

State of Connecticut



TRAFFIC RECORDS STRATEGIC PLAN

CT-TRCC

July 1, 2022

Table of Contents

1.0 Introduction1

1.1 Connecticut Traffic Records Coordinating Committee - Vision1

1.2 Traffic Records Coordinating Committee – A Proponent for Integrated Datasets.2

2.0 Traffic Records Coordinating Committee Documentation.....3

2.1 TRCC Charter6

2.2 TRCC Authority7

2.3 CONNECTICUT TRCC Certification.....8

2.4 Membership Roster.....9

3.0 Traffic Records System Strategic Plan.....19

3.1 Traffic Records System Deficiencies.....19

3.2 Strategic Planning and Traffic Records System Recommendations.....21

3.2.1 Crash Recommendations21

3.2.2 Vehicle Recommendations21

3.2.3 Driver Recommendations21

3.2.4 Roadway Recommendations.....21

3.2.5 Citation/Adjudication Recommendations.....21

3.2.6 EMS/Injury Surveillance Recommendations22

3.2.7 NHTSA Go-Team Report.....22

3.3 Project Selection Methodology.....24

3.3.1 Selected Project Table25

4.0 System Measures.....26

4.1 Crash System Component26

4.1.1 System Update.....26

4.1.2	Traffic Records Assessment Plan of Action	28
4.2	Roadway System.....	33
4.2.1	Traffic Records Assessment Plan of Action	39
4.3	Vehicle System.....	45
4.3.1	Traffic Records Assessment Plan of Action	47
4.4	Driver System	52
4.4.1	Traffic Records Assessment Plan of Action	52
4.5	Citation and Adjudication	58
4.5.2	Traffic Records Assessment Plan of Action	60
4.6	Emergency Medical Services.....	65
4.6.1	Traffic Records Assessment Plan of Action	67
5.0	Connecticut Traffic Records System FY 2023 Project Plan.....	74
5.1	Projects Summary Section 405 (c) Funding	75
5.2	Emergency Medical Service & Trauma Systems - Data Dictionary/Validation Rules for Traffic Data.....	76
5.3	State Police Administrative Police Vehicle (Expansion of Crash & ECitation)	86
5.4	ECitation Processing System-Version 2 Integration with On-Line Disposition	96
5.5	Electronic Citation Processing System - Online Dispositions	105
6.0	Traffic Records Recommendation not addressed in FY 2023	115

1.0 INTRODUCTION

Motor Vehicle Traffic Crashes continue to be a Major Cause of Death and Injury in the United States.

The Connecticut Department of Transportation has electronically received nearly 671,196 PR-1 reports since the inception of the MMUCC (Model Minimum Crash Criteria) compliant report form on January 1, 2015. As of March 31, 2022, out 774,140 crashes, there are 2,085 Fatality (K) (FARS Data); 10,655 Suspected Serious Injury (A); 96,1618 Suspected Minor Injury (B); 149,487 Possible Injury (C) and 1,575,818 No Apparent Injury (O).

Examples of factors that contribute to motor vehicle crashes, injuries and death include:

- Speeding
- Following too close
- Other aggressive driving
- Failing to yield right-of-way
- Impaired driving (alcohol, drugs, medication)
- Distracted driving – cell phone use, texting, etc.
- Unrestrained occupants
- Disregarding traffic signs and signals
- Running red lights
- Other careless driving

1.1 CONNECTICUT TRAFFIC RECORDS COORDINATING COMMITTEE - VISION

The vision of the Connecticut Traffic Records Coordinating Committee (TRCC) is a comprehensive Traffic Records System that provides reliable Data critical to the development of policies, and programs that enhance the operation and safety of the Connecticut Highway Transportation (National, State, and Local Roads) System.

Connecticut's traffic records information comprised of *Crash, Driver, Vehicle, Roadway, Citation/Adjudication, and Injury Surveillance Data System*. These components, is made up of:

- All reportable traffic crashes
- Driver citations
- Criminal history and judicial outcome data

-
- Driver licenses and registered vehicles
 - Commercial motor vehicles
 - Emergency Medical Systems and vital statistics
 - Trauma and inpatient hospital records
 - Roadway geometrics and features
 - Traffic volumes, traffic mix and freight
 - Location information via Geographic Information Systems

1.2 TRAFFIC RECORDS COORDINATING COMMITTEE – A PROPONENT FOR INTEGRATED DATASETS

Connecticut’s TRCC, with its multi-disciplinary membership, has been instrumental in promoting the creation and use of integrated datasets. Related areas of focus for the TRCC include the ongoing development of a traffic records inventory, including necessary data governance, access, and security policies for datasets that include several sources from multiple agencies. Connecticut’s TRCC includes representative data collectors, managers, and users drawn from each of the core traffic records system components. Membership also includes users of integrated datasets formed when data from different component systems are linked.

2.0 TRAFFIC RECORDS COORDINATING COMMITTEE DOCUMENTATION

Traffic Records Coordinating Committee (TRCC): The TRCC has continued to track its progress and manage safety project development by posting documents on its TRCC website. The links on the following pages include other websites encompassing core safety data systems relating to:

- Department of Transportation
- Highway Safety Programs,
- Traffic Records Coordinating Committee
- Connecticut Crash Data Repository,
- Connecticut Transportation Safety Research Center
- Department of Motor Vehicles,
- Department of Public Health,
- Department of Emergency Services & Public Protection
- Connecticut Police Chief's Association
- Judicial Branch
- Criminal Justice Information System

CTDOT - <http://www.ct.gov/dot> (Department of Transportation)

Highway Safety Programs -

<http://www.ct.gov/dot/cwp/view.asp?a=2094&q=432886>

- Child Passenger Safety
- Click it or Ticket Enforcement Campaign
- Crash Data Collection Initiatives and Programs (PR-1 and PR-2)
- Distracted Driving Prevention
- DUI Enforcement Program
- Motorcycle Safety - Connecticut Rider Education Program (CONREP)
- Police Traffic Services
- Safe Routes to School
- **Traffic Records Coordinating Committee (TRCC)**

Highway Safety Office

The Highway Safety Office is represented on its own **face book** page - <https://www.facebook.com/CThighwaysafety>

Traffic Records Coordinating Committee - Website

TRCC website located at -

<http://www.ct.gov/dot/cwp/view.asp?a=2094&q=435916>

DMV - <http://www.ct.gov/dmv> (Department of Motor Vehicles)

- Online – License Services
- Driver License Suspension Payments
- Check Driver License Status
- Commercial Driver Self Certification
- Vehicle Services

DPH - <http://www.ct.gov/dph> (Department of Public Health)

- Connecticut Health Database Compendium
- EMS Patient Care Report Database/Trauma Centers

http://www.ct.gov/dph/cwp/view.asp?a=3127&q=387370&dphNav_GID=1827&dphNav

- Injury Prevention
<http://www.ct.gov/dph/cwp/view.asp?a=3137&q=400094>

DESPP - <http://www.ct.gov/despp> (Department of Emergency Services & Public Protection)

- Division of State Police

http://www.ct.gov/despp/cwp/view.asp?a=4201&q=494678&desppNAV_GID=2077&desppNav=|

CPCA - <http://www.cpcanet.org/> (Connecticut Police Chiefs Association)

JUD - <http://www.jud.ct.gov/> (Judicial Branch)

- Infraction Ticket Processing
<https://www.jud2.ct.gov/cibepay/>

CJIS - www.ct.gov/cjis (*Criminal Justice Information System*)

- Connecticut Information Sharing System (CISS)

2.1 TRCC CHARTER

Objective

To create an inter-agency traffic records committee composed of all agencies involved in highway safety for the purpose of providing direction on all matters related to the State of Connecticut Traffic Records System.

Mission

Promote the effective use of information technology in support of the highway safety goals and objectives of the State. The Connecticut TRCC will adopt a global view of the data required to make the business of highway safety work and develop information systems and business processes that promote the sharing of highway safety data among all agencies involved. We will support data improvements that eliminate duplication, improve uniformity, promote electronic data collection, and facilitate data access and use.

Goal

Ensure that accurate, complete, and timely traffic safety data is collected, analyzed, and made available for decision making among appropriate partners.

Memorandum of Understanding

(I) Have authority to review any of the State's highway safety data and traffic records systems and any changes to such systems before the changes are implemented;

(ii) Consider and coordinate the views of organizations in the State that are involved in the collection, administration, and use of highway safety data and traffic records systems, and represent those views to outside organizations;

(iii) Review and evaluate new technologies to keep the highway safety data and traffic records system current; and

(iv) Approve annually the membership of the Connecticut TRCC, the TRCC coordinator, any change to the State's multi-year Strategic Plan required under paragraph (c) of this section, and performance measures to be used to demonstrate quantitative progress in the accuracy, completeness, timeliness, uniformity, accessibility or integration of a core highway safety database.

2.2 TRCC AUTHORITY

The Connecticut TRCC continues to operate under the authority of and by the appointment of the Administrators of the Connecticut Department of Transportation, Connecticut Department of Motor Vehicles, Connecticut Department of Public Health, and the Judicial Branch who represent the core safety data systems: Motor Vehicle Crash, Roadway, Driver License/History, Vehicle Registration, Injury Surveillance/EMS, and Citation/Adjudication.

Letters of delegation (see appendix A), from the following Administrators, designate individual(s) to attend, as their representatives and participate on the TRCC.

Crash Data and Roadway Data Systems:

Name: Joseph J. Giulietti
Title: Commissioner
Agency: Department of Transportation

Driver License / History and Vehicle Registration Data Systems:

Name: Sibongile Magubane
Title: Commissioner
Agency: Department of Motor Vehicles

Injury Surveillance / EMS Data System:

Name: Manisha Juthani, MD
Title: Commissioner
Agency: Department of Public Health

Citation / Adjudication Data System:

Name: Tais Ericson
Title: Executive Director of Operations
Agency: Superior Court

TRCC (Technical Level) – The Connecticut TRCC, supported by the Highway Safety Office, continues an active, full schedule. In its efforts to seek improvements in the State’s traffic records system, as outlined in this Strategic Plan and reflected in the 2021 Traffic Records Assessments, the TRCC’s emphasis has followed the original recommendations from the Section 405c process for measures of improvements – completeness, uniformity, timeliness, accuracy, integration, and accessibility of the data by stakeholders.

2.3

CONNECTICUT TRCC CERTIFICATION

The Connecticut TRCC continues to operate and function as the organization responsible for the planning and implementation of the state traffic safety data system improvements.

The Connecticut TRCC members voted and approved the Strategic Plan along with the projects selected for the FY 2023 funding under the “Section 405 (c) Program” on June 24, 2022, via online vote.

Joseph T. Cristalli  Digitally signed by Joseph T. Cristalli
Date: 2022.06.29 12:01:24-04'00'

Joseph T. Cristalli, Jr.
Transportation Principal Safety Program Coordinator
Connecticut Department of Transportation

2.4 MEMBERSHIP ROSTER

The Connecticut TRCC members are listed in the following table.

Traffic Records System	Role	Name	Organization	Agency
Crash/Citation Roadway	Manager/User	Joseph T. Cristalli, Jr. , Transportation Principal Safety Program Coordinator	Highway Safety Office Department of Transportation	ConnDOT
Crash/Citation Roadway	User	Flavia Pereira , Traffic Records Coordinator. Transportation Supervising Planner	Highway Safety Office Department of Transportation	ConnDOT
Crash/Citation Roadway	User	Juliet Little Transportation Planner II	Highway Safety Office Department of Transportation	ConnDOT
Crash/Citation Roadway	User	Robert Klin LEL - CTDOT Transportation Planner II	Highway Safety Office Department of Transportation LEL - CTDOT	ConnDOT
Crash/Citation Roadway	User	Bryan Pavlik CCT/Transportation Planner 1	Highway Safety Office Department of Transportation	ConnDOT
Crash	Collector (FARS)/User	Harley Polverelli Transportation Planner I / FARS Analyst	Crash Data & Analysis Section	ConnDOT
Crash	User	Linda Ackerman	Crash Data & Analysis Section	ConnDOT

		Trans. Planning Assistant II / FARS	Crash Data & Analysis Section	ConnDOT
Crash	User	Maxine Trout Trans. Planning Assistant II	Crash Data & Analysis Section	ConnDOT
Roadway	Management	Mike Connors Assistant Trans Planning Director	Transportation Planning	ConnDOT
Roadway	User	Al Iallonardo Transportation Supervising Planner	Transportation Planning	ConnDOT
Roadway	User	Greg Ciparelli Supervising Transportation Planner	Transportation Planning	ConnDOT
Roadway	User	Dominguez Facundo Transportation Planner II	Transportation Planning	ConnDOT
Roadway	User	Brunetti Justin Transportation Planner II	Transportation Planning	ConnDOT
Crash/Roadway	User	James Spencer , Photolog Geospatial Supervising Planner	GIS/Construction/Engineering	ConnDOT
Crash/Roadway	User	Jeff Hunter , Office of Construction Transportation Engineer	GIS/Construction/Engineering	ConnDOT
Crash/Roadway	User	Natasha Fatu Traffic Engineering	GIS/Construction/Engineering	ConnDOT
Crash/Roadway	User	Eamon Flannery Traffic Engineering	GIS/Construction/Engineering	ConnDOT

Crash/Roadway	Management	Robert Muzzy	Office of Information Systems	ConnDOT
Driver/Vehicle	User	Donald Bridge, (Lt.) Commercial Vehicle Safety Division	Commercial Vehicle	DMV
Driver/Vehicle	User	Cindy Zuerblis, Division Manager, Driver Regulation Division	Driver Regulation	DMV
Driver/Vehicle	Management	Audrey Hall, Division Manager Registry Division	Registry	DMV
Driver/Vehicle	User	Darlene Labonte, Driver Services CDL Help Desk, MV Related Programs	Help Desk	DMV
Driver/Vehicle	Collector/User	Catherine Lam	Child Safety	DMV
Driver/Vehicle	Collector/User	Janice Floyd	Child Safety	DMV
Driver/Vehicle	Collector/User	Tanisha Markland	Child Safety	DMV
Driver	Management	Brian Clarke	Driver Services	DMV
Driver	Collector/User	Grace Hurd	Driver Services	DMV
Crash/Citation/Adjudication	Collector/User	Kevin Gridley, Sgt. State Police	State Police	DES&PP
Crash/Citation/Adjudication	Collector/User	Alexander Horijatschun State Police	State Police	DES&PP
Crash/Citation	Support	Gregory Zeoli, CAD/RMS NexGen Support, LPR	State Police	DES&PP
Crash/Citation/Adjudication	Management	Mark Tezaris, CJIS Program Manager	Governing Board Criminal Justice Information System	CJIS

Crash/Citation/ Adjudication	Liaison	CJIS Governing Board Hank Lindgren , Sergeant, Ret. Public Safety Liaison, CJIS	Criminal Justice Information System	CJIS
Crash/Citation/ Adjudication	Liaison	Patrick Farrell Trainer and Public Safety Liaison	Criminal Justice Information System	CJIS
EMS/Injury Surveillance	Collector/User	Eliza Little , Epidemiologist Office of EMS	Office the EMS	DPH
EMS/Injury Surveillance	Collector/User	Michael Zachera , Epidemiologist Office of EMS	Office the EMS	DPH
EMS/Injury Surveillance	Management	Raffaella Coler , Director Office of EMS	Office of EMS	DPH
EMS/Injury Surveillance	User	Susan Yurasevecz , MS, MPH Epidemiologist, DPH, IPSU	Epidemiologist	DPH
EMS/Injury Surveillance	User	Susan Logan , MPH Epidemiologist, DPH, IPSU	Epidemiologist	DPH
EMS/Injury Surveillance	Support	John Baker IT Consultant	IT	DPH
EMS/Injury Surveillance	Support	Heidi Fitzgerald IT Consultant	IT	DPH
Crash/Citation/ Adjudication	User	Jackie McMahon Asst. State's Attorney	Traffic Safety Prosecutor	State Attorney

Crash/Citation/ Adjudication	User	Patrick J Griffin State's Attorney	Prosecutor	State Attorney
Crash/EMS/Injury Surveillance	User	Calvin Norway, Adult Trauma, Systems Coordinator	Hospital Research Medical Information	Yale New Haven Hospital
Citation/Adjudication	Management	Stacey Manware, Deputy Director	Superior Court Operations	Judicial Branch
Citation/Adjudication	Support	Antonio Pinho,	Judicial Information Systems	Judicial Branch
Crash/Citation	Management	Andrew Cota, Lt., Ansonia PD Local LE Coordinator	Ansonia PD	Local Law Enforcement
Crash/Citation	Collector/User	Chris Perry, Sgt.	Newington PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Marc Mikulski, Dept. Chief	Wallingford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Kevin Halloran, Chief	Branford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Ray Dunbar, Capt.	Branford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Rob Daniello, Lt.	Hamden PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User/ Support	Mario DiNatale	Hamden PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Mike Krzynowek	Enfield PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Mark Squires	Enfield PD	Local Law Enforcement

Crash/Citation/ Adjudication	Collector/User	Matthew Meier	Enfield PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Fred Jortner, Lt,	Cheshire PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Jeff Sutherland, Lt., Detective	Cheshire PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Michael Durkee, Administration	Cheshire PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Matt Damore	Plainville PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Kevin Gilleran	Bridgeport PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Steven Lougal, Capt.	Bridgeport PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Paul Cari	Bridgeport PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Patrick Krajewski, Lt.,	Bristol PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Ray LaPlante, Sgt.	Orange PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Matthew Donadio Sgt.	Brookfield PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	James Dzamko, Sgt	New Milford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Anthony Diaz, Sgt.	Hamden PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Andre' Rosedale, Officer First Class	Norwich PD	Local Law Enforcement

Crash/Citation/ Adjudication	Collector/User	Wayne Burroughs, Officer	Norwich PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Thomas Lazzaro, Sgt.	Norwich PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Dexter Herron, Sgt.	Groton Town PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Stephen Breshano, Sgt.	Manchester PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	TJ Moore, Sgt.	Darien PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Andrew Power, Lt.	Wethersfield PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Matt Lariviere, Sgt.	West Hartford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Off. Chick Bistany	Windsor Locks PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Thomas Cossette, Lt.	Meriden PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Jason Lee, Lt.	Hartford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Jeffrey Booth, Sgt.	Stamford PD	Local Law Enforcement
Crash/Citation/ Adjudication	Collector/User	Marshall S. Porter, Chief	Glastonbury PD	Local Law Enforcement
Crash/Citation	Support/Trainer	Chuck Grasso Field Coordinator for MMUCC-PR1	UCONN	UCONN Transportation Institute

Crash/Citation	Support/Trainer	Brandon O'Brien Field Coordinator for MMUCC-PR1	UCONN	UCONN Transportation Institute
Crash/Citation Roadway	Management	Mark Nielsen, Naugatuck Valley, Assistant Director	NVCOG	Regional Planning Organizations
Crash/Citation Roadway	User	Cheryl Assis, Capitol Region Council of Governments	CRCOG	Regional Planning Organizations
Crash/Citation Roadway	User	Pramod Pandey, CRCOG Senior GIS Coordinator	CRCOG	Regional Planning Organizations
Crash/Roadway	User	Terri Thompson, CRCOG Traffic Incident Management	CRCOG	Regional Planning Organizations
Crash/Roadway	User	Ben Muller, Transportation Planner	NVCOG	Regional Planning Organizations
Crash/Roadway	User	Devon Lechtenberg, CRCOG Transportation Planner	CRCOG	Regional Planning Organizations
Crash/Citation Roadway	User	Katie Raboin, Research Associate	Research	Preusser Group
Crash/Citation Roadway	Management	Neil Chaudhary, President	Research	Preusser Group

Crash/Roadway	Management	John Ivan , Professor & Associate Dept. Head	UCONN	UCONN Transportation Institute
Crash/Roadway	Management	Eric Jackson , Assoc. Research Professor	UCONN	UCONN Transportation Institute
Crash/Roadway	User	Donna Shea	UCONN	UCONN Transportation Institute
Crash/Roadway	User	Marisa Auguste	UCONN	UCONN Transportation Institute
Crash/Roadway	User	Aaron Nash	UCONN	UCONN Transportation Institute
Crash/Citation	User	Gerard O'Sullivan	Connecticut Insurance Dept.	Insurance
Crash/EMS	User	Carol P. Meredith , Dir. of Prevention	Dept. of Mental Health/Addiction Services	Mental Health
Crash/Citation	User	Alec Slatky , Mgr. of Public & Gov.	Affairs for AAA NE	Insurance
Other	User	Scott Gaul State Chief Data Officer	Office of Policy & Management	State
Roadway	Advisor	Daniel Suarez	Federal Agency	FHWA
Roadway	Advisor	Timothy Snyder	Federal Agency	FHWA
Commercial Motor Vehicle Safety	Advisor	Christopher Henry FMCSA, CT Division Administrator	Federal Agency	FMCSA

Commercial Motor Vehicle Safety	Advisor	Edward Brickner , FMCSA FMCSA, CT Division	Federal Agency	FMCSA
Highway Safety	Advisor	Shannon Hughes , Regional Program Manager	Federal Agency	NHTSA
Highway Safety	Advisor	Allison Beas , Traffic Records Coordinator, NHTSA Region	Federal Agency	NHTSA
Highway Safety	Advisor	Francisco Gomez , Lead Regional Program Manager, for CT	Federal Agency	NHTSA
Crash/Citation	Consultant	Jon Trivisano	Local Agency Support	NEXGEN
Crash/Citation	Consultant	Ken Dudas	Local Agency Support	Telepartner
Crash/Citation	Consultant	Bridget Vuolo	Local Agency Support	TriTech

3.0 TRAFFIC RECORDS SYSTEM STRATEGIC PLAN

3.1 TRAFFIC RECORDS SYSTEM DEFICIENCIES

A Traffic Records Assessment was conducted for the State between August and December 2021. This assessment was conducted using the National Highway Transportation Safety Administration (NHTSA), State Traffic Records Assessment Program (STRAP). STRAP is the web-based application for the assessment. The NHTSA assigned assessment facilitator works with the State assessment coordinator to prepare for the assessment and establish a schedule.

Following the kickoff meeting that explained the assessment process, a system token was provided that enabled the State Traffic Records Coordinator to log onto STRAP to enter answers to questions received or designate responsible stakeholders. Three Hundred and Twenty-eight (328) assessment questions were answered that addressed all state traffic records data systems.

A group of qualified selected independent assessors by NHTSA rate the responses and determined how closely State's capabilities match those of the ideal system outlined in the Traffic Records Advisory. The following is the Executive Summary of the Assessment results:

Out of 328 assessment question, Connecticut met the Advisory ideal for 198 questions (60%), partially met the Advisory ideal for 37 questions (11%) and did not meet the advisory ideal for 93 questions (28%).

As Figure 1 illustrates, within each assessment module, Connecticut met the criteria outlined in the Traffic Records Program Assessment Advisory 100% of the time for Traffic Records Coordinating Committee Management, 100% of the time for Strategic Planning, 85% of the time for Crash, 39% of the time for Vehicle, 61% of the time for Driver, 97% of the time for Roadway, 42% of the time for Citation/ Adjudication, 35% of the time for EMS/Injury Surveillance, and 75% of the time for Data Use and Integration.

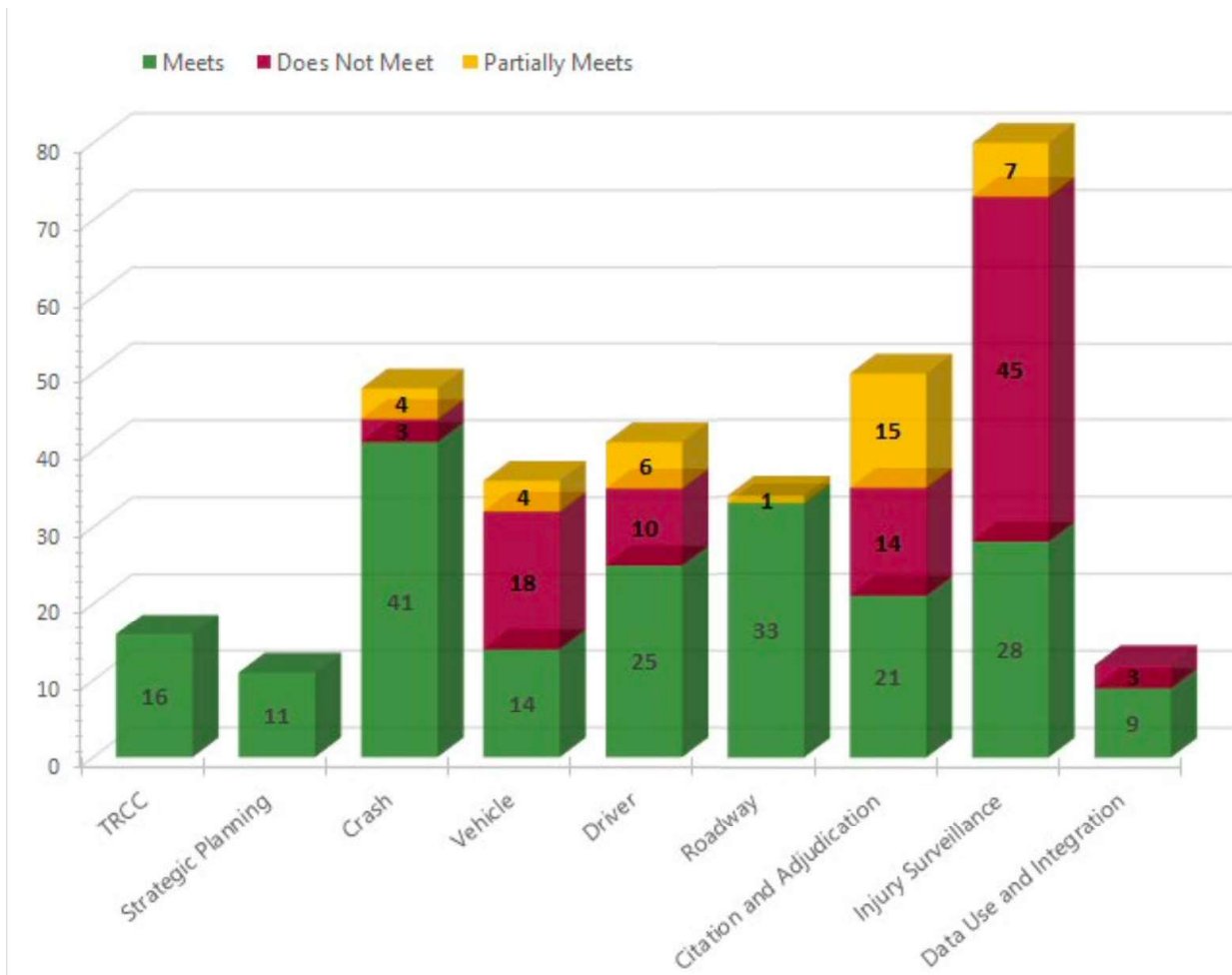


Figure 1. Assessment Rating Distribution by Module

The Connecticut TRCC has reviewed the recommendations provided by the National Highway Traffic Safety Administration Technical Assessment Team.

The TRCC developed and voted to adopt the following solutions as part of the on-going updates to Traffic Records System Strategic Plan to address the Technical Assessment Team recommendations.

3.2 STRATEGIC PLANNING AND TRAFFIC RECORDS SYSTEM RECOMMENDATIONS

3.2.1 CRASH RECOMMENDATIONS

- Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory
- Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

3.2.2 VEHICLE RECOMMENDATIONS

- Improve the data quality control program for the vehicle data system to reflect best practices identified in the Traffic Records Program Advisory
- Improve the interfaces with the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the procedures/process flows for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory

3.2.3 DRIVER RECOMMENDATIONS

- Improve the data dictionary for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

3.2.4 ROADWAY RECOMMENDATIONS

- Improve the interfaces with the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

3.2.5 CITATION/ADJUDICATION RECOMMENDATIONS

- Improve the data dictionary for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

-
- Improve the interface with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory

3.2.6 EMS/INJURY SURVEILLANCE RECOMMENDATIONS

- Improve the data dictionary for the Injury Surveillance system that reflects best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Injury Surveillance system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interface with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory

3.2.7 NHTSA GO-TEAM REPORT

Summarized during the February 2017 meeting of the TRCC, the Connecticut Trauma Registry and EMS, Go-Team Report described valuable discussions with DPH and other Trauma and Traffic Safety Partners beginning with the Go-Team visit in October 2016. A subset of recommendations to consider:

- Scheduling regular conversations via phone, webinar, or in-person with partner agencies and vendors,
- Using NHTSA's Performance Measure Guide, www-nrd.nhtsa.dot.gov/Pubs/811441.pdf, for the development of performance measures, establish measures for the six data quality attributes,
- Establish templates and set deadlines for system documentation for, *User manuals, *Data dictionaries, *Edit checks and validation rules,
- Track communication among partners using the following methods: *Set timelines for returning email and telephone correspondence, *Set timelines for dissemination of system changes, *Establish a formal feedback loop for questions or issues
- Document and disseminate data-sharing parameters (data confidentiality, DPH Institutional Review Board, etc.),
- Track progress of performance measures and update TRCC regularly at meetings,

-
- Establish a training schedule, either in-person or online, to provide an avenue for the developers to review modifications and updates and to allow an opportunity for users to have question and answer sessions,
 - Re-establish annual reports of trauma registry data to help identify trends and to identify potential problems in the data collection and reporting processes,
 - Coordinate activities with the State TRCC and any data governance processes that are established for the injury surveillance and traffic records data sources, and
 - Develop a report writer to assist EMS agencies and the State with quality metric reporting and aggregate data analyses of the pre-hospital data. Adding analytical resources will enhance the quality of the EMS system as a component of the State Traffic Records Injury Surveillance System.

3.3 PROJECT SELECTION METHODOLOGY

The TRCC reviewed each system’s deficiencies and developed goals, projects, and tasks to address the deficiencies as they relate to the goal of the state’s traffic records system.

The TRCC voted and selected projects for the FY 2023-year funding. The Lead Agency for the projects selected submitted project descriptions for the FY 2023 Section 405 (c) Grant Application.

- Degree of Difficulty

How difficult is the project in terms of:

- Infrastructure
- Inter-Agency
- Policy

- 5 - Not Difficult
- 4 - Somewhat Difficult
- 3 - Difficult
- 2 - Very Difficult
- 1 - Unattainable

- Impact

How significant will the project impact the Traffic Safety Information System if successful:

- 5 - Very Significant Impact
- 4 - Significant Impact
- 3 - Somewhat Significant

- Impact
- 2 - No Significant Impact
 - 1 - No Impact

- Cost

How expensive will the Project be (include life cycle cost in your estimate):

- 5 - Less than \$200K
- 4 - More than \$200K, but less than \$500K
- 3 - More than \$500K
- 2 - More than \$500K, but less than \$1.0M
- 1 - Over \$1.0M

- Measurable Progress

Will the Project show measurable progress during the 1st year of funding?

- 5 - Significant Measurable Progress
- 4 - Measurable Progress
- 3 - Somewhat Measurable Progress
- 2 - No Measurable Progress
- 1 - No Progress

3.3.1 SELECTED PROJECT TABLE

The table below provides a summary for each of the projects that are being proposed for funding under the **FY 2023** "Section 405 (c) Grant". A detailed description of each project is provided in this section of the application.

Project Title	Project Description	Funding 2023 Grant
Electronic Citation Connecticut State Police	Resident Trooper Project	\$600,000.00
EMS & Trauma Registry Data Dictionary / Automated Edit Checks and Rule Validation for EMS Traffic Data	System Data Dictionary & Edit Checks/Validation Rules for EMS Traffic Data	\$150,000.00
Electronic Citation Processing System - Version 2	Integration with Online Disposition	\$200,000.00
Online Disposition System - Version 2	Integration with Crash System	\$200,000.00
Traffic Records Administration	TRCC Management/Strategic Plan Updates	\$150,000.00
FY2023 BUDGET		\$1,300,000.00

4.0 SYSTEM MEASURES

4.1 CRASH SYSTEM COMPONENT

In January 2015, the State began the transition to a completely updated electronic crash reporting system using the MMUCC Guideline, 4th Edition as the basis for its crash data collection. This project encompasses multiple initiatives aimed at serving a segment of the law enforcement community. The focus is to help local police departments acquire public safety equipment. Some departments don't have computers or mobile data terminals (MDTs) in their vehicles, hindering their abilities for selective enforcement. Better tools/resources, including technology as well as software support where warranted, would enable local police departments to better implement new E-Crash investigation and enforcement initiatives.

Equipment as well as software support will be provided to support local law enforcement agencies in implementing E-Crash MMUCC PR-1. Equipment/software support will be specifically awarded to those agencies requesting assistance for the purchase and installation of computers, printers, or other mobile technology, as well as software applications. Evaluating applications and making award decisions will be based on established criteria.

The need for planning and coordination among law enforcement agencies is critical to the success of this effort. This E-Crash support initiative will be interfaced with the CTDOT/UConn Crash Data Repository (CDR). Electronic crash and citation reporting will reduce data input errors and improve the complete-ness of the collected data. It should also improve police officer efficiency by reducing the amount of time that officers spend collecting crash and citation data and decrease the time it takes this data to be received by the appropriate State agency.

4.1.1 SYSTEM UPDATE

Analysis of highway safety is probably the most data-intensive activity carried out by highway and transportation agencies. It requires more than just archiving police accident reports. To be effective, information recorded on the crash reports must be captured into a searchable database. Roadway inventory, traffic volumes and even land use information are all critical for evaluating the safety of any road segment or intersection. These were added as part of phase 3 of the CTCDR. However, other safety analysis exercises require data such as driver history, motor vehicle registration information, and vehicle miles traveled (VMT).

Other institutional databases such as patient care reporting and treatment received on the scene and at the hospital are important to understanding the full impact of a crash. Due to the sensitive nature of these types of data, discussions need to take place early and often to identify the potential risks and benefits to such an integrated database. These types of discussions will be a key part of phase 3 of the CTCDR; so that a future version of the repository may include such linkages to allow for a complete crash analysis from time of impact to release from hospital for injury crashes. UConn is in the final stages of executing an MOU with the Department of Public Health to obtain hospitalization data for linkage with crash data. We expect this to be completed by the end of 2022.

Phase 1 and 2 of these projects established a repository structure which provides users online access to these repositories through a common integrated portal. As part of the Crash Data Improvement Program (CDIP) review performed at CTDOT in October of 2011, the need for performance measures was identified. These measures would track elements such as timeliness, completeness, and accuracy. These tools were built in the CTDOT's crash editor application. Crash data quality staff can run custom reports to view metrics such as last time an agency has submitted a report, number of errors and warnings an agency receives, the size of the crash backlog, performance of crash coding staff, frequency of errors and warnings received as crash reports are imported, historical trends in crash reporting compared to current reporting frequency to check for missing or underreporting agencies.

Phase 1 and 2 of these projects provided users with access to the crash data. In Phase 3 the CTDOT and UConn prioritized timeliness of the crash data. Currently, fatal, commercial vehicle, and injury crashes are processed the day they are received. For property damage only crashes there is currently a 4-month backlog that the department is working to reduce to less than 30 days. This should be achieved before the end of 2022. Recently the CTDOT and UConn have updated their file transfer protocols such that crash data is now pushed to a cloud-based data warehouse where UConn can pull down data nightly. This will eventually replace the XML exports from the CTDOT to UConn. This new process allows the CTDOT and UConn to perform synchronization checks to ensure that our databases and mirror images are fully in sync with each other. This is currently in the pilot phase to ensure we are not losing data and that the system is working effectively. Once validated the CTDOT will shut down the XML feed to UConn.

The CTDOT moved to a 97.3% MMUCC version 4 complaint form in 2015. The CTDOT is awaiting the release of MMUCC version 6 to then redesign the crash form and crash system. We expect MMUCC version 6 to be released in 2024 and then the CTDOT and UConn will start a project to convert our current system to the new guideline.

4.1.2 TRAFFIC RECORDS ASSESSMENT PLAN OF ACTION

Recommendation

- Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

The TRCC will ensure that the Crash system data dictionary reflects best practices as identified in the Traffic Records Assessment Advisory.

Recommendation

- Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The Crash System is designed to interface with all the Traffic Records Systems (Driver System, Vehicle System, Roadway System, Citation/Adjudication System, and the EMS).

Connecticut's CTSRC is leading a large-scale traffic records data integration project, which is linked to the NGA initiative. Our number one aim is to ultimately link all the six core datasets of the State's traffic records system.

The CT Crash Data Repository now has an approved MOU for linking to Citation and Adjudication as well as the Driver Records. To-date 187,775 crash records have been linked to 515,805 Central Infraction Bureau's records.

Considerations for implementing your Crash recommendations

- Develop improved crash system documentation to identify data elements populated in the crash system via data linkage/interfaces from other data systems.
- Complete and implement data interfaces with the crash system and the driver, vehicle, citation/adjudication, and the Injury Surveillance Systems.
- Develop both internal and external uniformity performance measures for the remaining quality characteristic without measures.
- Encourage the development of smart mapping technology to collect an accurate crash location at the crash scene and use the roadway system interface to auto-populate the location data elements in the crash system.

- Work with crash system vendors to implement smart mapping technology in their systems for the use of statewide law enforcement agencies.

Deficiency Analysis & Performance Goal Matrix

Performance Area: **CT-CR-001 Timeliness - C-T-1**

Summary of Deficiency: Time delay between crash events and when the data is available for use. The crash data location processing and validation are heavily dependent on manual operations.

Measurement: Reduce the number of days between crash event and when the data is available for use in the centralized repository.

	Benchmark	2019	2020	2021	2022	2023
Goal	8hrs	59 days	35 days	13 days	13 days	13 days
Actual	Unknown	59 days	35 days	21days	14days	

Activity This Period:

*Crash Timeliness improved from 21 days to 14 days=7 **days decrease** from Crash Occurrence to available in Central for analysis and reporting= 31% Improvement*

Project: **Electronic Crash Reporting System**

Measurement: Average Days Between Crash Report Received and Completed

	Benchmark	2019	2020	2021	2022	2023
Goal	95 %	25 days	20 days	15 days	5 days	5 days
Actual		23 days	21 days	25 days	65days	

Activity This Period:

Average number of days from when the crash received, and processing completed increased by forty (40) days during this reporting period.

Performance Area: CT-CR-002 Accuracy - C-A-1

Summary of Deficiency: Submitted crash data is mostly accurate except for location and incorrectly completed data fields.

Measurement: % of Crash Records with no errors in Critical data elements (that passed all Validations).

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	100%	100%	100%	100%	100%
Actual	93.57%	97.13%	93.57%	98.56%	99.40%	

Activity This Period:

Crash Accuracy Improved from 98.62% to 99.40% =0.79%. Less than 1% (0.79%) of critical data elements missing from the Central Database for analysis.

Performance Area: CT-CR-003 Completeness - C-C-1

Summary of Deficiency: Incorrect/Incomplete or Missing critical Data Elements (Crash Location)

Measurement: % of crash records with no missing critical data elements (Crashes with accurate crash location using Geo Code data provided by the Crash Data Collection System Map Interface)

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	100%	100%	100%	100%	100%
Actual	95%	98%	100%	100%	100%	

Performance This Period: 100%

Previous Activity

Project: Electronic Crash Reporting System (Map Interface/Longitude & Latitude)

Performance Area: CT-CR-004 Consistency (Uniformity) C-U-1

Summary of Deficiency: None – 100% Compliant with MMUCC 4th Edition

Measurement: Number of MMUCC compliant data elements entered into the crash database or obtained via linkage to other databases

Project: Redesign of the Crash Form (MMUCC 4th Edition Compliant)

The goal in the upcoming fiscal year is to analyze the crash form and prepare for MMUCC 5th Edition update.

Performance Area: CT-CR-005 Integration - C-I-1

Measurement: % of appropriate records in the crash dataset that are linked to another system or file (e.g., integration between the crashes with violation linked to the citation file).

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	45%	50%	100%	100%	100%
Actual	40%	70%	75%	80%	80%	

Performance This Period:

None

Previous Activity:

Connecticut’s TRCC, with its multi-disciplinary membership, has been instrumental in promoting the creation and use of integrated datasets. Related areas of focus for the TRCC include the ongoing development of a traffic records inventory, including necessary data governance, access, and security policies for datasets that include several sources from multiple agencies. Connecticut’s TRCC includes representative data collectors, managers, and users drawn from each of the core traffic records system components. Membership also includes users of integrated datasets formed when data from different component systems are linked.

TRCC website is located at -

<http://www.ct.gov/dot/cwp/view.asp?a=2094&q=435916>

Data Users and Decision-Makers

Creation of linked datasets are an important start. In addition, data users and decision-makers should have access to the resources that support their needs, including skilled analytic personnel and user-friendly access tools. Ideally, these resources are specifically designed to meet a variety of needs, including legislative queries, problem identification, program and countermeasure development, management, and evaluation, as well as meeting all reporting requirements.

Crash Data Repository (CDR) website is located at - <http://www.ctcrash.uconn.edu/>

Project: - Electronic Citation System

Integration - ECitation fully integrated with the Crash System for analysis and reporting. Other ongoing integration initiatives including Crash with Roadway; Citation with Toxicology Lab and Judicial Criminal Records with Motor Vehicle.

Performance Area: **CT-CR-006 Accessibility - C-X-1**

Summary of Deficiency: Increase the number of authorized agencies capable of accessing the Crash File for analysis and reporting.

Measurement: Number of authorized agencies with access to crash data for analysis and reporting.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	100%	100%	100%	100%	100%
Actual	50%	70%	75%	80%	80%	

Performance This Method:

Previous Activity

Project:

Anticipated Improvement -

4.2 ROADWAY SYSTEM

Roadway information is used to group all of the data generally used by engineers to plan, design, construct, operate, and maintain the roadways. Roadway improvements, pavement improvements, and pedestrian or bicyclist access are measures that can be introduced as part of highway safety improvements program. Other engineering activities for improving highway safety might include design of crash barriers and other roadside devices intended to reduce crash severity and damage. Information required for these activities may include the following:

- Traffic information – number of vehicles per hour, day, week, or annual average, number of axles, weight, and speed.
- Structures – inventory and characteristics of bridges.
- Roadway Inventory – number of centerline miles and number of lane miles from pavement type, or number of total miles within any jurisdiction.

CTDOT has historically maintained its roadway related data in a non-geospatial LRS, built on an Oracle database platform, known as the Roadway Information System (RIS). Roadway attributes and characteristics were stored utilizing database tables that organized information based upon a route and mile point structure, with no geospatial representation; although certain fields were utilized to store single point geographic location information for certain operational and roadway identification needs.

The structure of that data was such that it was substantially similar to the MIRE FDE requirements regarding many of the elements. Additionally, CTDOT has performed local road data collection activities for all 169 towns and 5 boroughs in the state, on approximately 17,000 miles of locally owned roads, for elements such as: roadway location, identification, asset location, mileage, and classification status, as well as traffic volume on a select set of local roads.

CTDOT began an effort in 2012 to transition from RIS to a geospatially accurate LRS utilizing Bentley's EXOR program. This transition will eliminate many of the limitations in storing and attributing roadway data in the LRS that are associated with using a 15-year-old software application, along with enabling additional analysis capabilities that come with the LRS being geospatially accurate. Data maintenance in both systems, and migration from RIS to EXOR as the primary database of record, has been an ongoing responsibility of CTDOT's Roadway Inventory Office, who is tasked with maintenance of the road network and all road network related attribution.

The enhanced attribution capabilities of the new LRS (individual lane data, no character limits, layered asset location information/attribution), along with the need

for additional and more accurate attribution of roadway data for safety analysis purposes (outlined in MIRE), have led CTDOT's Roadway Inventory Section to adopt the MIRE data model as it applies to state, local, federal, and tribal roads.

In 2015, the CTSRC at the University of Connecticut (UConn) entered into a Memorandum of Understanding (MOU) with CTDOT's Traffic Engineering Safety Office to assess and develop tools to be used for advanced safety analysis of Connecticut's roadways. Included in that analysis are methods such as network screening, safety performance function (SPF) development, and countermeasure selection.

The availability of the resources necessary to compile a MIRE compliant data set that meets Federal requirements, along with the need for the CTSRC to access that data for safety analysis purposes, has led to a collaborative effort between CTDOT and CTSRC to identify data gaps, populate missing data, and develop maintenance plans for continued updating and utilization of the MIRE FDE and other critical data elements.

CTDOT has recently undergone both a Roadway Data Improvement (RDIP) Assessment (MIRE FDE Appendix A) and RDIP Workshop (MIRE FDE Appendix C) with regional and federal partners in order to identify data gaps and create a business plan for improving and integrating roadway data throughout the Department. The recommendations and summaries of those activities are included at the end of this plan as appendices. The workshop findings and business plan development recommendations (MIRE FDE Appendix B) are still a work in progress and are subject to change as discussions between CTDOT and VHB continue on how to best tackle the relatively unique structure of Connecticut's data integration effort to date.

The following table outlines the MIRE FDE for road segments, their applicability to certain road types in Connecticut, the compliance status utilizing current system capabilities, and data maintenance responsibility

Table 1– Roadway Segment MIRE FDE

Mire Object ID	Mire Description	Attribute Description	FDE on Paved FC Above Local	FDE on Paved Local FC	FDE on Unpaved	RIS Data And/Or LRS TIG Capabilities Meet MIRE FDE Standards on Applicable Roads	Maintenance Responsibility
4	Type of Governmental Ownership	State, County, City, Town, Park, Private, RR, Tribal, Fed	X	X	X	X	Roadway Inventory
8	Route Number	Signed numeric value for segment	X			X	Roadway Inventory
9	Route/Street Name	Alphanumeric route or street name where different	X			X	Roadway Inventory
10	Begin Point Segment Descriptor	Based on segment descr. Can be rte/mp or spatial	X	X	X	X	Network Segmentation - Roadway Inventory Safety Analysis Segmentation - CTSRC
11	End Point Segment Descriptor	Based on segment descr. Can be rte/mp or spatial	X	X	X	X	Network Segmentation - Roadway Inventory Safety Analysis Segmentation - CTSRC
12	Segment Identifier	Derived from other elements; combo of Rte/Cnty/BgnMP/EndMP	X	X	X	X	Network Segmentation - Roadway Inventory Safety Analysis Segmentation - CTSRC
13	Segment Length	Length of the segment in Miles	X			X	Network Segmentation - Roadway Inventory Safety Analysis Segmentation - CTSRC
18	Direction of Inventory	Direction of inventory if divided roads are inventoried in each direction	X			X	Roadway Inventory
19	Functional Class	Functional class of segment; interstate, PAFE, PAO, MinA, MajCol, MinCol, Local	X	X	X	X	Roadway Inventory
20	Rural/Urban Designation	Rural or Urban (Pop >5,000)	X	X		X	Roadway Inventory
21	Federal Aid/Route Type	Non Fed-Aid, Fed-Aid non NHS, NHS, NHS Con to Airport, Port, Amtrak Station, Rail/Truck Term, City Bus Term, Ferry, Pipeline, Pub Trans Term	X			X	Roadway Inventory
22	Access Control	Degree of Access Control; Full, Partial, None	X			X	Roadway Inventory
23	Surface Type	Surface type of segment; Unpaved, Bithuminous, AC Ovly, CRCP, JPCP, JRCP	X	X		X	Roadway Inventory
31	Number of Through Lanes	Number of through lanes excludes aux lanes (CD, Weaving, Frontage, Parking, Turn, Acc/Dec, TCL)	X	X		X	Roadway Inventory
54	Median Type	Undivided, Flush Paved, Raised, Depressed, 2-Way L Turn, Railroad, Divided sep grades no wall or with wall, other	X				Different Element Attribute - Roadway Inventory
79	Annual Average Daily Traffic (AADT)	Annualized average 24 hour volume of vehicles at a given point, or over a section of roadway	X	X		X	Traffic Monitoring
80	AADT Year	Year of entered AADT	X			X	Traffic Monitoring
91	One/Two-Way Operations	Indication of how segment operates	X			X	Roadway Inventory

The following table outlines the MIRE FDE for road junctions and interchanges, their applicability to certain road types within Connecticut, the compliance status utilizing current system capabilities, and who will be responsible for maintaining the data element.

Table 2 – Roadway Junction/Interchange MIRE FDE

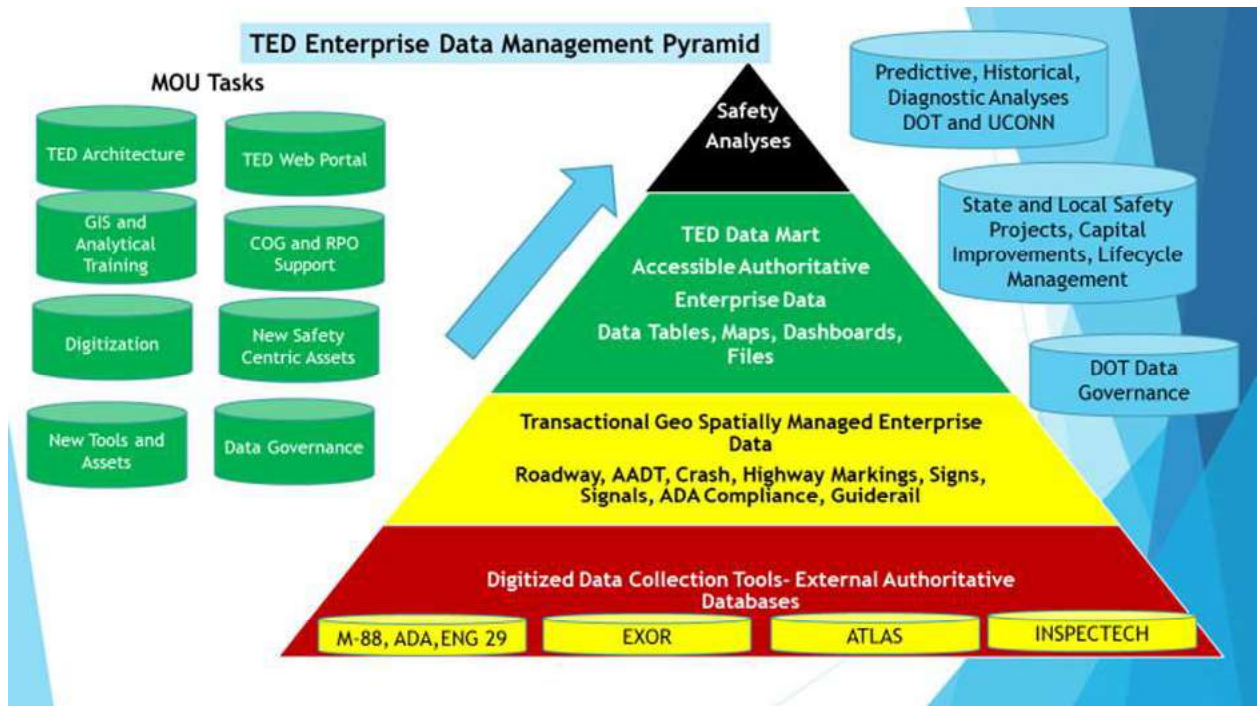
Mire Object ID	Mire Description	Attribute Description	FDE on Paved FC Above Local	FDE on Paved Local FC	FDE on Unpaved	RIS Data And/Or LRS TIG Capabilities Meet MIRE FDE Standards on Applicable Roads	Maintenance Responsibility
120	Unique Junction Identifier	A unique junction identifier - (e.g. node number, LRS of primary route, etc)	X				New Element - Roadway Inventory/CTSRC
122	Location Identifier for Road 1 Crossing Point	Location of the center of the junction of the first intersecting route (e.g. route and milepoint, or spatial coordinates)	X			X	Roadway Inventory
123	Location Identifier for Road 2 Crossing Point	Location of the center of the junction of the second intersecting route (e.g. route and milepoint, or spatial coordinates)	X			X	Roadway Inventory
79	Annual Average Daily Traffic (AADT) (each intersecting road)	Annualized average 24 hour volume of vehicles at a given point, or over a section of roadway	X			X	Traffic Monitoring
80	AADT Year (each intersecting road)	Year of entered AADT	X			X	Traffic Monitoring
126	Intersection/Junction Geometry	Type of geometric configuration that best describes the intersection/junction (T, Y, Cross, 5 or More Legs, Circular, Non-conventional, Midblock Ped)	X				New Element - Roadway Inventory/CTSRC
131	Intersection/Junction Traffic Control	Traffic control present at an intersection or junction (uncontrolled, 2 way stop, all way stop, yield, signalized w or w/o ped, railroad w/ L, G, SS, CB)	X				New Element - Roadway Inventory/CTSRC
139	Unique Approach Identifier	Any identifier that is unique for each approach at an intersection (e.g. sequential numbers, compass directions)	X				New Element - Roadway Inventory/CTSRC
178	Unique Interchange Identifier	A unique identifier for each interchange (e.g. node number, LRS of primary route, exit number, etc)	X				New Element - Roadway Inventory/CTSRC
182	Interchange Type	Type of ramp interchange - diamond, full clover, partial clover, trumpet, 3 leg, 4 leg, semi-directional, single entrance/exit, single point, other (double diamond, diverge d)	X				New Element - Roadway Inventory/CTSRC
187	Ramp Length	Length of ramp - from painted nose of gore to intersection curbline or painted nose of gore to painted nose of gore	X			X	Roadway Inventory
4	Type of Governmental Ownership	State, County, City, Town, Park, Private, RR, Tribal, Fed	X			X	Roadway Inventory
19	Functional Class	Functional class of segment; interstate, PAFE, PAO, MinA, MajCol, MinCol, Local	X			X	Roadway Inventory
191	Ramp AADT	Average Annual Daily Traffic for all ramps	X			X	Traffic Monitoring
192	Year of Ramp AADT	Year of collection for AADT on Ramp	X			X	Traffic Monitoring
195	Roadway Type at Beginning of Ramp Terminal	Type of roadway intersecting with the beginning of the ramp (Freeway, Non-Freeway, Other Ramp, Frontage Rd, Other)	X			X	Roadway Inventory
197	Location Identifier for Roadway at Beginning of Ramp Terminal	Location on the intersecting roadway of the ramp begin point (e.g. route - milepoint)	X			X	Roadway Inventory
199	Roadway Type at Ending Ramp Terminal	Type of roadway intersecting with the end of the ramp (Freeway, Non-Freeway, Other Ramp, Frontage Rd, Other)	X			X	Roadway Inventory
201	Location Identifier for Roadway at Ending Ramp Terminal	Location on the intersecting roadway of the ramp end point(e.g. route - milepoint)	X			X	Roadway Inventory

In the past year, the Connecticut Department of Transportation (CTDOT) embarked on an initiative to build an enterprise data warehouse designed to serve as a central repository of safety and asset data for the CTDOT. The enterprise data warehouse or Transportation Enterprise Database (TED) follows up on specific recommendations made in an FHWA sponsored December, 2016 RDIP Assessment to “consolidate and manage enterprise data integration efforts to fully integrate Department data resources and mapping capabilities using a geospatial LRS to map roadway features and crashes”.

From its origin, TED has always been focused on developing capabilities to advance safety project decision making. The TED initiative has also advanced capabilities to

collect and manage MIRE related data including roadway junction information that covers intersection features, traffic control devices and pedestrian and bicycle facilities.

How the TED Enterprise Database Supports Safety Data Management



As a result of its broad safety focus that goes well beyond basic MIRE FDE elements, TED has been able to focus on the following objectives in its first year of implementation:

- Serve as a unified database capable of hosting non-spatial data and geospatial data from a wide range of sources within the Agency with the objective to guide management policy, program and project investment decisions with an emphasis on safety and asset management
- Function as an enterprise transportation geographic information system (GIS) that would consist of an architecture that integrates geospatial data, suites of tools and applications, shared through a Data Mart to support daily CTDOT operations. This portal would serve as a single destination for CTDOT and their partners to consume, visualize, analyze, and publish their enterprise data and reports.
- The Data Mart will have a direct connection to UCONN's crash data repository, feed data to Traffic Engineering's safety analysis tool, serve the asset management and Capital Project safety related activities, and be accessible to local governments to update local road networks and to support safety analyses

-
- Be accessible through a centralized GIS platform, based primarily on ESRI ArcGIS, comprised of easy-to-use applications, fed by enterprise-level databases and high-performance computing

Significant progress has been made in the past twelve months that can be summarized as follows:

- A new TED architecture in Microsoft Azure has been built and is being tested;
- An enterprise licensing agreement has been signed with the ESRI corporation to purchase a range of licenses to support enterprise data collection and management
- The ATLAS capital project planning geodatabase was successfully separated from the TED data platform,
- New GIS tools and apps were developed to support inspection and repair functions for such safety centric assets as ADA curb ramps, signal control areas, and guiderail; UCONN GIS graduate students have started digitizing those same assets in ESRI applications.
- A digitized ENG 29 app has been developed for local governments along with a roadway data viewer capable of displaying the LRS in conjunction with safety asset data.
- Use cases are being documented to demonstrate the linkage between new enhanced MIRE related data sets and safety management planning

In addition, training in the use of ESRI software has begun, a work flow system for migrating TED legacy data sets has been developed; software user manuals and business requirement documentation is being completed, a prototype TED Web Portal has been developed, data governance concepts around standardization and data quality has been initiated, and a TED advisory group continues to meet weekly to monitor developments and provide direction. In addition, regular briefings of DOT staff have taken place through monthly briefings of the “TED Development Team” - a larger network of asset data stewards, so called “Lunch and Learn” sessions open to the entire Department, and specialized briefings for senior management. To assure data sets remain timely and complete, discussions have been initiated internally and with vendors regarding the business requirements for an automated work order system that would integrate with asset management databases to improve and maintain state of good repair.

At the same time that the new TED enterprise system was being built, CTDOT also took steps to consolidate its own GIS technical support capabilities by creating an organizational unit and point of contact with UCONN to facilitate the management and deployment of ESRI data systems and applications. This unit, known as the GIS Subject Matter Expert or SME team, is complemented by an emerging network of program manager Bureau leads and GIS technical support staff known as Bureau SMEs.

4.2.1 TRAFFIC RECORDS ASSESSMENT PLAN OF ACTION

Recommendation

- Improve the interfaces with the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

MIRE is the major guideline pertaining to the roadway system. There is a total of 202 elements that comprise MIRE Version 1.0 and 38 of those elements have been identified as FDEs. The MIRE elements are divided among three broad categories: roadway segments, roadway alignment, and roadway junctions. Each MIRE element has a definition, a list of attributes (coding) a priority rating, a reference to safety analysis tools, and – when necessary – an illustration that provides supplemental information on the element. It is important to have MIRE-level data for at least the roadway segments that have high crash rates so that causality can be investigated.

The collaborative plan between CTDOT and CTSRC to populate critical MIRE data elements into the new geospatial LRS, and to maintain the datasets for safety analysis use, directly addresses the Traffic Records Assessment Recommendation. It is an ongoing effort, with plans to comply with federal requirements well before the 2026 deadline.

Considerations for implementing your Roadway recommendations

- Create a more direct linkage with county and local agencies
- Consider moving to a single LRS system.

Timeliness – linkage to the CPD will enable ability to generate reports that track the completion of a project and link that information to the date the system was updated. Once data migration is completed, and appropriate database linkages have been established, CTDOT will further assess the ability to establish data Timeliness related performance measures.

Accuracy – TIG has the ability to query and identify errors in critical data elements and attribution. Once data migration is completed, CTDOT will further assess the ability to establish data Accuracy related performance measures.

Completeness - TIG has the ability to query and identify missing data elements and attribution. Once data migration is completed, CTDOT will further assess the ability to establish data Completeness related performance measures.

Uniformity - CTDOT is currently tracking the MIRE compliant and non-compliant FDE as they are migrated from RIS into the geospatial LRS (see Table 1 & Table 2 of the *Project Background* section). Once data migration is complete, and additional data collection and integration activities have been successfully completed, CTDOT will further assess the ability to establish data Uniformity related performance measures.

Integration - Ongoing efforts to link critical and appropriate databases is still ongoing, as is a roadway database inventory. At the completion of roadway database inventory identification efforts, a metric that tracks the number of linked and integrated databases as a percentage of all available databases can be established. CTDOT is involved in an effort to integrate all Bentley licensed products as well, and the progress of that integration is being tracked; these databases includes both safety and non-safety related data.

Accessibility - once the geospatial LRS and many of the associated critical data layers are in full production and can be used for safety analysis, surveys regarding the accessibility and satisfaction of the data can be developed.

Deficiency Analysis & Performance Goal Matrix

Performance Area: **Timeliness R-T-1**

Summary of Deficiency: - CT_RW_001 - Lack of update to roadway file

Measurement: The median number of days from (a) the date a periodic collection of critical roadway data elements is complete to (b) the data the updated critical roadway data element is entered into the database.

Time between field collection (which all adjustments will be time/date/user stamped) and when it is incorporated into the system (which is maintained by the LRS management system).

	Benchmark	2019	2020	2021	2022	2023
N/A	N/A	60	45	30	15	25
Actual	Unknown	Unknown	Unknown			

Activity This Period

Deployment of MAVRIC as a production field data collection tool, and prioritized migration from the legacy system, which did not support this type of measure, were just completed for the year end 2019 roadway data. Integration across systems and data access improvements will allow CTDOT to begin measuring the performance measure in the 2020 year-end file.

Performance Area: **Accuracy R-A-1**

Summary of Deficiency - CT_RW_002 - Significant errors and incomplete road segment data elements.

Measurement: - Percent of road segment records with no errors in critical data elements.

	Benchmark	2019	2020	2021	2022	2023
Goal		98	99	99	100	100
Actual	95	99	99	99	99	

Activity This Period

Deployment of FME as a software solution will enable Roadway Inventory to automate this performance measure with monthly/weekly reports for QA/QC - crossing attribute validations will be built in.

All current errors in road segment records are attributed to knowledge that road segments exist, but lack of presence on the basemap. This includes all federal roads and some state-owned roads such as state institution, state forest, and state parks.

Performance Area: **Completeness R-C-1**

Summary of Deficiency - CT_RW_003 - Limited number of public roadway miles or jurisdictions identified on the State's Basemap or roadway inventory file.

Measurement: Percent of public roadway miles or jurisdictions identified on the State's base map or roadway inventory file.

	Benchmark	2019	2020	2021	2022	2023
Goal		99	99	100	100	100

Actual	95	98	99	99.6		
--------	----	----	----	------	--	--

Activity This Period

Active correction and digitization of the remaining approximately 418 miles of public road is ongoing.

Require federal assistance in identified federal public roads - this hampers CTDOT's ability to have 100% coverage.

Performance Area: **Completeness R-C-2**

Summary of Deficiency - CT_RW_004 - Number of roadway segments that include location coordinates using measurement frame such as GIS Basemap.

Measurement:

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Activity This Period

Note:

All roadway segments digitized in GIS basemap contain location coordinates. Completion of all public roads will result in all road segments having location coordinates. Because the Basemap contains the ability to generate coordinates for all road segments and nodes, this second performance measure might be redundant as it will align exactly with R-C-1. Propose removing it.

Performance Area: **Consistency (Uniformity) R-U-1**

Summary of Deficiency - CT_RW_005 - Roadway data need to be Model Inventory Roadway Elements (MIRE) compliant

Measurement: Number of MIRE compliant data elements entered into a database or obtained via linkage to other databases

	Benchmark	2019	2020	2021	2022	2023
Goal		56	85	90	112	112

Actual	30	60	89	95		
--------	----	----	----	----	--	--

Activity This Period

Intersection and approach collection and delivery will result in 29 additional data elements being integrated, hopefully by the end of 2020.

Performance Area: **Integration R-I-1**

Summary of Deficiency - CT_RW_006 - Limited linkage with the other Traffic Records System components (There is linkage between crash and roadway data through TED).

Measurement: % of appropriate records in a specific file in the roadway database that are linked to another system or file.

Measurement: Number of Traffic Records System component databases linked to the Roadway database.

	Benchmark	2019	2020	2021	2022	2023
Goal		3	4	5	6	6
Actual	2	3	4			

All appropriate records in the Roadway Database contain an LRS location, which is our common linkage element. Percent of records might not be an appropriate measure, but number of disparate systems that have that linkage may be a better measure, along with a list. The propose metric reflects the suggested revision that's highlighted.

Activity This Period

Roadway Data is linked to Traffic Data (Volume/Counts) through Exor Asset

Roadway Data is linked to Crash Data through TED/CRSMS

Roadway Data is linked to Bridge Data through Exor/InspectTech

Performance Area: **Accessibility R-X-1**

Summary of Deficiency - CT_RW_007 - % of Roadway data is electronically accessible to traffic records data users

Measurement: # of Traffic Records Users with access to roadway file

Measurement: # of Roadway data that is accessible

Roadway Data is being published online and through a database connection. A better measure of accessibility might be to note the percentage of critical elements that are published to this platform versus those that are only available internally. The performance measure has been updated to reflect this proposed metric

	Benchmark	2019	2020	2021	2022	2023
Goal		6%	20%	50%	50%	75%
Actual	6%	6%	10%			

Activity This Period

CTDOT is in the process of building an Enterprise System for all roadway data to be more widely accessible and deployment of that system is anticipated in calendar year 2020. A small amount of additional roadway data was published to organizational members and partners during this year, but a much more widespread dissemination will come with the new Enterprise platform.

4.3 VEHICLE SYSTEM

The vehicle system is an inventory of data that enables the titling and registration of each vehicle under the State's jurisdiction to ensure that a descriptive record is maintained and made accessible for each vehicle and vehicle owner operating on public roadways.

Vehicle information includes identification and ownership data for vehicles registered in the State and out-of-State vehicles involved in crashes within the State's boundaries. Information on vehicle make, model, year of manufacture, body type (usually extracted from the VIN), and adverse vehicle history (title brands) is maintained to produce the data needed to support safety programs. Ideally, the vehicle system is capable of recording and reporting title data, registration information, and verification of required insurance and should clearly define both the vehicle itself and the owner or leaseholder.

Connecticut's vehicle registration and titling data is maintained in a separate system from its driver data. The strong points of this system include the use of software to validate the vehicle identification numbers, real-time processing, use of NMVTIS (National Motor Vehicle Title Information System) in real-time, and querying the NMVTIS system prior to issuing a Connecticut title. The vehicle system uses NMVTIS brand codes and the State participates in the PRISM (Performance and Registration Information Systems Management) system at the gold level. Additionally, the State has developed process flows for most of its vehicle-related processing. These are all best practices and deserve recognition.

The State's data dictionary for the system is a combination of the NMVTIS information, AAMVA D.20 data elements, and State-specific data elements. These aspects of the data dictionary should be combined into a Connecticut vehicle data dictionary that is limited to the State's data and definitions and contains its data edits and validation rules. It is commendable that the State uses NMVTIS and AAMVA documentation, as that provides for uniformity, but data users and collectors benefit more from a concise listing of the State's data elements and definitions.

There are some areas in which the State can improve its data, processes, and documentation to further improve an already good system. While the State has developed an error-handling process, it is not contained in the process flows; an error-handling process flow would help to ensure that this information is reviewed and updated as needed. Stolen vehicle flags are not added to the registration system upon reporting by law enforcement, with State reliance on NMVTIS in lieu of flagging. However, State-level registration system flags would improve the timeliness of such reporting and could help to ensure that, upon recovery, such vehicles could be immediately cleared on the State system. In the same light, brand history from NMVTIS can be carried forward on to Connecticut titles, but such brands that are

listed on out-of-state titles are not necessarily copied onto the Connecticut title. Changing this procedure would help to ensure that brands are not inadvertently washed from titles when moving from State to State.

One concern about uniformity within the State is the fact that personal information is not collected in the same format on the vehicle file as it is on the driver file. The discrepancies are due to the fact that the files are of varying ages and one has greater capacity than the other. It would behoove the State to review the current conventions for collecting and recording names and attempt to make those consistent.

Finally, a comprehensive data quality management program should be initiated for the vehicle data. The State has made efforts to improve its data quality and assumes that those practices and technology have made data quality better. However, the only way to ensure that data quality is and remains improved is to develop specific measures and to take and record those measurements on a regular basis. It is an often-faulty assumption that all errors are prevented by data edits. That is not the case and auditing for errors that might have bypassed the edits is a good way to develop additional edits if needed and to ascertain where training or procedures might need to be updated.

Random audits of the data, independent of customary State processes, help to find and fix problems. A small number of files, randomly selected and reviewed on a regular basis can help to determine what types of transactions are most likely to result in errors, to develop regular audit procedures for most-risky transaction types, and to provide feedback to data collectors and data entry staff to improve accuracy. Performance measures regularly monitored and reported to the TRCC will aid in maintaining the quality of the data and data system that Connecticut has developed.

4.3.1 TRAFFIC RECORDS ASSESSMENT PLAN OF ACTION

Recommendation

- Improve the data quality control program for the vehicle data system to reflect best practices identified in the Traffic Records Program Advisory.

Plan of Action

The vehicle system data quality control program is under review and once completed the DMV will ensure that it provides data verification, validation, and quality control where applicable, provides matching edit checks and data collection guidelines. Procedures for collection, reporting, and posting of registration, title, and title brand information will be formally documented. The data quality control program will be accessible to all users and updated regularly to reflect changes to the system.

The Vehicle system will adhere to the American Association of Motor Vehicle Administrators (AAMVA) standard and guidelines and reflects best practices identified in the Traffic Records Program Assessment Advisory.

Recommendation

- Improve the Interfaces with the Vehicle data system to reflects best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

The vehicle system is under review with plan improvements to include interface with other Traffic Records System.

Recommendation

- Improve the procedures/process flows for the Vehicle data system to reflects best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

Upon completion of the system review DMV will ensure the system procedures/process flow reflects best practices identified in the Traffic Records Program Assessment Advisory

Considerations for implementing your Vehicle recommendations

- Add a 2D barcode to the registration documents for use by law enforcement in fast and accurate data collection.
- Develop a comprehensive data quality management program that includes baseline measurements for the quality attributes of timeliness, accuracy, completeness, uniformity, accessibility, and completeness to ensure that the vehicle system data remains high quality. The data quality reports should be regularly reported to the TRCC.

Deficiency Analysis & Performance Goal Matrix

Performance Area: **Timeliness V-T-1**

Summary of Deficiency - CT_VH_001 - Improve timeliness of Vehicle Records updates entered into the database within 2 days after the critical status change

Measurement: % of title transactions posted within 24hr: 100%.

	Benchmark	2019	2020	2021	2022	2023
Goal	80%	95%	98%	100%	100%	100%
Actual	Unknown		100%	100%		

All motor vehicle title is posted at the time of vehicle registration

Activity This Period: All title information is posted immediately when a vehicle is registered or a title only transaction is processed. All paperwork is reviewed to ensure accuracy and the title is printed at a later date.

Performance Area: **Accuracy V-A-1**

Summary of Deficiency - CT_VH_002 - Improve the number of vehicle records with no errors in critical data elements e.g., Vehicle Identification Number (VIN)

Measurement: % of accurate or valid VIN.

	Benchmark	2019	2020	2021	2022	2023
Goal	90%	98%	98%	100%	100%	100%
Actual	Unknown					

Activity This Period

Performance Area: **Completeness V-C-1**

Summary of Deficiency - CT_VH_003 - The vehicle file has a significant number of missing fields due to data entry errors.

Measurement: % of vehicle records with no missing data elements.

	Benchmark	2019	2022	2021	2022	2023
Goal	80%	95%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period

Performance Area: **Completeness V-C-1**

Summary of Deficiency - CT_VH_004 - Large Truck and Buses vehicle have incomplete data elements.

Measurement: % of vehicle records from large trucks and buses that have all of the following data elements: Motor Carrier ID, Gross Vehicle Weight Rating/Gross Combination Weight Rating, Vehicle Configuration, Cargo Body Type, and Hazardous Materials (Cargo Only)

	Benchmark	2019	2022	2021	2022	2023
Goal	80%	95%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period

Performance Area: Consistency (Uniformity) V-U-1

Summary of Deficiency - CT_VH_005 - Increase number of standard/compliant data elements entered into the vehicle database or obtained via linkage to other databases. These standards include AAMVER Standards and the MMUCC.

Measurement: Number of standards-compliant data elements entered or obtained via linkage to other databases. (AAMVER elements in the Vehicle File).

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	100%	100%	100%	100%	100%
Actual	Unknown					

Activity This Period:

Performance Area: Integration V-I-1

Summary of Deficiency - CT_VH_006 - No file linkage with the other Traffic Records System components.

Measurement: The percent of appropriate records in the vehicle file that are linked to another system or file.

	Benchmark	2019	2020	2021	2022	2023
Goal	80%	95%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period

Performance Area: Accessibility C-X-1

Summary of Deficiency - CT_VH_006 - Vehicle file is accessible to Law Enforcement and Department of Public Safety only.

Measurement: % of traffic records data user with access to vehicle file for data analysis.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period

4.4 DRIVER SYSTEM

Connecticut's driver system has a number of excellent qualities. Purges of data in the system are made according to State Archival policies. The State keeps an audit log of changes to driver records, including the identity of the employee who made the change, and provides employees with the policy and procedure manual in an electronic format. Additionally, conviction data is relayed electronically from the courts in a nightly batch for upload and posting to the driver history file. The driver file also contains information about driver improvement training, and novice driver training is available in a paper-based file. The State uses a combination of its own data dictionary, the AAMVA D.20 data dictionary, and depends on its driver license vendor to keep the system documentation up-to-date.

To ensure compliance with the Driver Privacy Protection Act, the State has developed Memoranda of Understanding with its data users and audits them regularly.

Connecticut has good external fraud detection policies, procedures, and training. CT DMV's Document Integrity Unit (DIU) performs both external and internal reviews of Branch and third-party partners' issuance processing. DIU performs the biometric facial recognition analysis on a daily basis to deter customer fraud attempts. Moreover, DIU randomly reviews the enterprise license credential issuance and shares its audit findings with DMV management for any follow-up action, if needed. Additionally, hard stops are programmed into the system can prevent issuance of a license without required documentation, such as Commercial Driver's Licenses without appropriate medical or hazmat documentation. A gap analysis might aid the State in determining what measures to take to improve internal fraud detection and prevention.

4.4.1 TRAFFIC RECORDS ASSESSMENT PLAN OF ACTION

Recommendation

- Improve the data dictionary for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The State Driver Licensing system is well documented. Each data field has an established definition and validated values—including appropriate null codes. All applicable edit checks and data collection guidelines matched the data definitions. The data dictionary will be maintained and updated to keep pace with system, legislative, and other changes.

Driver data system will reflect best practices as identified in the Traffic Records Program Assessment Advisory.

Recommendation

- Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The system will have a formal data quality management program's review protocols that covers the entire process; the collection, submission, processing, posting, and maintenance of driver data.

An automated edit checks and validation rules will be implemented to ensure entered data falls within the range of acceptable values and is logically consistent between other fields. Edit checks will be applied when data is added to the record. The system will have a Performance measures program that will be tailored to the needs of data managers and address the concerns of all stakeholders.

The Driver system will reflect best practices identified in the Traffic Records Program Assessment Advisory

Considerations for implementing your Driver recommendations

- Enhance the driver data dictionary to include specific values for fields where applicable, all edit checks and validations that occur for each field, and lastly develop a policy on when the dictionary should be updated.
- Seek legislation to maintain and post at-fault crashes to an individual's driver history to help identify poor driving habits.
- Develop a comprehensive performance plan with performance measures for each of the core areas: timeliness, accuracy, completeness, uniformity, integration, and accessibility to benefit the State in preparation for entrance into AAMVA's S2S. Guidance on the measures can be found in NHTSA's Model Performance Measures for State Traffic Records Systems, as well as the Traffic Records Program Assessment Advisory.

Deficiency Analysis & Performance Goal Matrix

Performance Area: **Timeliness D-T-1**

Summary of Deficiency - CT_DL_001 - There is a time lag in the processing of convictions file to the driver history file.

Measurement: Number of days from the date of driver's adverse action to the date the adverse action is entered into the database. Presently, CT DMV processes convictions on a nightly basis from the courts and administrative actions utilize the Driver Services' ACD code matrix (all federal, Compact and state convictions/sanctions) for the determination of any administrative actions.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period:

CT DMV, with the assistance of FMCSA federal grants, has worked on numerous projects that impact the timeliness and accuracy of data, particularly in regard to Commercial Learner Permit, Commercial Driver License, and for non-CDL operators driving commercial motor vehicles. Nevertheless, the improvement in these categories has also had a tertiary and beneficial impact for all license classifications since it is the source system for the processing of traffic convictions and administrative any subsequent administrative actions.

Performance Area: Accuracy D-A-1

Summary of Deficiency - CT_DL_002 - Improve the percentage of driver records that have no errors in critical data elements, e.g., Date of Birth.

Measurement: % of driver records that have no errors in critical data elements

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period:

CT DMV requires customers to provide certain breeder documentation for the issuance of any license-related credential. These documents include SS#, birth certificates, passports, Visas, etc. CT DMV staff validate the data against federal systems to ensure accuracy prior to being recorded in its database and the credential issued.

Performance Area: Accuracy D-A-2

Summary of Deficiency - CT_DL_003 - Improve the percentage of driver records with validated Social Security Number (SSN)

Measurement: The percentage of records on the State driver file with Social Security Numbers (SSN) successfully verified using Social Security Online Verification (SSOLV) or other

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period:

Pursuant to federal law, CT DMV must seek a social security number for those required to have one or require that they provide documentation for those that do not require one. All social security numbers are validated against SSOLV prior to issuance of the credential. Any discrepancies must be resolved by the customer and Social Security Administration in order for the customer to be issued a license credential.

Performance Area: Completeness D-C-1

Summary of Deficiency - CT_DL_004 - Improve the percentage of driver records with no missing critical data elements

Measurement: Increase % of complete driver records with no missing critical elements previous driving records from other states or territories.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period.

CT DMV issuance system is programmed with hard stops so that any critical information required by federal or state law is mandated. Failure to have the legally obligated information will not be processed until the data is completed.

Performance Area: Consistency (Uniformity) D-U-1

Summary of Deficiency: CT_DL_005 - Increase the number of standard-compliant data elements entered into the driver database or obtained vial linkage to other databases

Measurement: % of SSN, Immigration and Vital Statistics documents verified online prior to Driver License issuance.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period:

CT DMV is required by federal and state law to verify against source systems such as SSN# and SAVE. The EVERS system, for verification of a customer's date of birth, is in production via NAPHSIS but is fledgling at this point and is costly. One of the main issues is the ability for states to digitize its prior DOB certificate records. CT DMV's intent would be to eventually seek to check customers' DOBs against that system of record, given the cost considerations.

Performance Area: Integration D-I-1

Summary of Deficiency - CT_DL_006 - No file linkage with the other Traffic Records System components.

Measurement: Increase percent of appropriate records in the driver file that are linked to another system or file

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period:

CT DMV provides data linkage to authorized DPPA users on a case by case basis. Given the DPPA, CT DMV must ensure compliance with usage and therefore, any linkage with other entities, such as Traffic Records System components. CT DMV provides linkages to CT’s Criminal Justice Governing Board’s CISS system. Additionally, CT DMV has linkage to CVIEW (commercial safety/traffic) for IRP, IFTA, Over Size and Overweight, as well as commercial motor carrier safety systems.

Performance Area: Accessibility D-X-1

Summary of Deficiency - CT_DL_007 - Driver file is only accessible to DPS and Law Enforcement Agency

Measurement: Increase the number of principal users access to appropriate driver records or file.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period:

CT DMV has numerous MOA and MOUs with both governmental and non-governmental agencies that qualify under the provisions of the federal and state Driver Privacy Protection Act.

4.5 CITATION AND ADJUDICATION

Prior to the implementation of Electronic Citation (E-Citation) Processing, Connecticut's traffic violation citation system was completely manual; vulnerable to human error at many points in the process. Handwritten documents required multiple entry in numerous and varied systems causing inconsistencies and inaccuracies in data. This sometimes led to agencies that relied on the system, such as the Department of Motor Vehicles (DMV), receiving erroneous information, which in some cases resulted in a failure to consistently and accurately apply conviction information to driver history files. In addition to creating opportunities for inaccurate and conflicting data to be entered into the system, reliance upon handwritten citations and multiple points of data entry often resulted in processing delays and time-consuming exceptions processing.

The paper driven manual process for adjudicating traffic violations is labor intensive. Recipients of traffic infractions respond either with payment or a not guilty plea. Some do not respond at all. A not guilty plea received at the CIB can either result in a nulled (decision by the state's attorney to not prosecute the infraction), or a transfer to the court of jurisdiction. Once at the court, the case may be reviewed and nulled or scheduled for an infraction hearing. Once scheduled, outcomes are varied and can include payment, substitution of charges, charitable contributions, nulls, and dismissals, etc.

In addition to creating opportunities for inaccurate and conflicting data to be entered into the system, reliance upon a system based on paper and multiple points of data entry often results in processing delays and time-consuming exceptions processing.

4.5.1 SYSTEM UPDATE

A statewide systematic effort was undertaken to address these problems, with the Judicial Branch E-Citation Processing System project developed in coordination with Citation projects involving the Capitol Region Council of Government (CRCOG) and the Department of Public Safety (DPS). This resulted in the development of a statewide electronic roadside data capture system for the issuing and reporting of traffic citations.

The Centralized Infractions Bureau (CIB) receives all infractions (approximately 400,000 annually) from every law enforcement agency in the State of Connecticut. In 2015, CIB received and processed over 148,000 "not guilty" pleas, each of which required the individual who received the infraction to appear in-person to participate

in a court hearing. In 2018, the Connecticut Judicial Branch deployed an online adjudication system which enabled individuals who pled “not guilty” to an infraction to participate in the court process electronically, rather than be required to physically appear in court (not including trials). Currently available in nine of the fifteen locations in the State, and scheduled to be in twelve by the end of 2018, these online dockets have reduced costs, improved the quality and timeliness of hearings, and improved the convenience and efficiency of the process for both the court and the individual who receives the infraction. Approximately 70 percent of all individuals who are eligible to participate in the program have opted for this online system rather than an in-person court appearance.

Building on the E-Citation initiative, Judicial developed and implemented an on-line disposition system whereby the recipient of an infraction elects to have their case reviewed and adjudicated on-line. This allows prosecutors to review most, if not all, not guilty pleas entered by defendants and reach resolution without the necessity of the recipient coming to court. If the defendant requests a trial, those cases would be heard in the court of jurisdiction.

In addition to removing the requirement for the defendant to appear in court, the online disposition system will allow prosecutors to review most, if not all, “not guilty” pleas entered by defendants and reach resolution at a more central location, without the necessity of physically appearing in court, helping to conserve the limited resources of the criminal justice system

4.5.2 TRAFFIC RECORDS ASSESSMENT PLAN OF ACTION

Recommendation

- Improve the data dictionary for the Citation/ Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The Judiciary and ECitation systems have a detailed data dictionary that describes all the procedures and process flow for each system.

TRCC will ensure that both systems reflect best practices in the Traffic Records Program Assessment Advisory.

Recommendation

- Improve the data quality control program for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The Judiciary and ECitation systems an established data control and data validation programs that describes all the data quality requirements for each system.

TRCC will ensure that both systems reflect best practices in the Traffic Records Program Assessment Advisory.

Recommendation

- Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The new Court system and the ECitation are currently undergoing interfacing efforts with Driver, Motor Vehicle and EMS systems.

TRCC will ensure that both systems interfaces reflect best practices in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Citation and Adjudication recommendations

- Improve the data dictionary provided for the case management system (citation and adjudication) with plain language descriptions of fields and other relevant information, like data linkages and edit criteria. Diagrams of how data flows would also be helpful, not only for assessment purposes, but to help users and developers understand and articulate improvements.
- Establish performance measures for integration, completeness, and accessibility that could be helpful in improving data quality and usefulness to system users. Connecticut has established performance measures for timeliness, accuracy, and uniformity. The emphasis of the performance measures should be on data quality. Regular monitoring of performance can also help identify system improvements that can be supported by the TRCC.

Deficiency Analysis & Performance Goal Matrix

Performance Area: **Timeliness C/A-T-1**

Summary of Deficiency - CT_C/A_001 - There is a time lag in the processing of citations from issuance to when it is entered into the database.

ECitation data transfer to the court system shows a significant improvement in the timeliness.

Measurement: Mean number of days from citations issuance to when it is entered to the court system (centralized database).

	Benchmark	2019	2020	2021	2022	2023
Goal	1 day					
Actual						

Project: ECitation is completed, tested and deployed

Activity This Period:

Performance Area: Timeliness C/A-T-2

Summary of Deficiency - CT_C/A_002 - There is a significant time lag in the date of charge disposition to the date the charge disposition is entered into the statewide adjudication database and Driver History File

Measurement: The mean number of days from the date of charge disposition to the date the charge disposition is entered into the statewide adjudication database.

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual		0.274798928	0.07034221	0.164513	0.05247005	

Project: Online Adjudication/Disposition System

Activity This Period:

Citation Adjudication Disposition improved from 0.16451335 to 0.05247005 days=68.11% reduction (0.1120433 days) for Citation Adjudication Disposition to posting in Driver History File

Performance Area: Accuracy C/A-A-1

Summary of Deficiency - CT_C/A_003 - Illegible handwriting on Paper Citations results in data entry errors.

Measurement: % of Citation records with no missing critical data elements, e.g., time citation issued

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Project:

Activity This Period:

Performance Area: Completeness C/A-C-1

Summary of Deficiency: CT_C/A_004 - Citation records with missing critical data elements

Measurement: % of citation records with no missing critical data elements

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Project:

Activity This Period:

Performance Area: Consistency (Uniformity) C/A-U-1

Summary of Deficiency - CT_C/A_005 - Most Local Law Enforcement Agency are not participating in the use of the State Electronic Citation Program.

Measurement: % of Local Law Enforcement Agency using the State Electronic Citation System

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Project:

Activity This Period:

Performance Area: IntegrationC/A-I-1

Summary of Deficiency - CT_C/A_006 - Limited number of Citation records that are linked to other Traffic Records System components or file

Measurement: % of appropriate records in the citation file that are linked to another system or file.

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Project:

Activity This Period:

Performance Area: **Accessibility** **C/A-X-1**

Summary of Deficiency - CT_C/A_007 - Limited access to the Citation File

Measurement: Number of principal users of citation data with access to the citation database.

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Project:

Activity This Period:

4.6 EMERGENCY MEDICAL SERVICES

The Connecticut Crash Data Repository (CTCDR), as part and parcel of an integrated, inter-agency “Data Linkage Program,” defined by the Centers for Disease Control and Prevention (CDC), was designed to help prevent crash-related injuries and death through the surveillance of information from inter-related data sources including most of the basic components of CDC’s ideal data linkage guidance. This includes the linking and manipulation of electronic pre-crash, crash, and post-crash data sources such as driver citation records, police crash reports, emergency medical services (EMS) transportation records, hospital discharge records, trauma registry records, laboratory toxicology records, vital statistics death records, and records from the Office of the Medical Examiner.

Inter-agency data, when linked, can be used for more than identify risk factors (i.e., the frequency of distracted or impaired driving) or protective factors (i.e., low speed or use of passenger restraints). Inter-agency data linked in the CTCDR allows for addressing traffic safety within a public health approach. That is to 1) define the problem, 2) identify risk and protective factors, 3) test and develop prevention strategies, and 4) assure widespread adoption. With insights gained from using inter-agency linked data to define risk and protective factors, strategies can be identified and tested more accurately at a community level to prevent motor vehicle crash injuries and deaths among those most at risk. Linked data contained within the CTCDR also serves to support Safe States’ 2019 *Strategies to Address Shared Risk and Protective Factor for Driver Safety* and the Vision Zero strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all.

Fundamental to any data source, including data sources that comprise the CTCDR, is the quality and representative nature of the information gathered. In 2021, the Connecticut Department of Transportation (CTDOT) completed an interagency State Traffic Records Assessment Program (STRAP) survey with the National Highway Traffic Safety Administration (NHTSA). While the overall assessment was positive, there were significant recommendations for improvement in the category of Injury Surveillance. These recommendations include select data-base owners engage in activities to improve their data quality and establish data reporting performance measures for their data reporters.

The Traffic Records Coordinating Committee (TRCC) has been tasked by the federal government with improving the collection, management, and analysis of traffic safety data at the state and federal level. The project goal is to develop and implement programs that improve the timeliness, accuracy, completeness, uniformity, and accessibility of state safety data.

In 2022, the Connecticut Transportation Safety Research Center (CTSRC), with funding from the CTDOT/HSO, entered into a data sharing agreement with the DPH to receive crash-related records from Connecticut's National Emergency Medical Services Information Systems (NEMESIS), Connecticut's emergency department and hospital discharge data (Chime Data), and Connecticut's International Trauma Diagnosis data. This agreement is conducted in compliance with the Health Insurance Portability and Accountability Act (HIPAA) privacy rule, protection of identifiable health data as defined by regulations for Connecticut state agencies 19a-25-1 et. Seq., and under guidance from the Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control's (NCIPC) traffic safety initiative of linking information for Nonfatal Crash Surveillance (LINCS). This agreement will support the prevention and reduction of motor vehicle crash-related fatal and non-fatal injuries by improving upon the knowledge base of traffic injury-related behaviors associated with but not limited to child passengers, teen drivers, older adult drivers, substance-impaired drivers, distracted drivers, pedestrians, bicyclists, and motorcyclists.

4.6.1 TRAFFIC RECORDS ASSESSMENT PLAN OF ACTION

Recommendation

- Improve the data dictionary for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

The Office of Emergency Medical Services (OEMS) at the DPH has submitted a project proposal to the CTDOT for creating a formal Connecticut EMS Data Dictionary that is compliant with the National Emergency Medical Services Information Systems (NEMSIS) and a formal Connecticut Trauma Data Dictionary that is compliant with the International Trauma Diagnosis criteria.

Recommendation

- Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The Injury and Violence Surveillance Unit of DPH will develop a record matching protocol to link crash-related records from NEMSIS, ChimeData, and ITDX records to create a data sharing platform to connect with CTCDR record sets.

Recommendation

- Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The Office of Emergency Medical Services (OEMS) at the DPH has submitted a project proposal to the CTDOT for education of EMS providers statewide as part of the roll-out and implementation of edit checks and data validation rules in the new NEMSIS version 3.5 scheduled for the summer of 2022. This will include addressing the rejection of EMS data reporting that does not meet minimum quality standards.

Considerations for implementing your Injury Surveillance recommendations

- Use the update of the EMS data system to NEMSIS v. 3.5 as an opportunity to complete the development of a data dictionary and document edit checks, validation rules, and error-correcting processes.
- Continue to support the trauma registry and its efforts to make the data accessible for analysis.
- Develop comprehensive data quality management systems for the Injury Surveillance components of the CTCDR. It is important that such systems include the establishment and tracking of performance measures.
- Develop a comprehensive performance plan with performance measures for each of the core areas: timeliness, accuracy, completeness, uniformity, integration, and accessibility. Guidance on the measures can be found in NHTSA's Model Performance Measures for State Traffic Records Systems, as well as the Traffic Records Program Assessment Advisory.

Deficiency Analysis & Performance Goal matrix

Performance Area: **Timeliness I-T-1**

Summary of Deficiency - CT_EMS/I_001 - There are time delays, failure to submit data and failures in system processing of local EMS data. Identifying gaps in data by year, month and EMS agency is being used to identify causes and to effect solutions.

Measurement Method: Percent of EMS total records expected that are available in the yearly databases for analysis at 6 months (2019) and at 12 months (2017, 2018). The estimated annual total for all types of EMS calls is ~ 750,000 if all EMS agencies report. At least 500,000 of the totals should be emergency 911 calls.

	Benchmark	2019	2020	2021	2022	2023
Goal	90%	90%	100%	90%	100%	
Actual	NA	90%+	100%			

Activity This Period

Almost 92% of the expected total of all records for 2018 were received. As previously stated, an unknown volume of records from both 2017 and 2018 were erased from the state server and there is no way to tell if all of those were restored.

A draft annual report of the **2018** data was completed in March 2020 but appears to be still internal to DPH. The epidemiologist for OEMS also answered questions from the legislative auditor Laura Zhao in February 2020. Draft annual reports were completed for 2019 and 2020, but both are still internal to DPH.

The EMS database is in the process of being shifted from Digital Innovations, Inc. To Image Trend Elite, which is used by at least 41 states, including all of New England and New York. Records from (mostly) 2020 have begun appearing in the new system. The process of migrating the legacy data from 2017 onward is complete, though significant data was lost prior to 2020.

DPH OEMS and DPH Information Technology have been working for months on transition, updating contacts with the local EMS agencies and with all the software vendors for the local agencies. At least three months' work on redirecting their electronic submissions (and underlying configurations) to the new Image Trend Elite data collector. We are now receiving much better participation from local agencies because their submissions are automated, via a web service. No more manual data submissions.

Performance Area: Timeliness I-T-2

Summary of Deficiency - CT_EMS/I_002 - The number of EMS agencies who are successfully submitting data is less than the number of EMS agencies that should be submitting data.

Measurement Method: Percent of EMS agencies identified in the 2019 agency roster who are submitting **any data for each month** in 2017, 2018 and 2019 as of June 30, 2019, even if volume fluctuated outside expected range. In 2019 we have 165 certified agencies and 20 licensed agencies, which can change slightly by year.

	Benchmark	2019	2020	2021	2022	203
Goal	100%	100%	100%	100%	100%	100%
Actual	185	140 (76%)	100%			

Activity This Period

EMS agencies are now more likely to be send closed ePCRs directly to the database via a vendor web service. The collaboration of EMS agencies with their local software vendors is a challenge, as 80% of our EMS agencies are staffed on a volunteer basis.

Now that the legacy data from 2017 to 2019 (and any catch-up 2020 records) has been migrated to the new database system, follow-up reports have been run via the system's Report Writer to verify the number of reporting EMS agencies and record totals for each year.

There are FEWER local EMS agencies in 2020. We now can see data imported into the new system from 173 out of a possible 173 agencies.

Performance Area: Accuracy I-A-1

Summary of Deficiency: - CT_EMS/I_003- Errors in critical data elements

Measurement: % of EMS Patient Care Reports at NEMESIS with an overall data quality score of 90% or greater in seven categories, based on all NEMESIS version 3.4.0 data in V3 NEMESIS records for Connecticut. This includes years 2017, 2018 and 2019 and is limited to only the emergency 911 calls (not standby, transport, etc.)

	Benchmark	2019	2020	2021	2022	2023
Goal	90%	90%	90%	95%	95%	95%
Actual	Unknown	60%	75%			

Activity This Period

NEMESIS has many observations about quality criteria and most of our records trigger at least one violation. The suggestion by Image Trend is to work out a small second step Schematron of the ten most important criteria and attach them to "warning" level messages that allow data to be submitted, but raise a flag to the submitter, with a message. The next step is to let that sink in and send out information that the "warnings" are going to turn into "rejections". A new Schematron was uploaded to the NEMESIS website in May. Agencies will be notified in June to begin using the new Schematron.

As you can imagine, part of the difficulty is always to get this information read by the right people. An EMS chief may be the listed contact, but may not be the one who looks at emails, etc. Our contact lists are updated now, but that is always a moving

target. However, when the records start bouncing back, it is not something that should happen all at once but needs to be part of an iterative learning process.

Performance Area: Accuracy I-A-2

Summary of Deficiency: - CT_EMS/I_003- Quality scores for specific data areas

Measurement: Current quality measures of seven data areas from NEMSIS Tableau query of Connecticut data received as of July 2019. This includes years 2017, 2018 and 2019 and is limited to only the emergency 911 calls (not standby, transport, etc.)

Goal	Category of Measures	Score
90%	Overall	80%
	Patient Information	96%
	Cardiac Arrest	80%
	Valid System Times	85%
	Trauma center transports: Cause of Injury	69%
	Trauma center transports: Type of destination	83%
	Trauma center transports: Reason for choosing destination	82%
	Trauma center transports: Hospital designation	24%
	Clinical times for patients treated by EMS	81%
	Other Incident Information	66%

Activity This Period

The preceding section addresses the issue. Once the data are migrated and then pushed to NEMSIS, we will have a better idea of what is going on.

Performance Area: Completeness I-C-1

Summary of Deficiency: - CT_EMS/I_004 Missing Critical Data Elements

Measurement: % of EMS Patient Care Reports with no missing critical data elements

	Benchmark	2019 YTD	2020	2021	2022	2023
Goal	100%	100%	100%			
Actual		33%	33%			

Activity This Period

Please see preceding sections on transition to a new system, on importing and also migration of legacy data.

Performance Area: Consistency (Uniformity) I-U-1

Summary of Deficiency - CT_EMS/I_005 - Adopt the use of National Emergency Medical Services Information System Compliant (NEMSIS) data elements.

Measurement: Percent of records on the State EMS data file that are NEMSIS Compliant.

	Benchmark	2019	2020	2021	2022	2023
Goal	100%	90%	95%	95%	95%	95%
Actual	Unknown					

Activity This Period

Please see preceding sections on transition to a new system, on importing and also migration of legacy data.

Performance Area: Integration I-I-1

Summary of Deficiency - CT_EMS/I_006 - No data linkage to any other traffic records system.

Measurement: % of appropriate records in the EMS file that are linked to another system or file.

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

Activity This Period

OEMS has already exported the first NEMESIS v3.4.0 – based dataset of records with documentation of EMS naloxone administration to Yale University approved under research protocol #883.

There are other requests in the pipeline, but right now we cannot actually manipulate the data from 2017-2020. The older data reside in the department, but that is not accessible to me at this time.

Note that the Trauma Registry used to be a separate part of the old Digital Innovations, Inc. Data Collector. While EMS data is now with Image Trend Elite, Trauma Registry data was left with Digital Innovation, Inc. Digital Innovation Inc has been sold to another software company called ESO. I do not have access to their system or to the Trauma Registry data at this time.

Performance Area: **Accessibility I-X-1**

Summary of Deficiency – CT_EMS/I_007 - There is no access to the EMS file.

Measurement: Number of principal users with access to the EMS Run reports within HIPAA laws.

	Benchmark	2019	2020	2021	2022	2023
Goal						
Actual						

No Measurable Progress

We are beginning to export subsets of real data for the use of programming by one research partner in preparation for more complete analysis.

5.0 CONNECTICUT TRAFFIC RECORDS SYSTEM FY 2023 PROJECT PLAN

The Connecticut TRCC reviewed each system’s deficiencies and developed goals, objectives and projects to address the deficiencies as they relate to the goal of the traffic records system in the state.

The Connecticut Plan of Action addresses the traffic safety community needs for traffic safety information that is timely, accurate, complete, uniform, integrated, and accessible. The traffic safety community includes Department of Public Safety, State Police; Local Law Enforcement Agencies; Department of Transportation, Department of Public Health, Judiciary, Attorney General Office, Department of Motor Vehicles and Council of Regional Government.

5.1 PROJECTS SUMMARY SECTION 405 (C) FUNDING

The table below provides a summary for each of the projects that are being proposed for funding in FY 2023 under Section 405 (c) Grant". A summary description of each project is provided in this section of application.

Project Title	Performance Area	Baseline	Goal 2023	Funding Source	Funding Requirement
Electronic Citation Connecticut State Police	Timeliness Accuracy	0%	25%	405(c)	\$600,000.00
EMS & Trauma Registry Data Dictionary / Automated Edit Checks and Rule Validation for EMS Traffic Data	Uniformity	0%	75%	405(c)	\$150,000.00
Electronic Citation Processing System - Version 2 Integration with Online Disposition	Timeliness Accuracy Uniformity	57%	80%	405(c)	\$200,000.00
Electronic Citation Processing System - Online Dispositions	Integration Timeliness	74.4%	80%	405(c)	\$200,000.00
Traffic Records Administration					\$150,000.00
Total FY 2023 Budget					\$1,300,000.00

5.2 EMERGENCY MEDICAL SERVICE & TRAUMA SYSTEMS - DATA DICTIONARY/VALIDATION RULES FOR TRAFFIC DATA

New

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/2022
Submitted By: <i>Michael Zacchera</i>		Email: michael.zacchera@ct.gov

Article I. Deficiencies:

The legislation requires that States list their system deficiencies and how those deficiencies were determined:

Deficiency ID: (For ease of reference, provide each deficiency with an identifier of up to 10 characters - no spaces)

I-A-1 - CT_EMS/I_003

I-A-2 - CT_EMS/I_003

I-C-1 - CT_EMS/I_004

I-U_1 - CT_EMS/I_005

Deficiency Description: (This section contains a brief statement of the deficiency.)

- Lack of an EMS Data Dictionary
- Lack of a Trauma Registry Data Dictionary
- EMS software to be updated to v 3.5
- Lack of automated edit checks and rule validations of EMS data

Core System: (What core system is referred to by this deficiency? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area is referred to by this deficiency?
Check one)

-
- Accuracy
 - Completeness
 - Integration
 - Timeliness
 - Uniformity
 - Accessibility

Source of Deficiency: (How was the deficiency identified? i.e.: TR Assessment)

Deficiencies identified in TRCC NHTSA Traffic Records Assessment 2021

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Michael Zacchera</i>		Email: michael.zacchera@ct.gov

Article II. Performance Measures & Goals:

Legislation and the Federal Register call for States to identify performance measures and goals as a basis for demonstrating progress. You may use the following template to record your Performance Measures and Goals.

Measure ID: (For ease of reference, provide each performance measure / goal statement with an identifier of up to 10 characters - no spaces)

I-A-1 - CT_EMS/I_003

I-A-2 - CT_EMS/I_003

I-C-1 - CT_EMS/I_004

I-U_1 - CT_EMS/I_005

Core System: (What core system will be affected by this measure? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area will be affected by this measure? Check one)

- Accuracy
- Completeness
- Integration
- Timeliness
- Uniformity
- Accessibility

Direction: (What direction will the measure move to demonstrate a success? Check one)

- Increase

-
- Decrease

What Will Be Measured: (This section contains a brief statement of what will be measured.)

1. A formal EMS data dictionary
2. A formal Trauma Registry data dictionary
3. The activation of rule validation in the EMS software and completed educational sessions
4. EMS data is updated to NEMESIS software version 3.5

How Will It Be Measured: (This section contains a brief statement of how the measurement will be determined?)

Presence of a formal data dictionary for EMS data, and the Trauma Registry, EMS Software will be NEMESIS v. 3.5 compliant

Activation of rule validation by before and after reports on traffic data.

Goals by Year: (Provide annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

GOAL: Value as of: *Increase in Time Savings*

June 2018	0%
June 2019	0%
June 2020	0%
June 2021	0%
June 2022	0%

Status by Year: (When the State provides FINAL VALUES for this performance measure as part of their annual progress report, they may choose to add the following information. Annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

FINAL **(this year - prior year)**

Value as of	%	Change	%
June 2022	0%	Change from 2021	0%
June 2023	75%	Change from 2022	50%
June 2024	100%	Change from 2023	50%
June 2025		Change form 2024	
June 2026		Change from 2025	

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Michael Zacchera</i>		Email: michael.zacchera@ct.gov

Article III. Projects:

The following project description format is SUGGESTED, but not required for use by the State. This sample includes information on all projects that impact directly upon system deficiencies and, therefore, system level performance measures, or which will involve USDOT funding (FHWA, FMCSA or NHTSA), in whole or in part. Exceptions and comments are noted in italics.

Project ID: (For ease of reference, provide each Project with an identifier of up to 10 characters – no spaces)

- I-A-1 - CT_EMS/I_003
- I-A-2 - CT_EMS/I_003
- I-C-1 - CT_EMS/I_004
- I-U_1 - CT_EMS/I_005

Project Title: OEMS TRCC Project

Lead Agency: Department of Public Health, Office of Emergency Medical Services

Project Director / Primary Contact: (Person who is responsible for reporting Project Status.)

While not required, project director / contact information will assist the State Safety Data Coordinator in knowing who to contact for project progress information and will provide project-specific contact information for the NHTSA Safety Data Improvement Program Project Clearinghouse web site. Lacking a project-specific contact, the Clearinghouse will list the State Safety Data Coordinator as the Contact.

Name: Michael Zacchera
 Title: Regional EMS Coordinator
 Agency: Department of Public Health Office of Emergency Medical Services
 Court Address: 410 Capitol Avenue, MS # 12EMS
 City, ZIP: Hartford, CT 06134
 Phone: 860-509-7975
 Email: Michael.Zacchera@CT.gov

Partner Agencies: (Name of the Agencies that are partners with the Lead Agency in the implementation of the project.)

Partner agencies may not be relevant to most projects, but if included, this helps document that more than one agency is responsible for the implementation and ultimate success of the project.

Core System & Performance Area:

What Core System(s) and Performance Area(s) will be affected by this project?

Check All that Apply



Project Description: *(This section provides a brief overview of what the project will entail.)*

The Department of Public Health works closely with the Department of Transportation as part of the Transportation Records Coordinating Committee (TRCC).

In 2021 the Connecticut Department of Transportation completed a Traffic Records Assessment with the National Highway Traffic Safety Administration (NHTSA). A large amount of the records that were reviewed are held and maintained by the Department of Public Health (e.g., Vital Records, EMS & Trauma data). While the overall assessment was positive, there were significant recommendations for improvement in the category of Injury Surveillance.

Specifically, the lack of a Data Dictionary for both the EMS database and the Trauma Registry and the lack of a data validation process were identified. The data dictionaries provide a uniform method of reporting data. The validation processes allow us to be certain that the data we provide is consistent and correct.

The Department of Transportation has funding to support projects, and invited the Department of Public Health, Office of Emergency Medical Services to apply for funding.

Proposal

The Office of Emergency Medical Services proposes the following projects to improve the Traffic Records Coordinating Committee's next assessment.

- Creation of a formal EMS Data Dictionary.
- Creation of a formal Trauma Registry Data Dictionary
- The initiation of automated edit checks and rule validation for EMS traffic data
 - The education of EMS providers statewide on the implementation and importance of the edit checks and rule validation.
- Upgrade of the EMS data to v 3.5.

Basis for Project: *(Provide the deficiencies that will be addressed by this project. If you like, you can list the Deficiency ID's that are being addressed.)*

Deficiencies identified in TRCC NHTSA Assessment

- Questions 244, 248, 249, 250, 261, and 293.

Expected Impact: *(Indicate what impact you expect from this Project. This may be done by listing the Performance Measure ID's that are likely to be impacted by the Project.)*

Consistent and reliable information from EMS regarding traffic accidents

Project Priority: *(This section provides describes the classification of Project Priority. States may use any prioritization that they choose such as short, medium, and long range; low, medium high priority, or a specific rank order.)*

High

Projected Budget by Funding Source:

Ideally, States should provide funding source and projected budgets by year for any projects that directly impact system performance goals or draw upon USDOT funding sources. This will help establish future year funding estimates for the Section 405 (c) and other USDOT funded programs. (Show estimated thousands of dollars by Section 405 (c) grant year)

Funding Source	2022	2023	2024	2025
Section 405 (c)		\$150,000		

Project Milestones: *(This section lists the Milestones that will be used to show that the effort is on schedule.)*

Milestones are not required, but by providing them a state can establish a means of demonstrating that the project is on schedule.

Milestones	Projected Completion Date	Actual Completion Date
Data Dictionary	December 31, 2022	
Education of EMS Providers	March 1, 2023	
Activation of Rule Validation and Edit Checks	March 1, 2023	

(NOTE: When providing information for your annual progress report the State may add another column that is the "Actual Completion Date" and fill in those values for milestones that have been completed.)

Project Status: *(This section provides a basic category for the status of the project as of the submission date.)*

- Unknown** (Status not currently assigned)
- Proposed** (Project is proposed but has not been funded and / or approved)
- Planned** (Project is approved, but has not yet started)
- Start-Up** (Project is in organizational or administrative start-up - e.g., waiting for staffing)
- Active** (Project is under way)
- Completed** (Project has been completed)

-
- Cancelled** (Project was cancelled)
 - On Hold** (Project is temporarily on hold)
 - Postponed** (Project has been postponed, or tabled at this time)

5.3 STATE POLICE ADMINISTRATIVE POLICE VEHICLE (EXPANSION OF CRASH & ECITATION)

Agency: <i>State Police</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Sgt. Kevin Gridley</i>	Email: Kevin.Gridley@ct.gov	

Article I. Deficiencies:

The legislation requires that States list their system deficiencies and how those deficiencies were determined:

Deficiency ID: (For ease of reference, provide each deficiency with an identifier of up to 10 characters - no spaces)

C-T-1 - CT_CR_001

C-A -1- CT_CR_002

C-C-1 - CT_CR_003

C/A-T-1 CT_C/A_001

Deficiency Description: (This section contains a brief statement of the deficiency.)

Most police vehicles utilized by the Connecticut State Police, other than those designated as primary patrol vehicles, are not equipped with hardware and software that would allow for electronic reporting of citations and automatic upload of driver/registration information to use on traffic crash forms.

Core System: (What core system is referred to by this deficiency? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area is referred to by this deficiency? Check one)

-
- Accuracy
 - Completeness
 - Integration
 - Timeliness
 - Uniformity
 - Accessibility

Source of Deficiency: (How was the deficiency identified? i.e.: TR Assessment)

2021 Connecticut Traffic Records Assessment

Agency: <i>State Police</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Sgt. Kevin Gridley</i>		Email: Kevin.Gridley@ct.gov

Article II. Performance Measures & Goals:

Legislation and the Federal Register call for States to identify performance measures and goals as a basis for demonstrating progress. You may use the following template to record your Performance Measures and Goals.

Measure ID: (For ease of reference, provide each performance measure / goal statement with an identifier of up to 10 characters - no spaces)

C-T-1 - CT_CR_001

C-A -1- CT_CR_002

C-C-1 - CT_CR_003

C/A-T-1 CT_C/A_001

Core System: (What core system will be affected by this measure? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area will be affected by this measure? Check one)

- Accuracy
- Completeness
- Integration
- Timeliness
- Uniformity
- Accessibility

Direction: (What direction will the measure move to demonstrate a success? Check one)

- Increase
- Decrease

What Will Be Measured: (This section contains a brief statement of what will be measured.)

- Time required for issuing and transmitting citation to the state’s Centralized Infraction Bureau
- Completeness and accuracy of citation data
- Number of state police vehicles that are equipped with electronic citation hardware/ software capabilities

How Will It Be Measured: (This section contains a brief statement of how the measurement will be determined?)

- Time measured in the number of days in which a handwritten, hard copy citation is received at the Centralized Infractions Bureau vs. the number of days for an electronically generated citation to be received at Centralized Infractions Bureau.
- Increase in number of vehicles equipped with electronic citation capability.

Goals by Year: (Provide annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

GOAL: Value as of:

Increase in Time Savings

June 2022	0%
June 2023	25%
June 2024	75%
June 2025	75%
June 2026	75%

Status by Year: (When the State provides FINAL VALUES for this performance measure as part of their annual progress report, they may choose to add the following information. Annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

FINAL

(this year - prior year)

Value as of	%	Change	%
June 2022	00%	Change from 2021	0%
June 2023	25%	Change from 2022	25%
June 2024	75%	Change from 2023	50%
June 2025	75%	Change from 2024	0%
June 2026	75%	Change from 2026	0%

Agency: <i>State Police</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Sgt. Kevin Gridley</i>		Email: Kevin.Gridley@ct.gov

Article III. Projects:

The following project description format is SUGGESTED, but not required for use by the State. This sample includes information on all projects that impact directly upon system deficiencies and, therefore, system level performance measures, or which will involve USDOT funding (FHWA, FMCSA or NHTSA), in whole or in part. Exceptions and comments are noted in italics.

Project ID: (For ease of reference, provide each Project with an identifier of up to 10 characters – no spaces)

C-T-1 - CT_CR_001

C-A -1- CT_CR_002

C-C-1 - CT_CR_003

C/A-T-1 CT_C/A_001

Project Title: Connecticut State Police Administrative Police Vehicle connectivity

Lead Agency: State Police

Project Director / Primary Contact: (Person who is responsible for reporting Project Status.)

While not required, project director / contact information will assist the State Safety Data Coordinator in knowing who to contact for project progress information and will provide project-specific contact information for the NHTSA Safety Data Improvement Program Project Clearinghouse web site. Lacking a project-specific contact, the Clearinghouse will list the State Safety Data Coordinator as the Contact.

Name: Kevin Gridley

Title: Sergeant

Agency: Department of Emergency Services and Public Protection, Division of State Police

Court Address: 111 Country Club Rd.,

City, ZIP: Middletown, CT 06457

Phone: 860-263-2752

Email: Kevin.Gridley@ct.gov

Partner Agencies: (Name of the Agencies that are partners with the Lead Agency in the implementation of the project.)

Partner agencies may not be relevant to most projects, but if included, this helps document that more than one agency is responsible for the implementation and ultimate success of the project.

- Connecticut Department of Transportation
- Traffic Records Coordinating Committee (TRCC)

Core System & Performance Area:

What Core System(s) and Performance Area(s) will be affected by this project?

Check All that Apply

Project Description: *(This section provides a brief overview of what the project will entail.)*

The Connecticut State Police (CSP) is seeking to expand the number of police vehicles in its fleet which are equipped and/or capable of transmitting and receiving data pertinent to areas such as e-citation and crash data. Currently, only vehicles designated primarily for patrol use are fully equipped with computers, e-citation printers and the associated modems, routers, and other related secure infrastructure to handle mobile computing. CSP has approximately 150 non-patrol vehicles assigned to troopers for daily use that lack any connectivity or access to the department's Computer Aided Dispatch (CAD), which is the gateway for access to querying driver/registration data and the e-citation and crash platforms. Accordingly, any citations written by a trooper in one of these vehicles is done on a paper citation form. These paper citations often take up to 2 weeks to be received at

the Judicial Branch’s Centralized Infractions Bureau. The issuing trooper needs to report into a duty station to drop the citation off, once it is at the duty station, it might take a few business days for the citation to be placed on a transmittal report to prepare it for Judicial. The duty station then needs to assign a sworn person to relay the citation and transmittal to the single physical location in the state, where it can ultimately be processed by Judicial staff.

The intent of the proposed project is to deploy custom electronic solutions that are catered to the type of vehicle and available secure infrastructure necessary and available based on the need, including but not limited to:

- Mobility software licenses
- CAD Application licenses
- Bluetooth or similarly enabled e-citation printer, along with corresponding connectivity peripherals
- Vehicle modems and antennas along with cellular data plans
- Ruggedized tablets and associated mounting equipment
- Barcode scanning capable devices (or app enhancements to existing issued mobile devices)
- Portable kit solutions that can be transported from one non-patrol vehicle to the next
- Associated labor and installation costs for additional new vehicle upfitting / existing vehicle retrofitting costs

Depending on the configuration that is best suited for the vehicle application, initial costs may vary from \$1,250 per vehicle for just an e-citation printer installation to over \$4,000 per vehicle is the installation also includes a tablet solution, vehicle modem and corresponding license fees. The license fees will be incurred each year the equipment is in use in the vehicle.

In addition to the initial focus on ensuring a workable solution depending on the vehicle platform, priority will be given to those vehicles that are utilized by those troopers most closely associated/exposed to patrol work (Troop commanders and other personnel frequently involved in traffic enforcement and initial response at crash scenes).

Note: New vehicle upfits in year 1 may be limited due to timing delays in state’s vehicle ordering budget process and current extended lead times in receiving new vehicle orders.

Basis for Project: *(Provide the deficiencies that will be addressed by this project. If you like, you can list the Deficiency ID’s that are being addressed.)*

Expand access to mobile CAD ecosystem amongst non-patrol vehicles and provide a secure communication link to allow the querying of driver/registration data in the field, as

well as the creation and issuance of e-citations, along with data import at traffic crash scenes, for later completion of MMUCC crash reports.

Expected Impact: *(Indicate what impact you expect from this Project. This may be done by listing the Performance Measure ID's that are likely to be impacted by the Project.)*

Equip a greater number of non-patrol vehicles with mobile CAD access, which will allow for a greater number of citations to be issued electronically, thereby reducing time required for the issuance and transmission of the citation, as well as allowing more accurate driver, passenger, and registration data to be passed electronically into both the e-citation and crash reporting platforms.

Project Priority: *(This section provides describes the classification of Project Priority. States may use any prioritization that they choose such as short, medium, and long range; low, medium high priority, or a specific rank order.)*

High

Projected Budget by Funding Source:

Ideally, States should provide funding source and projected budgets by year for any projects that directly impact system performance goals or draw upon USDOT funding sources. This will help establish future year funding estimates for the Section 405 (c) and other USDOT funded programs. (Show estimated thousands of dollars by Section 405 (c) grant year)

Funding Source	2021	2022	2023	2024
Section 405 (c)		\$	\$600,000.00	\$

Project Milestones: *(This section lists the Milestones that will be used to show that the effort is on schedule.)*

Milestones are not required, but by providing them a state can establish a means of demonstrating that the project is on schedule.

Milestones	Projected Completion Date	Actual Completion Date
Equipment Specification		
Equipment Procurement		
Vehicle Configuration & Equipment Installation		
System Testing		
Training		
Deployment		

(NOTE: When providing information for your annual progress report the State may add another column that is the "Actual Completion Date" and fill in those values for milestones that have been completed.)

Project Status: *(This section provides a basic category for the status of the project as of the submission date.)*

- Unknown** (Status not currently assigned)
- Proposed** (Project is proposed but has not been funded and / or approved)
- Planned** (Project is approved, but has not yet started)
- Start-Up** (Project is in organizational or administrative start-up - e.g., waiting for staffing)
- Active** (Project is under way)
- Completed** (Project has been completed)
- Cancelled** (Project was cancelled)
- On Hold** (Project is temporarily on hold)
- Postponed** (Project has been postponed, or tabled at this time)

5.4 ECITATION PROCESSING SYSTEM - VERSION 2 INTEGRATION WITH ON-LINE DISPOSITION

On-Going

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Stacey Manware</i>		Email: Stacey.Manware@jud.ct.gov

Article I. Deficiencies:

The legislation requires that States list their system deficiencies and how those deficiencies were determined:

Deficiency ID: (For ease of reference, provide each deficiency with an identifier of up to 10 characters - no spaces) C/A-T-1 - CT_C/A_001/C/A_002

C/A-I-1 - CT_C/A_006

C/A-A-1 - CT_C/A_003

Deficiency Description: (This section contains a brief statement of the deficiency.)

- Improve the procedures/process flows for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Core System: (What core system is referred to by this deficiency? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area is referred to by this deficiency? Check one)

- Accuracy
- Completeness
- Integration
- Timeliness

-
- Uniformity
 - Accessibility

Source of Deficiency: (How was the deficiency identified? i.e.: TR Assessment)

A Traffic Records Assessment dated December 10, 2021, and NTHSA Go Team evaluation.

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Stacey Manware</i>		Email: Stacey.Manware@jud.ct.gov

Article II. Performance Measures & Goals:

Legislation and the Federal Register call for States to identify performance measures and goals as a basis for demonstrating progress. You may use the following template to record your Performance Measures and Goals.

Measure ID: (For ease of reference, provide each performance measure / goal statement with an identifier of up to 10 characters - no spaces)

C/A-T-1 - CT_C/A_001/C/A_002

C/A-I-1 - CT_C/A_006

C/A-A-1 - CT_C/A_003

Core System: (What core system will be affected by this measure? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area will be affected by this measure? Check one)

- Accuracy
- Completeness
- Integration
- Timeliness
- Uniformity
- Accessibility

Direction: (What direction will the measure move to demonstrate a success? Check one)

- Increase

- Decrease

What Will Be Measured: (This section contains a brief statement of what will be measured.)

1. Time required for issuing and transmitting citation to the state centralized database.
2. Completeness and accuracy of citation data.
3. Time required for disseminating citation reports to qualified requestors.
4. Time required for disposition and updating Driver History File.
5. Completeness and accuracy of Citation data.
6. Integration of Citation/ Adjudication and Disposition data with Driver History File.

How Will It Be Measured: (This section contains a brief statement of how the measurement will be determined?)

1. Timeliness - Time periods from citation issuance to disposition and update of Driver History File. This can often be measured in days on the current Online Adjudication System.
2. Completeness and accuracy of Citation data.
3. Integration criminal data with traffic data for developing countermeasures.
4. Interface to Driver and Vehicle Data.

Goals by Year: (Provide annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

GOAL: Value as of:

Increase in Time Savings

June 2017	0%
June 2018	50%
June 2019	80%
June 2020	80%
June 2021	80%
June 2022	80%

Status by Year: (When the State provides FINAL VALUES for this performance measure as part of their annual progress report, they may choose to add the following information. Annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

FINAL	(this year - prior year)		
Value as of	%	Change	%
June 2017	00%	Change from 2016	0%
June 2018	50%	Change from 2017	50%
June 2019	80%	Change from 2018	30%
June 2020	80%	Change from 2019	0%
June 2021	80%	Change from 2020	0%
June 2022	80%	Change from 2021	0%

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Stacey Manware</i>		Email: Stacey.Manware@jud.ct.gov

Article III. Projects:

The following project description format is SUGGESTED, but not required for use by the State. This sample includes information on all projects that impact directly upon system deficiencies and, therefore, system level performance measures, or which will involve USDOT funding (FHWA, FMCSA or NHTSA), in whole or in part. Exceptions and comments are noted in italics.

Project ID: (For ease of reference, provide each Project with an identifier of up to 10 characters – no spaces) C/A-T-1 - CT_C/A_001/C/A_002

C/A-I-1 - CT_C/A_006

C/A-A-1 - CT_C/A_003

Project Title: ECitation Processing System – Version 2 Integration with Online Disposition

Lead Agency: Superior Court

Project Director / Primary Contact: (Person who is responsible for reporting Project Status.)

While not required, project director / contact information will assist the State Safety Data Coordinator in knowing who to contact for project progress information and will provide project-specific contact information for the NHTSA Safety Data Improvement Program Project Clearinghouse web site. Lacking a project-specific contact, the Clearinghouse will list the State Safety Data Coordinator as the Contact.

Name: Stacey Manware
 Title: Deputy Director
 Agency: Superior
 Court Address: 225 Spring Street
 City, ZIP: Wethersfield, CT 06109
 Phone: 860-263-2752
 Email: Stacey.Manware@jud.ct.gov

Partner Agencies: (Name of the Agencies that are partners with the Lead Agency in the implementation of the project.)

Partner agencies may not be relevant to most projects, but if included, this helps document that more than one agency is responsible for the implementation and ultimate success of the project.

- Connecticut Police Chief’s Association (CPCA)
- State and Local Law Enforcement Agencies
- Connecticut Department of Transportation
- Traffic Records Coordinating Committee (TRCC)

Core System & Performance Area:

What Core System(s) and Performance Area(s) will be affected by this project?

Check All that Apply

Performance Area Core System	Accuracy	Completeness	Integration	Timeliness	Uniformity	Accessibility
Crash	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Driver License / History	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Injury Surveillance / EMS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roadway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citation / Adjudication	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle Registration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Project Description: *(This section provides a brief overview of what the project will entail.)*

Building on the fiscal year 2022 grant accomplishments and information gleaned through the 2021 “Electronic Citation Processing System – Outreach to Police Departments” the Connecticut Judicial Branch will continue to implement action plans to bring all departments to 100% compliance with electronic citation.

- Validate new vendor schema and provide support for transition to ecitation
- Troubleshoot existing agency issues
- Continued outreach to law enforcement agencies re: submission of subsequent documentation through ecitation to online disposition

In conjunction with the Highway Safety Office, utilize reports developed during the 2020 grant year to assess departments with citation, not producing citations electronically 100% of the time.

- Identify equipment or funding issues

Basis for Project: *(Provide the deficiencies that will be addressed by this project. If you like, you can list the Deficiency ID's that are being addressed.)*

- Improve the procedures/process flows for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Expected Impact: *(Indicate what impact you expect from this Project. This may be done by listing the Performance Measure ID's that are likely to be impacted by the Project.)*

- C/A-T-1 - CT_C/A_001/C/A_002
- C/A-I-1 - CT_C/A_006
- C/A-A-1 - CT_C/A_003

Project Priority: *(This section provides describes the classification of Project Priority. States may use any prioritization that they choose such as short, medium, and long range; low, medium high priority, or a specific rank order.)*

High

Projected Budget by Funding Source:

Ideally, States should provide funding source and projected budgets by year for any projects that directly impact system performance goals or draw upon USDOT funding sources. This will help establish future year funding estimates for the Section 405 (c) and other USDOT funded programs. (Show estimated thousands of dollars by Section 405 (c) grant year)

Funding Source	2020	2021	2022	2023
Section 405 (c)	\$174,840.00	\$180,000.00	\$190,000.00	\$200,000.00

Project Milestones: *(This section lists the Milestones that will be used to show that the effort is on schedule.)*

Milestones are not required, but by providing them a state can establish a means of demonstrating that the project is on schedule.

Milestones	Projected Completion Date	Actual Completion Date
Police Department Outreach	On-going	
Electronic Citation Deployment	On-going	
ECitation Enhancements	On-Going	

(NOTE: When providing information for your annual progress report the State may add another column that is the "Actual Completion Date" and fill in those values for milestones that have been completed.)

Project Status: *(This section provides a basic category for the status of the project as of the submission date.)*

- Unknown** (Status not currently assigned)
- Proposed** (Project is proposed but has not been funded and / or approved)
- Planned** (Project is approved, but has not yet started)
- Start-Up** (Project is in organizational or administrative start-up - e.g., waiting for staffing)
- Active** (Project is under way)
- Completed** (Project has been completed)
- Cancelled** (Project was cancelled)
- On Hold** (Project is temporarily on hold)
- Postponed** (Project has been postponed, or tabled at this time)

5.5 ELECTRONIC CITATION PROCESSING SYSTEM - ONLINE DISPOSITIONS

On Going

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/22
Submitted By: <i>Stacey Manware</i>	Email: Stacey.Manware@jud.ct.gov	

Article I. Deficiencies:

The legislation requires that States list their system deficiencies and how those deficiencies were determined:

Deficiency ID: **(For ease of reference, provide each deficiency with an identifier of up to 10 characters - no spaces)**

C/A-T-1 - CT_C/A_001/C/A_002

C/A-I-1 - CT_C/A_006

C/A-A-1 - CT_C/A_003

Deficiency Description: **(This section contains a brief statement of the deficiency.)**

- Improve the procedures/process flows for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Core System: **(What core system is referred to by this deficiency? Check One)**

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: **(What performance area is referred to by this deficiency? Check one)**

-
- Accuracy
 - Completeness
 - Integration
 - Timeliness
 - Uniformity
 - Accessibility

Source of Deficiency: (How was the deficiency identified? i.e.: TR Assessment, FMCSA Data Quality Audit, and TRCC Input)

Traffic Records Assessment dated December 10, 2021, and NTHSA Go Team evaluation.

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/2022
Submitted By: <i>Stacey Manware</i>		Email: Stacey.Manware@jud.ct.gov

Article II. Performance Measures & Goals:

Legislation and the Federal Register call for States to identify performance measures and goals as a basis for demonstrating progress. You may use the following template to record your Performance Measures and Goals.

Measure ID: (For ease of reference, provide each performance measure / goal statement with an identifier of up to 10 characters - no spaces)

C/A-T-1 - CT_C/A_001/C/A_002

C/A-I-1 - CT_C/A_006

C/A-A-1 - CT_C/A_003

Core System: (What core system will be affected by this measure? Check One)

- Crash
- Driver License / History
- Injury Surveillance / EMS
- Roadway
- Citation / Adjudication
- Vehicle Registration

Performance Area: (What performance area will be affected by this measure? Check one)

- Accuracy
- Completeness
- Integration
- Timeliness
- Uniformity
- Accessibility

Direction: (What direction will the measure move to demonstrate a success? Check one)

- Increase

-
- Decrease

What Will Be Measured: (This section contains a brief statement of what will be measured.)

1. Time required for disposition and updating Driver History File.
2. Completeness and accuracy of Citation data.
3. Integration of Citation/ Adjudication and Disposition data with Driver History File.

How Will It Be Measured: (This section contains a brief statement of how the measurement will be determined?)

1. Timeliness - Time periods from citation issuance to disposition and update of Driver History File. This can often be measured in days on the current Online Adjudication System.
2. Completeness and accuracy of Citation data.
3. Integration criminal data with traffic data for developing countermeasures.
4. Interface to Driver and Vehicle Data.
5. Public Accessibility for adjudication process.

Goals by Year: (Provide annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

GOAL: Value as of:***Increase in Time Savings***

June 2017	0%
June 2018	5%
June 2019	15%
June 2020	20%
June 2021	30%
June 2022	40%

Status by Year: (When the State provides FINAL VALUES for this performance measure as part of their annual progress report, they may choose to add the following information. Annual values for the baseline and goal levels of the measure for each program year, in terms of its value in June of the given year.)

FINAL (this year - prior year)

Value as of	%	Change	%
June 2017	0%	Change from 2016	0%
June 2018	0%	Change from 2017	5%
June 2019	50%	Change from 2018	50%
June 2020	60%	Change from 2019	10%
June 2021	60%	Change from 2020	0%
June 2022	%	Change from 2021	10%

Agency: <i>Judiciary</i>	Plan Year: 2023	Revision Date: 06/16/2022
Submitted By: <i>Stacey Manware</i>		Email: Stacey.Manware@jud.ct.gov

Article III. Projects:

The following project description format is SUGGESTED, but not required for use by the State. This sample includes information on all projects that impact directly upon system deficiencies and, therefore, system level performance measures, or which will involve USDOT funding (FHWA, FMCSA or NHTSA), in whole or in part. Exceptions and comments are noted in italics.

Project ID: (For ease of reference, provide each Project with an identifier of up to 10 characters - no spaces) C/A-T-1 - CT_C/A_001/C/A_002

C/A-I-1 - CT_C/A_006

C/A-A-1 - CT_C/A_003

Project Title: Electronic Citation Processing System - Online Disposition

Lead Agency: Superior Court

Project Director / Primary Contact: (Person who is responsible for reporting Project Status.)

While not required, project director / contact information will assist the State Safety Data Coordinator in knowing who to contact for project progress information and will provide project-specific contact information for the NHTSA Safety Data Improvement Program Project Clearinghouse web site. Lacking a project-specific contact, the Clearinghouse will list the State Safety Data Coordinator as the Contact.

Name: Stacey Manware
 Title: Deputy Director
 Agency: Superior Court
 Address: 225 Spring Street
 City, ZIP: Wethersfield, CT 06109
 Phone: 860-263-2752
 Email: Stacey.Manware@jud.ct.gov

Partner agencies may not be relevant to most projects, but if included, this helps document that more than one agency is responsible for the implementation and ultimate success of the project.

- Connecticut Police Chief’s Association (CPCA)
- State and Local Law Enforcement Agencies
- Connecticut Department of Transportation
- Traffic Records Coordinating Committee (TRCC)

Core System & Performance Area:

What Core System(s) and Performance Area(s) will be affected by this project?

Check All that Apply

Core System \ Performance Area	Accuracy	Completeness	Integration	Timeliness	Uniformity	Accessibility
Crash	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Driver License / History	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Injury Surveillance / EMS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roadway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citation / Adjudication	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle Registration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Project Description: *(This section provides a brief overview of what the project will entail.)*

Due to lack of staff availability during the 20/21 grant year, the Judicial Branch did not apply for or receive grant funding under this initiative, although plans to do so were included in the 2020 Highway Safety Plan. The Judicial Branch will therefore accomplish the following during the 2021/2022 grant year.

Building on the fiscal year 2019 grant accomplishments, the Connecticut Judicial Branch Proposes to improve the On-Line Disposition Program by:

- Make improvements to the Online Disposition System to allow improved functioning and communication by upgrading the underlying programming to MVC.
 - Include separation of concerns (loosely coupled) which helps unit testing easy and better maintenance
 - Enable clerks to message the prosecutor concerning pertinent information
 - Enable the public to update email addresses
 - Improve system performance
- Collaborate with the Highway Safety Office and Traffic Records Coordinating Committee Safety Partners to develop and implement additional alternatives at disposition for National, State and Regional Safety Campaigns, e.g., Click It or Ticket and Child Safety Seats
- Analyze current disposition trends and statistics and document opportunities for improvement
- Complete programming for entirely paperless electronic process

Basis for Project: *(Provide the deficiencies that will be addressed by this project If you like, you can list the Deficiency ID's that are being addressed.)*

A Traffic Records Assessment dated December 10, 2021, and NTHSA Go Team evaluation.

Expected Impact: *(Indicate what impact you expect from this Project. This may be done by listing the Performance Measure ID's that are likely to be impacted by the Project.)*

Timely adjudication and disposition of traffic violations and update of Driver History File.

Project Priority: *(This section provides describes the classification of Project Priority. States may use any prioritization that they choose such as short, medium, and long range; low, medium high priority, or a specific rank order.)*

High

Projected Budget by Funding Source:

Ideally, States should provide funding source and projected budgets by year for any projects that directly impact system performance goals or draw upon USDOT funding sources. This will help establish future year funding estimates for the Section 405 (c) and other USDOT funded programs. (Show estimated thousands of dollars by Section 405 (c) grant year.)

Funding Source	2020	2021	2022	2023
Section 405 (c)	\$187,000.00	\$200,000.00	\$200,000.00	\$200,000.00

Project Milestones: *(This section lists the Milestones that will be used to show that the effort is on schedule.)*

Milestones	Projected Completion Date	Actual Completion Date
System Analysis	On Going	
System Enhancements	On Going	

(NOTE: When providing information for your annual progress report the State may add another column that is the “Actual Completion Date” and fill in those values for milestones that have been completed.)

Project Status: *(This section provides a basic category for the status of the project as of the submission date.)*

- Unknown (Status not currently assigned)
- Proposed (Project is proposed but has not been funded and / or approved)
- Planned (Project is approved, but has not yet started)
- Start-Up (Project is in organizational or administrative start-up – e.g., waiting for staffing)
- Active (Project is under way)
- Completed (Project has been completed)
- Cancelled (Project was cancelled)
- On Hold (Project is temporarily on hold)
- Postponed (Project has been postponed, or tabled at this time)

6.0 TRAFFIC RECORDS RECOMMENDATION NOT ADDRESSED IN FY 2023

Vehicle Recommendations _ under the department review

- Improve the data quality control for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

The vehicle system data quality control is under review and once completed the DMV will ensure that it provides quality control where applicable, provides matching edit checks and data collection guidelines. Procedures for collection, reporting, and posting of registration, title, and title brand information will be formally documented. The data dictionary will be accessible to all users and updated regularly to reflect changes to the system.

The Vehicle system will adhere to the American Association of Motor Vehicle Administrators (AAMVA) standard and guidelines and reflects best practices identified in the Traffic Records Program Assessment Advisory.

- Improve the Interfaces with the Vehicle data system to reflects best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

The vehicle system is under review with plan improvements to include interface with other Traffic Records System.

- Improve the procedures/process flows for the Vehicle data system to reflects best practices identified in the Traffic Records Program Assessment Advisory

Plan of Action

Upon completion of the system review DMV will ensure the system procedures/process flow reflects best practices identified in the Traffic Records Program Assessment Advisory

Driver Recommendations _ under the department review

- Improve the data dictionary for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The Driver Licensing system will be well documented. Each data field will have an established definition and validated values—including appropriate null codes. All applicable edit checks and data collection guidelines will match the data definitions. The data dictionary will be maintained and updated to keep pace with system, legislative, and other changes.

Driver data system will reflect best practices as identified in the Traffic Records Program Assessment Advisory

- Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Plan of Action

The system will have a formal data quality management program's review protocols that covers the entire process—the collection, submission, processing, posting, and maintenance of driver data.

An automated edit checks and validation rules will be implemented to ensure entered data falls within the range of acceptable values and is logically consistent between other fields. Edit checks will be applied when data is added to the record. The system will have a Performance measures program that will be tailored to the needs of data managers and address the concerns of all stakeholders.

The Driver system will reflect best practices identified in the Traffic Records Program Assessment Advisory

ⁱ Extracted from CAS2 Database – CTDOT