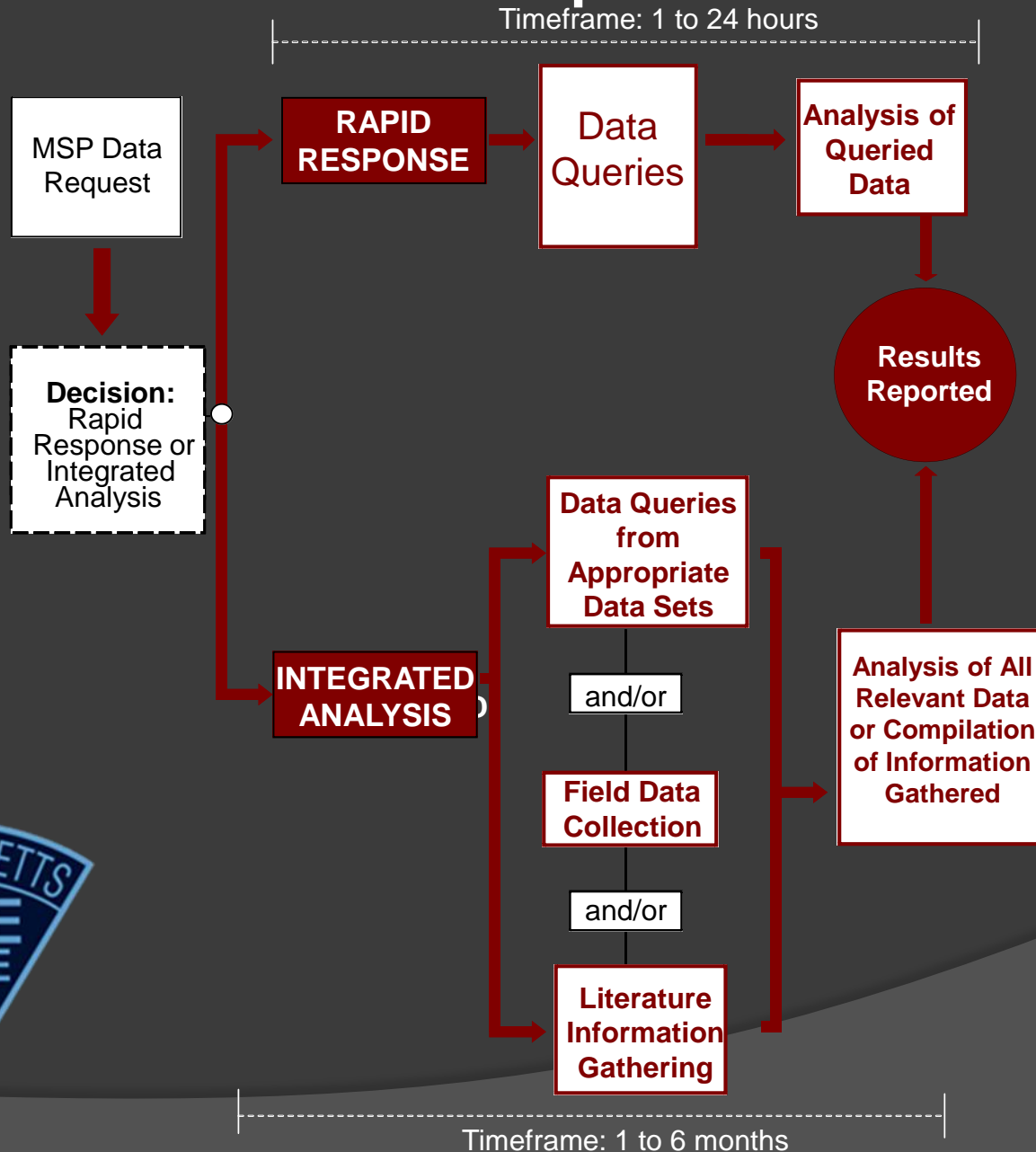


Support State
Agencies
(Law
Enforcement &
DMVs)



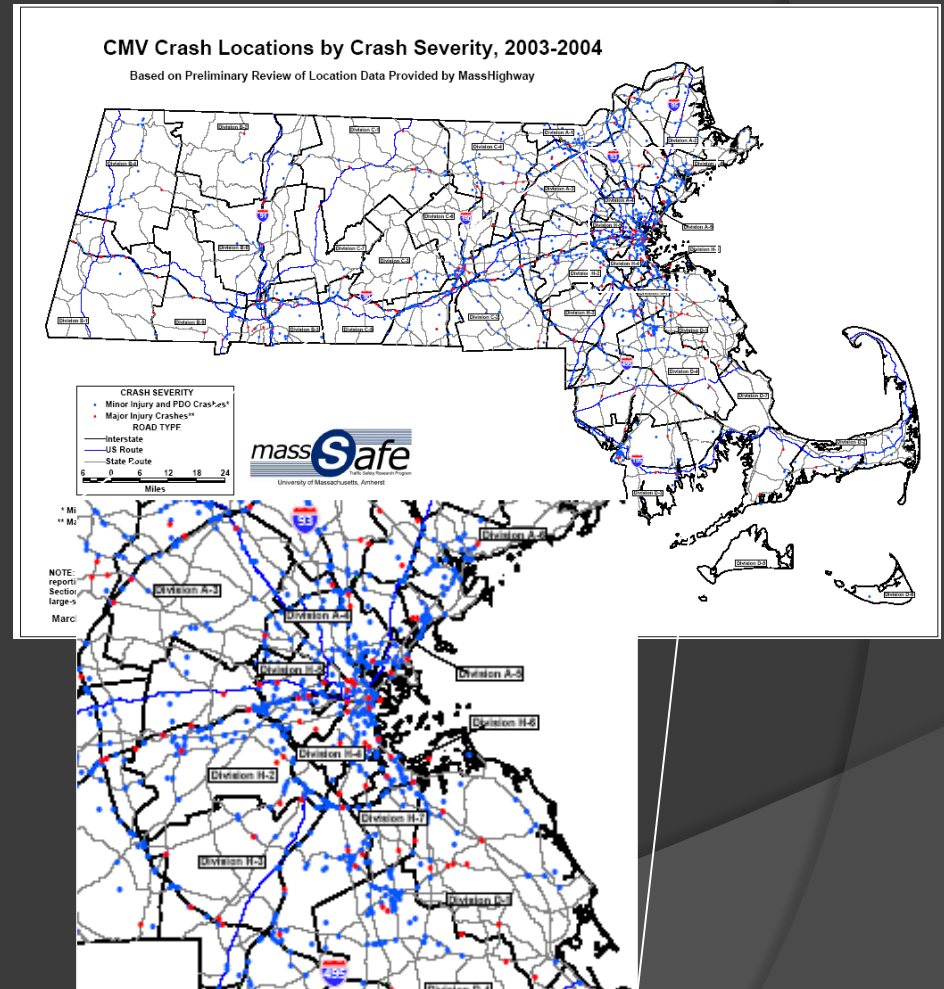
Technical Assistance Program

TS/TAC - Conceptual Framework



Location Analyses

- Identify high crash areas (intersections, corridors, etc)
- Use additional data for characteristics of those crashes
- Combine GIS with linked data for cost/benefit analysis





Crash Data Web Interface

The Commercial Vehicle Data Tool provides access to commercial vehicle crash data collected by police officers in Massachusetts.



UMASSSAFE SAFETY DATA WAREHOUSE

The UMassSafe Safety Data Warehouse has been developed as a tool for maximizing the use of highway safety data. Data stored in the warehouse include traditional datasets such as crash and citation data as well as less traditional highway safety data such as health care data and commercial vehicle safety data.

THE IMPORTANCE OF CRASH DATA

Law enforcement personnel and highway safety stakeholders utilize crash data to plan crash prevention programming and targeted enforcement. The integrity of crash data is fundamental to the work done by the Massachusetts State Police Commercial Vehicle Enforcement Section (MSP CVES) and other safety professionals across the Commonwealth, in order to prevent crashes. Thus, improving the accuracy, speed and completeness of commercial vehicle crash (CMV) data continues to be an ongoing goal of the Commonwealth.

In addition, states are required to CMV crashes to the Federal Motor Carrier Safety Administration (FMCSA) who compiles this data and evaluates the quality of each states crash data, specifically the data's completeness, timeliness, accuracy, and consistency. States receive a ranking of "Good," "Fair" or "Poor" for each measure as well as an overall rating.

CRASH DETAILS

Date	Sat December 12, 2009
Location	Boston (Washington Street)
Carrier Name	M B T A

[more detail](#)

Crash [Vehicle 1](#) [Data Quality](#)

Crash Report Number:	874986
Crash Date:	07/20/2006
Crash Day:	Thursday
Crash Time:	17:26
Crash Town:	Worcester
Police Type:	Local police
Reporting Agency:	Worcester Police Dept
Light Condition:	1 - Daylight
Weather:	1 - No Adverse Condition
Road Surface:	1 - Dry
Crash Severity:	Property damage only (none injured)
Trafficway:	1 - Two-way, not divided
Citation Issued:	Yes
Towaway:	Yes
Officer Badge Number:	104
Number of Vehicles:	2
Number of CMVs:	1
Number of Injuries:	0
Number of Fatalities:	0

CMV Data Tool – Data Quality Component



MASSACHUSETTS Commercial Vehicle Data Tool

Home Crash Maps Data Explorer **Data Quality**

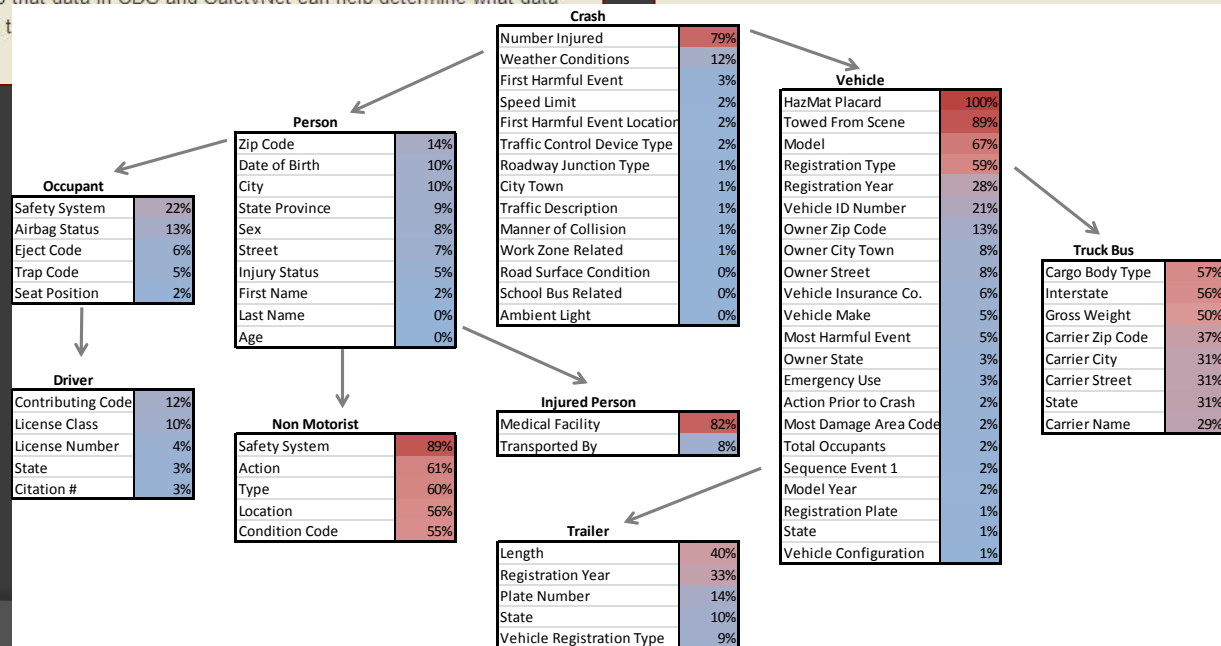
Data Quality Reports

Police officers complete crash reports and submit them to the Registry of Motor Vehicles (RMV) where they are entered into the Crash Data System (CDS). Crash reports specific to CMVs are then sent to the Massachusetts State Police Commercial Motor Vehicle Enforcement Section where they are entered into the Federal Motor Carrier Safety Administration (FMCSA) SafetyNet database.

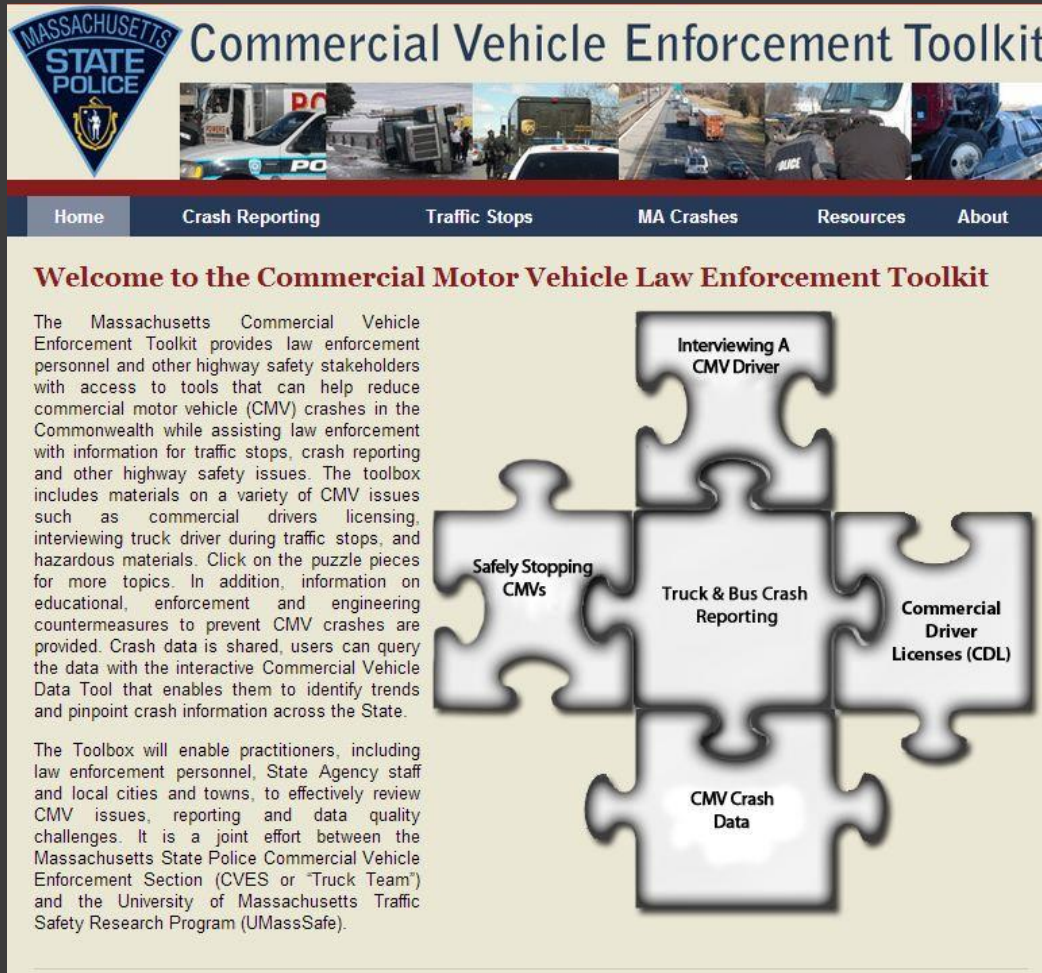
This tool enables users to examine data quality issues specific to CMV crashes by town, troop and Massachusetts as a whole. Specifically, one can query which crash fields are completed and which are left empty within the crash report. In addition, a comparison of the completeness of those fields on the crash reports to that data in CDS and SafetyNet can help determine what data that is missing on crash reports is to SafetyNet.

Create a Data Quality Report

- Create a general report from recent data »
- Create a report based on a group of quality fields »
- Create a report based on one data quality field »
- Create a report for a specific troop, barracks, or local police department »



Commercial Vehicle Enforcement Toolkit



Commercial Vehicle Enforcement Toolkit

Home Crash Reporting Traffic Stops MA Crashes Resources About

Welcome to the Commercial Motor Vehicle Law Enforcement Toolkit

The Massachusetts Commercial Vehicle Enforcement Toolkit provides law enforcement personnel and other highway safety stakeholders with access to tools that can help reduce commercial motor vehicle (CMV) crashes in the Commonwealth while assisting law enforcement with information for traffic stops, crash reporting and other highway safety issues. The toolbox includes materials on a variety of CMV issues such as commercial drivers licensing, interviewing truck driver during traffic stops, and hazardous materials. Click on the puzzle pieces for more topics. In addition, information on educational, enforcement and engineering countermeasures to prevent CMV crashes are provided. Crash data is shared, users can query the data with the interactive Commercial Vehicle Data Tool that enables them to identify trends and pinpoint crash information across the State.

The Toolbox will enable practitioners, including law enforcement personnel, State Agency staff and local cities and towns, to effectively review CMV issues, reporting and data quality challenges. It is a joint effort between the Massachusetts State Police Commercial Vehicle Enforcement Section (CVES or "Truck Team") and the University of Massachusetts Traffic Safety Research Program (UMassSafe).



Web-Based Resources

- [Crash Reporting](#)
- [Traffic Stops](#)
- [Officer Safety](#)
- [Crash Data Quality](#)

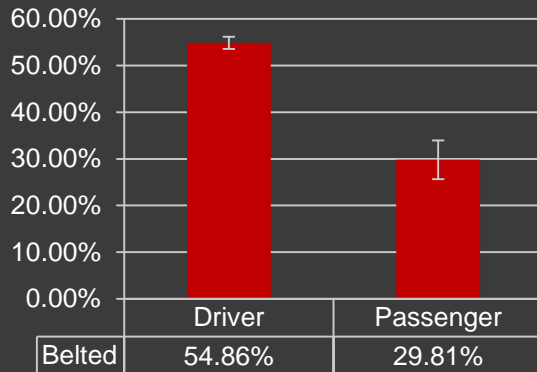


High Priority Grants

CMV Seat Belt Survey & Campaign

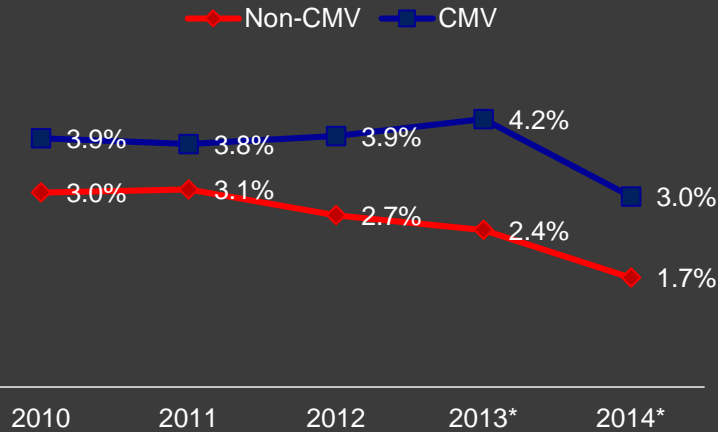


CMV Seat Belt Use Among Drivers and Passengers

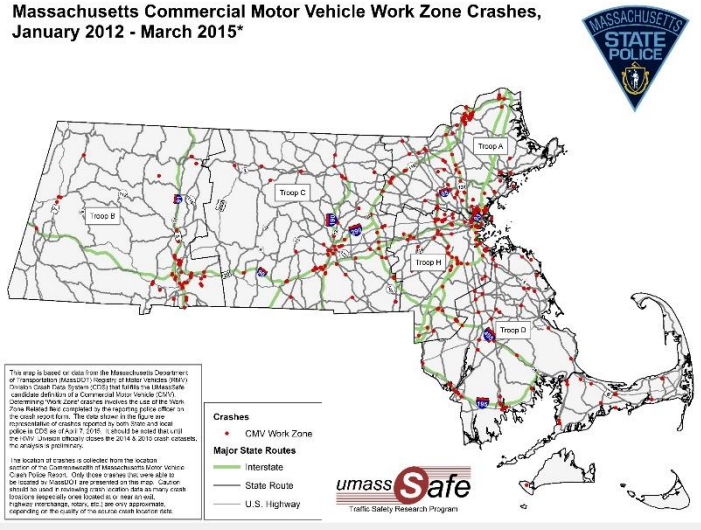


Work Zone CMV Safety Improvement

% of Massachusetts Crashes in Work Zones by Vehicle Crash Type and Year, 2010-2014



Massachusetts Commercial Motor Vehicle Work Zone Crashes, January 2012 - March 2015*



CMV Driver Distraction Pilot Project



Massachusetts State Police are strictly enforcing distracted driving regulations for commercial vehicle drivers.

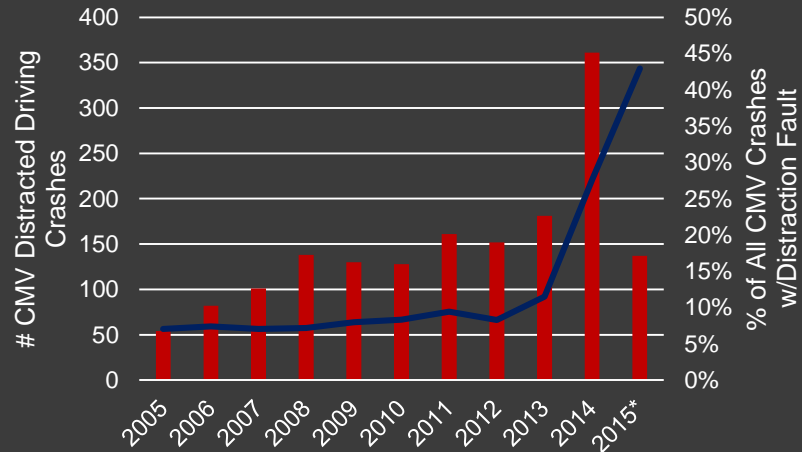
Commercial vehicle drivers are not allowed to use cell phones (only hands-free) or send, type, or read electronic messages while operating a motor vehicle. This includes use of the internet and text messaging.



Produced with funds from the Federal Motor Carrier Safety Administration



Massachusetts Crashes with CMV Driver Contributing Code of Inattention, 2005-2015





SaDIP Grants

Law Enforcement Training & Technical Assistance

- Factsheets
- Toolkit website
- Site visits & technical assistance
- Academy training
- In-service training

Instructor's Guide Truck & Bus Crash Report Training



Massachusetts Truck/Bus Crash Reporting Guide

Many crash fields specific to truck/bus crashes on the Massachusetts crash report are incorrect or left incomplete. This data is vital for state and federal agencies in their planning of regulatory, roadway design and enforcement efforts to reduce such crashes.

A review of commercial motor vehicle (CMV) crash data, compiled from police reported crashes, was conducted to determine what fields are left empty or completed incorrectly most often.

- Fields that were left **empty** most often, included vehicle cargo body type, interstate, gross vehicle weight rating, license class, and towed.
- Fields most often completed **incorrectly** included US DOT number, carrier name, and address, and fields specific to crashes involving hazardous materials.

Carrier Information – US DOT Number

Carrier Name and Address

- Carrier Information can be found on the side of the vehicle and is correct most of the time. However, the carrier information must be verified.
- Interview the driver to confirm the carrier information is correct.
 - Are you the Motor Carrier responsible for this load?
 - Who has "direction and control" of this vehicle?
- Carrier information can also be found on shipping papers, driver's log and lease agreement.



US DOT Number

- The 5-7 digit code found on the side of the cab.
- If multiple US DOT numbers are present, use the number of the carrier leasing the vehicle. Or verify the number on shipping papers, driver's log, etc.



Why Is It Important To Obtain The Correct Carrier Information?

All commercial vehicle crash reports are uploaded to the federal database where carriers' safety records are stored and used to regulate motor carriers authority and target unsafe drivers. If the carrier is not identified correctly then the motor carrier's safety rating cannot be identified and adjusted.

Massachusetts Truck/Bus Crash Reporting Guide



This fact sheet is a part of the Commercial Motor Vehicle Enforcement Toolkit, which is designed to provide officers with the information needed to correctly complete truck & bus crash reports and effectively conduct CMV traffic enforcement.

Materials are available online as well as through the Truck & Bus Crash Report Training and the CMV Traffic Enforcement Training courses available through the Massachusetts State Police Commercial Vehicle Enforcement Section (MSP CVES). In addition an online data tool is available to promote access to CMV crash data analyses.

For more information see: cmvtoolkit.ecs.umass.edu

Developed by the University of Massachusetts Traffic Safety Research Program (UMassSafe) for the Massachusetts State Police Commercial Vehicle Enforcement Section (MSP CVES).



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With Assistance from National Institute for Safety Research, Inc.

Funded by the Federal Motor Carrier Safety Administration and the Massachusetts Department of Transportation (MassDOT) Registry of Motor Vehicles Division



January 2012

SaDIP Analysis Projects

- ◉ CMV Data Quality State of the Practice
- ◉ CMV Crash Data Integrity Focus Group: Review of Law Enforcement CMV Crash Data Collection & Reporting Processes
- ◉ CMV Crash Data Linkage Analysis – Using Data linkage for Data Quality Improvements & Crash Causation Determination
- ◉ CMV Crash Data Quality Audit: A Review of MA CMV Crash Data Accuracy & Timeliness
- ◉ CMV Crash Data Quality Assessment & Action Plan






CDL Program Improvement Grants

T-Force Toolkit




One stop shopping for all commercial truck/bus traffic enforcement resources







SAVE LIVES
Traffic Patrol Officers: Increase Bus/Truck Traffic Enforcement

Home Fast Facts ▾ Web Resources ▾ Instructor Portal ▾ Library About




Fast Facts




Web Resources



Instructor Portal



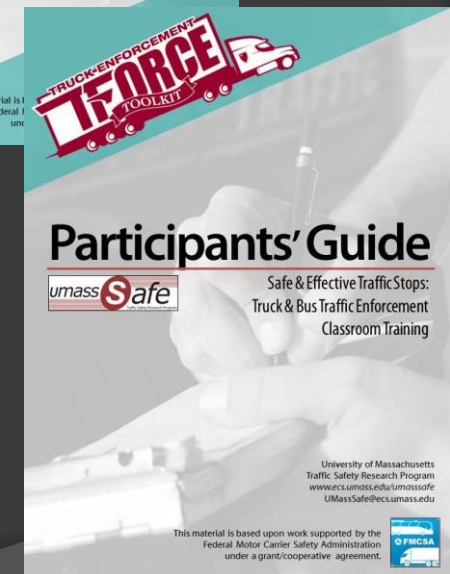
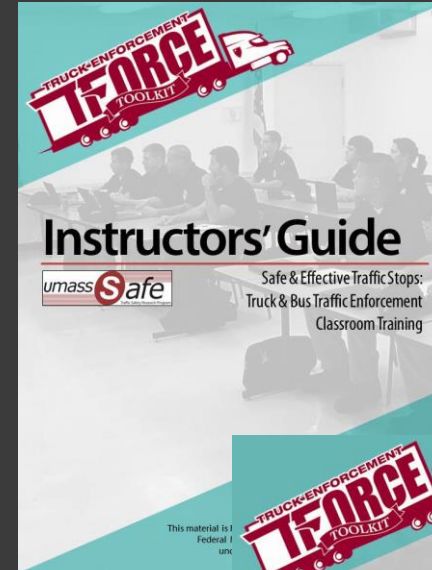
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This material is based upon work supported by the Federal Motor Carrier Safety Administration under a grant/cooperative agreement



www.tforcetoolkit.com

Classroom Training

- Traffic stop from start to finish
- Similarities and Differences between traffic enforcement with trucks/buses and passenger cars
 - Officer Safety
 - Choosing the location
 - Approaching a large truck/bus
 - Visibility issues
 - Commercial Drivers License
 - Assisting the truck in re-entering traffic



Commercial Vehicle Safety Research Summit



Commercial Vehicle Safety Research Summit: Best Practices for Advancing Safety Through Partnerships with Universities

* Law Enforcement * Driver License Agencies * Universities *

Finding Solutions Together!

For more information go to:

www.umasstransportationcenter.org/CVSummit

**REGISTER
NOW!**

**NOV. 9-10, 2016
NORTHAMPTON, MA**

Supported by the Federal Motor Carrier Safety Administration under a cooperative agreement-
FM-CDL-0192-15-01-00

UMass **Safe**
Traffic Safety Research Program

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