

Getting Ready For CTDOT's New PR-1 and Electronic Crash Reporting Initiative January 1, 2015

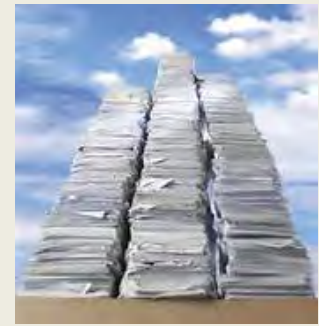




DOT's Core Safety Mission

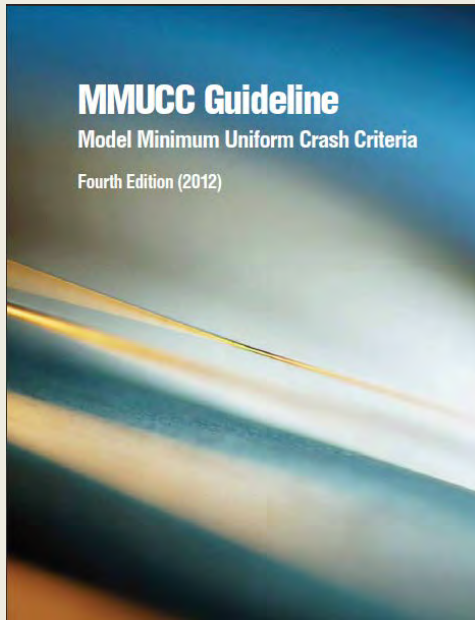
- Reduce death and injury on State and local roadways using data driven strategies to implement state of the art roadway safety improvement and driver behavior programs
- *Crash data makes a difference in how many lives we can save: Decisions involving millions of dollars each year depend on what an individual officer puts on a crash report*
- *A sampling of crash data uses:*
 - Required for analysis of State problems and solutions to receive Federal funds
 - Support high visibility enforcement and public awareness programs
 - Used by State and local traffic engineers to support roadway improvement projects (mapping applications)

Why Change? Why Now?



- PR-1 last updated in 1995-CT has missed three cycles of updates to national data standards known as MMUCC
- Over 100,000 crash reports processed each year by the DOT; 70% received as paper; extensive back end validations and edits; not a sustainable business model
- Enhance DOT's ability to have timely, complete, and accurate crash data to meet core mission
- Enable law enforcement community to develop data driven grant projects and performance based solutions
- New MAP-21 legislation requires States to link problems to solutions that can drive performance goals. Without more complete and up to date crash data, CT will not be able to analyze its problems or put in place effective countermeasure programs.

So What Is MMUCC? Why Do We Need It?



- State must certify to Federal government that it is making progress towards adoption of national crash data standards
- Standardizes data elements and definitions enabling data to be compared at all levels
- Helps states better capture data on emerging issues (e.g. distracted driving)
- Helps States use their crash data to better assess where to invest their limited resources
- Helps law enforcement to do better problem id and determine most effective countermeasures at local level
- Helps State meet data driven requirements under MAP-21

The New MMUCC 4.0 PR-1 For CT

How The Data Will Change

- All codes embedded in form
- Allow for multiple entries for driver contributing factors
- New data on airbags, distracted, driving, and alcohol/drug impairment
- Most important data fields (crash, vehicle, driver up front)
- Supplemental pages for busses, commercial vehicle, bicyclists, and witness id info
- More data attributes and choices for basic data fields

The image shows a detailed form for reporting a crash. Key sections include:

- CRASH DATE, TIME, SEVERITY, AND LOCATION:** Fields for date, time, severity (Fatal, Injury, Property), and location details like street name and mile marker.
- CRASH FACTORS AND CONDITIONS:** A large grid of checkboxes for various factors such as 'Manner of Impact', 'Weather Conditions', 'Light Conditions', and 'Contributing Circumstances'.
- WORK ZONE CRASH INFORMATION:** A section at the bottom with checkboxes for work zone status and enforcement.

Note: Subsets of the crash file will occur less frequently

- Almost 70 per cent of reportable crashes are property damage only in CT
- Nearly 7 in 10 crashes in CT do not include pedestrian, bicyclist, bus, commercial vehicle, hazardous materials, or work zone



The New MMUCC PR-1 Requirement

DOT's Goals

- Deploy new PR-1 that meets national standards by January 1, 2015 *and work to submit all crash reports electronically*
- Work closely with IT managers and vendors to select technology strategy that works for your Dept.
- Offer training opportunities through POST to increase officer familiarity with data elements

Technology Options

- DPS Vendor Upgrade (110 towns)
- CRCOG Web based CT Chief solution (5 towns)
- Upgrades to e-crash modules in existing RMS systems
- Front end client tool integrated with local RMS
- Digital pdf copy of PR-1 and paper forms
- Explore other technology options upon request (e.g. Web hosted e-crash module)





MMUCC Reporting and Electronic Crash Reporting Tasks Completed To Date



Law Enforcement
PR-1 Outreach Mtgs



PR-1 Specification
Package Released



New MMUCC PR-1
By UCONN



DOT Plan For
Acceptance Testing
and Data Entry



Edit Rules Webinar



Technology
Capabilities Survey





Electronic Crash Coordination/Support for Cities and Towns

Fillable pdf option

Explore diagramming and mapping tools

MMUCC/PR1 Training Manual

Electronic Crash Resource Website
<http://www.CDIP>
Website
brochures - posters

DOT Electronic Crash Records Support



Law Enforcement Training Workshops Using PR-1 and E-Crash



Technology Outreach Workshops



Assess Vendor Capabilities



DPS Upgrade /CROG
CT Chief

Regional IT and PR-1 Field Coordinators

Possible DOT support for RMS upgrades

Explore options for Web hosted e-crash

Anticipated Timeline For Implementation

October, 2013	<ul style="list-style-type: none">• Release DOT Specifications Package• Stand up CDIP Web Site• Distribute brochures and poster
October through December, 2013	<ul style="list-style-type: none">• Nexgen RMS upgrade for DPS• Continue CRCOG RMS upgrade• Survey remaining towns for upgrade needs
January through March, 2014	<ul style="list-style-type: none">▪ Complete technology workshops▪ Determine need for Statewide diagramming and mapping tools▪ LEAs select PR-1 technology solutions▪ Develop tech assistance plans to assist LEAS▪ Begin work on RMS vendor upgrades▪ Complete user manual and pilot test PR-1 training workshop▪ Determine need for other technology solutions beyond RMS upgrades
April through October, 2014	<ul style="list-style-type: none">▪ Pilot test DOT acceptance edits▪ Continue training workshops▪ Monitor beta testing of PR-1 submissions
November through December, 2014	<ul style="list-style-type: none">• Complete back end system checklist• Assist State and local LEAS with transition issues and fixes

Why Change? Why Now?

Connecticut's PR-1 was last updated in 1995.

Over the last 20 years significant changes have occurred with respect to automobile and data collection technologies.

In response to requests from the law enforcement community, the Department of Transportation has embarked on a mission to modernize both the data collected and support more efficient methods of electronic data capture and submission.

This initiative is timely in the fact that the latest national guideline on crash data, the Model Minimum Uniform Crash Criteria (MMUCC) Version 4 was released in the fall of 2012.

MMUCC is a minimum, standardized data set for describing motor vehicle crashes and the vehicles, persons and environment involved. The Guideline is designed to generate the information necessary to improve highway safety within each state and nationally.

CONTACT US TODAY FOR
MORE INFORMATION:



Mario Damasio
CTDP Data Champion
Connecticut Transportation Safety Research Center
270 Middle Turnpike, East 5202
Serra, CT 06264
860-594-2024
mario.damasio@ct.gov

Mariela Wojcicki
Transportation Assistant Planning Director
Bureau of Policy and Planning
CTDOT
Telephone: (860) 594-2045
Fax: (860) 594-2056
mariela.wojcicki@ct.gov

Eric Jackson, Ph.D.
Associate Research Professor
Director, Connecticut Transportation Safety Research Center
Connecticut Transportation Institute
University of Connecticut
270 Middle Turnpike, East 5202
Serra, CT 06264
860-486-8426
ejackson@ctrp.uconn.edu

 **Connecticut
Transportation Safety
Research Center**



The New Connecticut PR-1



How Has the Data Collected by Law Enforcement Changed?

- Vehicle Maneuver Prefix and Suffix have been eliminated
- Multiple entries are now allowed to describe contributing circumstances
- Data fields have been updated to reflect new technology (e.g. airbags, cell phones, etc.)
- Distracted driving data now collected
- New and improved edit rules have been developed with law enforcement feedback
- New data elements have been added to aid in safety analysis and crash prevention
- Crash data now compliant with MMUCC national guidelines to aid in obtaining/sustaining federal funding

What Major Changes Have Been Made to the Paper Form?

- It is CT DOT's intent to make the paper form available electronically to support improved accuracy and ease of completion. To view the proposed new PR-1 paper form, please go to the following DOT Web site: <http://www.ct.gov/dot>
- Overlays Eliminated: Values for each of the fields are integrated into the form
 - Supplemental forms have been developed to aid in rare event data collection

How Were Changes Made?

- Two full day workshops and one webinar were held with law enforcement to gain feedback on drafts of the new forms.
- Police departments from across the state were invited to attend and suggest edits to the form.
- CT DOT with the assistance of the Capital Region Council of Governments (CRCOG) assembled data committees to review the new MMUCC data elements and select which elements should be collected as part of the New PR-1.
- The Connecticut Police Chiefs Association (CPCA) was involved in the distribution of a survey of all Police Departments across the state to discover which technologies are currently being used to collect crash data in Connecticut.
- A workgroup was established within CT DOT to ensure the new data elements would collect the necessary data to meet the engineering and transportation safety data needs.



What are the Benefits?

- Implementation of MMUCC will improve the quality of CT's crash data and the ability of highway safety planners to accurately define our highway safety problems.
- Standardized data elements and definitions enable the crash data to be shared and compared at all levels.
- Software for crash data entry is easier to develop for statewide implementation when the data elements and definitions are uniform.
- Comprehensive crash data are necessary to determine which countermeasures are most effective.
- This information is useful for targeting resources so they will have the most impact on reducing deaths, injuries, injury severity and health care costs.
- Law enforcement agencies throughout the State will have better data to support problem identification and results oriented solutions in their highway safety grant applications to the CT DOT.
- The availability of more accessible and complete crash data, UConn has established a crash data repository which is now available to all law enforcement agencies to retrieve their data. For more information, you can click on the following link: <http://s.uconn.edu/ctsrc>

Getting Prepared

Next Steps for Local Law Enforcement Agencies

- Identify key point of contact in your Dept. to work with the DOT
- Participate in technology outreach and training workshops
- Meet with your RMS vendor to review interest in e-crash upgrades
- Consult with the DOT regarding your preferences for reporting crash data electronically
- Arrange for technical assistance as appropriate
- Execute software changes as needed and arrange for pilot testing with DOT
- Conduct internal training for your officers
- Begin submission of new MMUCC crash data on January 1, 2015



Important DOT and UCONN Contacts

Eric Jackson, Ph.D.

Associate Research Professor
Director, Connecticut Transportation Safety Research
Center
860-486-8426
e.Jackson@engr.uconn.edu

Mario Damiata

Crash Data Improvement Coordinator
UCONN Transportation Safety Research
Center
860-594-2024
Mario.Damiata@ct.gov

Rory Belanger

DOT Office of Information Services
860-594-3535
Rory.Belanger@ct.gov

Maribeth Wojenski

DOT Bureau of Policy and Planning
860-594-2045
Maribeth.Wojenski@ct.gov

- Coming Soon! New and Updated DOT Crash Report Web site
- Technology Outreach Workshops for Law Enforcement Agencies and Their Vendors

