Federal Fiscal Year 2026
Strategic Plan for Traffic Records Improvements

Prepared for:

National Highway Traffic Safety Administration,
U.S. Department of Transportation

Completed by:

Executive Office of Public Safety and Security's Office of Grants and Research in conjunction with the Massachusetts Traffic Records Coordinating Committees

Initially Completed: July 2, 2025
Revision #1 completed 2/6/26 following submission of FFY25 Annual Report
Revision #2 completed 2/20/26 following retirement of the CDS's ETRCC rep

Table of Contents

1.0 BACKGROUND

1.1 Introduction

This FFY 2026 update to the Commonwealth of Massachusetts' Strategic Plan for Traffic Records Improvements was developed by the Massachusetts Executive Office of Public Safety and Security's (EOPSS) Office of Grants and Research (OGR), with support from the Commonwealth's Executive-level and Working-level Traffic Records Coordinating Committees (ETRCC and WTRCC).

The purpose of this document is to provide traffic records stakeholders in the Commonwealth with a strategic plan for improvements of core traffic records systems. The plan relies notably on recommendations identified through the 2023 Massachusetts Traffic Records Self-Assessment.

The ETRCC voted to approve this FFY 2026 plan update on 7/1/25, empowering OGR to make any remaining minor edits before the expected completion in mid-July 2025 ahead of the 8/1/26 due date for the Annual Grant Application to NHTSA.

A TRCC is a statewide stakeholder forum to primarily facilitate the selection, implementation, and evaluation of projects to improve a state's core traffic records systems. The Massachusetts TRCC has representatives from the highway safety, transportation, law enforcement, criminal justice, and public health professions. The TRCCs, with this plan as a guide, strive to improve the accessibility, accuracy, completeness, integration, timeliness, and uniformity of the systems listed below. It is expected this will lead to better problem identification and countermeasure selection, program implementation, and program evaluation by the above-mentioned professions in Massachusetts.

The Secretary of Public Safety and Security oversees OGR, which is the lead entity in the Commonwealth for the application for and administration of federal highway safety funding from the National Highway Traffic Safety Administration (NHTSA), including those funds for traffic records improvement. In this role, the Secretary serves as the Governor's Representative for Highway Safety.

The **ETRCC Chair** is Kerry Collins, the Undersecretary of Forensic Science and Technology for EOPSS.

The **WTRCC Chair** is Bob Smith, OGR's Highway Safety Division Manager, who also serves as vice chair of the ETRCC.

The **State Traffic Records Coordinator**, John Fabiano, is a Senior Program Manager at OGR.

TRCC purposes and responsibilities, and charters are described in Section 1.2 and 1.3.

The Commonwealth's core traffic records systems are comprised of the following systems that are accessible to varying degrees to highway safety professionals, related disciplines, and the public:

Crash Data System

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Driver License/History Data System

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Emergency Medical Services / Injury Surveillance Data System

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Roadway Data System

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Citation/Adjudication Data System

Sonja Singleton
Director of Merit Rating Board
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Vehicle Registration Data System
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Assistant Registrar of Vehicle Services - Titles Administration
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1.2 Role of the Executive-Level TRCC

The ETRCC provides a forum for senior decision-makers to ensure optimum communication and coordination occurs between collectors, custodians, and users of data involved with the Commonwealth's traffic records systems. The ETRCC receives technical assistance from the WTRCC.

The ETRCC's organization, mission, vision, purpose, governance, and membership are enumerated in the ETRCC Charter below. The full ETRCC membership list, provided to members prior to a spring ETRCC meeting, and any updates confirmed at that meeting, are incorporated by reference into this plan.

Commonwealth of Massachusetts

Executive-Level Traffic Records Coordinating Committee

FFY 2026 Charter

ORGANIZATION

By recommendation of the National Highway Traffic Safety Administration (NHTSA) and the Commonwealth of Massachusetts' strategic planning activities, the Executive Office of Public Safety and Security (EOPSS) convened the first meeting of its Massachusetts Executive-Level Traffic Records Coordinating Committee (ETRCC) on January 22, 2010. A NHTSA Traffic Records Assessment for Massachusetts, which took place March 2009, recommended the Commonwealth "establish the Executive-Level of the Traffic Records Coordinating Committee (ETRCC) to ensure full support and authorization of the TRCC and its members by the executives of all agencies in whose area of responsibility the components of the traffic records system fall." To that end, EOPSS invited owners of the core traffic records systems and a small representative sample of data consumers and collectors (see below) to join the ETRCC. Broader stakeholder participation remains with the Working-level TRCC (WTRCC). In Massachusetts, the ETRCC and WTRCC share the same mission and vision.

MISSION

Through the coordinated efforts of its member organizations, provide a forum for the creation, implementation, management, and dissemination of accessible, accurate, complete, integrated, timely, and useful traffic records data to aid decision-makers working to reduce transportation-related fatalities, injuries, and economic losses in Massachusetts.

VISION

Save lives and reduce injuries on Massachusetts roadways by using efficient processes to collect, store, and analyze complete and accurate traffic safety information and make it freely available to all safety stakeholders.

PURPOSE

Ensure that accurate, complete, and timely traffic safety data is collected, integrated, analyzed, and made available for decision making by ETRCC member organizations and other public and private professionals. In alignment with requirements of NHTSA grant funding (23 CFR 1300.22), key functions of the ETRCC will include, but not be limited to:

1. Maintain authority to review any of the Commonwealth's highway safety data and traffic records systems and any changes to such systems before the changes are implemented;

2. Provide a forum for the discussion of highway safety data and traffic records issues and report on any such issues to the agencies and the organizations in the Commonwealth that create, maintain, and use highway safety data and traffic records;

3. Consider and coordinate the views of organizations in the Commonwealth that are involved in the collection, administration, and use of highway safety data and traffic records systems, and represent those views to outside organizations;

4. Represent the interests of the ETRCC and the WTRCC to outside organizations;

5. Review and evaluate new technologies to keep the highway safety data and traffic records systems up to date;

6. Assist ETRCC and WTRCC members applying for public and private funds to support and improve traffic records;

7. Assure the Commonwealth's Strategic Plan for Traffic Records Improvement incorporates IT strategies and business plans and documents all sources of funding for data improvement projects in the plan;

8. Approve the Commonwealth's annual Section 405c application, including projects supported by this funding source, submitted by EOPSS's Office of Grants and Research (OGR) to NHTSA;

9. Review and provide input on other federal traffic records funding received by EOPSS/OGR; and

10. Approve annually the membership of the ETRCC and the WTRCC, the TRCC coordinator, updates based on Section 405 guidance to the Commonwealth's Strategic Plan for Traffic Records Improvement, and

performance measures to be used to demonstrate quantitative progress in the accuracy, completeness, timeliness, uniformity, accessibility, or integration of at least one core highway safety database.

Notwithstanding the above, the ETRCC recognizes:

- The responsibility of its member agencies to work collaboratively to achieve the statewide vision for traffic safety information systems;
- The responsibility of its member agencies to manage their own safety information systems to accomplish their mission by improving internal business processes;
- The need to create a collective sense of responsibility among its member agencies for developing and sharing safety data in support of the Commonwealth's highway safety mission in a manner that minimizes cost, duplication of effort, and inefficiencies;
- The need to ensure regular communication with the Commonwealth's WTRCC regarding the issues they face;
- The importance of member agencies engaging in open communication to maximize the effectiveness, compatibility, and interoperability of any federally funded projects in conjunction with the Strategic Plan for Traffic Records Improvements and will facilitate compliance with all federal reporting requirements.

GOVERNANCE OF THE ETRCC

The ETRCC will be chaired by the EOPSS Undersecretary for Forensic Science and Technology. The Highway Safety Division Director at OGR will serve as vice chair of the ETRCC to serve in his/her absence (and Chair of the WTRCC as necessary). The Commonwealth's Traffic Records Coordinator will be appointed by the Highway Safety Division Director at OGR to support both the ETRCC and the WTRCC.

Each ETRCC member organization shall designate its member of the ETRCC. ETRCC members will be renewed each year.

The ETRCC will meet a minimum of once per year and more as needed. Each ETRCC member organization will have one vote. The ETRCC may extend membership to additional organizations and representatives by majority vote. Votes requiring a 2/3 majority of the ETRCC include approvals of a Strategic Plan for Traffic Records

Improvements, a Section 405c application, and projects for Section 405c funding. A majority vote will be sufficient for normal ETRCC business matters.

ETRCC MEMBER ORGANIZATIONS

- Massachusetts Association of Regional Planning Agencies
- Massachusetts Department of Public Health – Injury Surveillance Program
- Massachusetts Department of Public Health – Bureau of Health Care Safety and Quality
- MassDOT/Office of Planning
- MassDOT/Registry of Motor Vehicles
- MassDOT/Merit Rating Board
- MassDOT/Highway Division
- Massachusetts Chiefs of Police Association
- Executive Office of Public Safety and Security/Undersecretary for Forensic Science and Technology
- Executive Office of Public Safety and Security/Department of Criminal Justice Information Services
- Executive Office of Public Safety and Security/Municipal Police Training Committee
- Executive Office of Public Safety and Security/Massachusetts State Police
- Executive Office of Public Safety and Security/Office of Grants & Research
- Executive Office of Technology Services and Security
- Massachusetts Trial Court

Current advisory members, with no voting powers:

- National Highway Traffic Safety Administration (NHTSA)
- Federal Highway Administration (FHWA)
- Federal Motor Carrier Safety Administration (FMCSA)

1.3 Role of the Working-Level TRCC

The WTRCC helps to ensure on-going communication and coordination between collectors, custodians, and users of data that make-up the Commonwealth's traffic records systems. It provides technical assistance to the ETRCC.

The WTRCC organization, mission, vision, purpose, governance, and membership are enumerated in a WTRCC Charter that is like the ETRCC Charter above.

2.0 Traffic Records Systems

The Massachusetts core traffic records systems are managed by the following agencies:

- Registry of Motor Vehicles Division (RMV) of the Massachusetts Department of Transportation (MassDOT) manages the crash, driver license and history, and vehicle registration and title systems;
- Merit Rating Board (MRB) of MassDOT/RMV maintains operator driving history records consisting of at-fault crash claim records, comprehensive claim records, out-of-state incidents, and civil and criminal traffic citation information;
- Massachusetts Trial Court (MTC) manages adjudication information;
- MassDOT's Office of Transportation Planning (OTP) manages the road inventory file; and
- Massachusetts Department of Public Health (MDPH) and the Center for Health Information and Analysis (formerly known as the Division of Healthcare Finance and Policy) manage injury surveillance, EMS, and other healthcare/trauma/health insurance claims/death/behavioral risk factor information-related systems.

The following section provides a brief overview of each system.

2.1 Crash Data System

System Key Points

The RMV operates the Commonwealth's Crash Data System (CDS). Reports of more than 130,000 motor vehicle crashes are typically received annually by the RMV. Most recently, the RMV has adopted of the need to capture more comprehensive data pertaining to vulnerable uses of the public roadway including the various types of bicycles, scooters, and other newly developed means of transportation other than a motor vehicle. This is being accomplished via the collection of data in 21 fields which provide more detail into the circumstances of the crash and the operator of the vulnerable user that mirror those in the Vehicle Driver portion of the Crash Report.

Total Number of Crashes in IMPACT Portal	
Year	**Crashes**
2021	125,212
2022	134,356
2023	135,561
2024	133,808

As of 2025, approximately 99.2% percent of crash reports are received electronically from state and local law enforcement agencies.

The remainder are received on paper using the Motor Vehicle Crash Police Report last revised in September 2024. Police reports may be used to document the date, time, location, environment, and characteristics of a crash. The crash reporting criterion for both police and operators is: Any crash involving damage to any one vehicle or property exceeding $1,000, or any injury or fatality.

The MassDOT Highway Division, Traffic Engineering and Safety Section, developed an automated process for attaching location coordinates to crash master records that has been in use since 2006. This process is based on standards for location data on crash reports coupled with an extensive set of location matching algorithms that can take the street names, route numbers, exit numbers, mile markers and other location data as supplied in crash reports.

The geocoding tool within MassDOT's crash data portal, IMPACT, was implemented in July 2019.

While the 2022 file is not finalized/closed, as of April 17, 2025, 96.51% of crashes are geocoded (82% automatically and 14.51% manually).

While the 2023 file is not yet finalized/closed, as of April 17, 2025, 96.23% of crashes are geocoded (82.06% automatically and 14.17% manually).

While the 2024 file is not yet finalized/closed, as of April 17, 2025, 94.2% of crashes are geocoded (82.24% automatically and 11.96% manually).

There are now elements in place to improve the geocoding. The new ServiceNow-based Crash Data System at the RMV has enhanced messaging to law enforcement agencies

which should help to improve data quality, including geocoding. New vendors are submitting crash data to the RMV so there is more scrutiny of their data and their submission process. This has helped to find some data quality issues, including with location information, and that is in the process of being rectified. Due to staffing issues, the manual geocoding has fallen behind which reflects the poorer manually geocoding rate for 2023. We are trying to staff up to increase geocoding.

System Performance Measurement(s)

No information provided.

System Accessibility

Public access to data in the CDS is through MassDOT's crash data portal, IMPACT, at apps.impact.dot.state.ma.us/cdp/home. Select data in this system – specifically regarding fatal crashes – is provided to NHTSA's Fatality Analysis Reporting System (FARS) at www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars.

Training & Technical Assistance Opportunities

RMV has a Crash System Law Enforcement Liaison (LEL) that provides training and technical assistance to state and local law enforcement agencies. The LEL has been successful in updating the crash module used for all new police officer trainings for the new Vulnerable User requirements. This is a big change to the officer writing crash reports. The LEL continues to work with the Massachusetts Police Training Committee (MPTC), who oversees the police academy curriculum and is the standard for all Massachusetts and state police academies, including the MBTA. The curriculum now has an updated Crash Module that reflects critical points and procedures when reporting a crash, including the Vulnerable User section. In addition, the LEL attends many of the academy classes during the crash module portion of the training to answer questions and clarify information. The quality of the VU crash reports was not very good at first, due to confusion on the various types of modes of transportation on the roadways, but has improved via LEL's regular communications with departments and work at MPTC's academies,

Launched in September 2018, the 405-c funded E-Crash Report Manual web portal developed by UMassSafe serves primarily as the data dictionary of the CDS. It is available at masscrashreportmanual.com. RMV works closely with UMassSafe to keep the manual up to date. Through mid-2023, UMassSafe worked on its latest 405-c funded project to enhance and expand the manual. Portal enhancements included new crash

report interactive overlays for two more records management systems used by law enforcement agencies (LEAs), an auto updated spreadsheet of ratings/rankings of the crash report completeness of LEAs, and additions to the Traffic Records News page.

Since its 2020 release, UMassSafe's Tools Improving Crash Report Reviews Project has provided resources to assist law enforcement in better completing the narrative portion of the crash report. These and other resources produced with 405c funding to assist with crash reporting can be accessed at masscrashreportmanual.com.

In October 2021, the Massachusetts State Police completed with UMassSafe assistance a 405-c funded project to improve its training curriculum for crash reporting for new and current troopers.

Recent Developments & Challenges

MassDOT IT/RMV completed the update of the Massachusetts Crash System. The system now has the ServiceNow platform. In addition, there is a newly implemented section of the Massachusetts Crash Report called the Vulnerable User section. The acceptance and understanding of this new portion has been difficult. The LEL has distributed training materials and the VU type photo and reference guide to all LEAs and the MPTC police training academy. RMV staff meets regularly to review the quality of the VU data and will provide feedback to the LEAs.

The Department of Criminal Justice Information Services continues to use 405-c funding to roll-out its Massachusetts Automated Citation and Crash System (MACCS) to additional local police departments and undertake system enhancements. As of April 2024, the Massachusetts State Police and 294 local police departments were participating in MACCS.

The Boston Police Department launched a 405-c funded crash reporting application for mobile and desktop use in late December 2021. BPD went live submitting crash data to the RMV in March of 2024, testing the electronic crash report submissions and providing feedback to BPD.

In early 2024, the Department of Public Health's Injury Surveillance Program used 405-c funding to assess the completeness, accuracy, and uniformity of the variables in crash data using linked MA Crash-Related Injury Surveillance System (MA CRISS) data. This assessment found significant problems with the completeness and uniformity of these variables. The Department of Public Health sent a memorandum to the MA Chiefs of Police and Municipal Police Training Committee with recommendations for law enforcement training and RMS validation and autocomplete processes to improve the completeness of the alcohol and drug-related variables in crash data.

2.2 Roadway Data System

System Key Points

The MassDOT Office of Transportation Planning (OTP) maintains the Road Inventory File (RIF) for Massachusetts. This file, which contains more than 36,000 centerline miles and more than 75,000 lane miles of roads, serves as the foundation for the State's Geographic Information System (GIS).

This file is used for a variety of purposes, such as:

- Identifying functional classification, jurisdiction, and National Highway System (NHS) status of all roadways in the State;
- Helping to fulfill the Federal Highway Administration's Highway Performance Monitoring System (HPMS) reporting requirements;
- Determining centerline miles by city/town for allocating State Aid Funds to communities; and
- Supporting development of safety improvement projects.

The Traffic Engineering Section of the Highway Division of MassDOT works in concert with RMV to locate and geocode records in the CDS. The CDS uses roadway information as the basis for locating crashes. Approximately 90% of crash records are matched to a location automatically. However, the accuracy of crash location data depends on both the characteristics of the roadways (and the degree of difficulty in describing crash location due to the complexity of roadway geometry), and degree of precision by police in correctly providing and coding crash location information in their reports.

Traffic counts and pavement condition ratings are obtained over a three-year cycle, and this data is used to update the RIF on a continuous basis. While Massachusetts historically has used ortho-photography to verify the accuracy and completeness of road features and characteristics, the Commonwealth moved to use of a video log for ongoing verification activities of state-owned roadways.

Recent updates since the last plan update to the database include improved linework to the Linear Referencing System (LRS), continued revisions to the number of travel lanes and speed regulation events, additions to the bicycle facility, street name, facility type, and street operation, pedestrian facility and the addition of a new Interchange event

layer. Research has begun into improvements to the local traffic data. New work into developing Machine learning driven classification techniques for event development is underway.

System Performance Measurement(s)

The RIF is generated from an attribute event-based database utilizing Esri's Roads and Highways system. The attributes are registered to the Linear Referencing System (LRS). The database is updated through various stakeholders within MassDOT and other agencies through Event Editors or Web Services. MassDOT's Office of Transportation Planning GIS Services team regularly provides updates to the database.

In 2023 the database was migrated to ArcGIS Pro, Esri's current GIS application.

OTP continues to improve the completeness of the Route Feature Class of the Massachusetts Roadway Inventory System (RIS). Route Feature Class is the network feature layer for the RIF that serves as the backbone for the data organization of all the Road Inventory event layers. Between 3/18/24 and 4/8/25, an improvement in completeness of the system was achieved in Route Feature Class entries with an increase of 106 routes, from 213,878 to 213,984.

System Accessibility

GIS data is provided to the public through GeoDOT, a web-based GIS Platform at massdot.maps.arcgis.com. GeoDOT contains GIS layers to download, including the RIF file, as well as interactive maps and applications. Requests for services including GeoDOT accounts, software and training are available here. Municipalities provide updates to the local road network using the Road Inventory Submission Application (RISA).

The applications RoadIE and BikeUR and the new WalkUR application allow DOT employees, municipal employees, and the public to submit requests for updates to the RIF, Bike Facility Inventory, and the pedestrian facility event respectively. These applications enable the GIS editors to rapidly respond to data update requests to improve the completeness and accuracy of the data within the RIF.

Training & Technical Assistance Opportunities

MassDOT's Office of Transportation Planning has deployed an improved RIF data dictionary that reflects changes made to the data schemas. Training is available for the

GeoDOT GIS platform using the GIS Learning Management System for MassDOT Employees to better leverage GIS systems.

Recent Developments & Challenges

MassDOT's Office of Transportation Planning has a GIS team member serving as GIS QC Coordinator. This position documents our data management processes as well as developing metadata standards. The GIS QC Coordinator meets regularly with Road Inventory editors to understand their workflows and install best practices throughout the process.

As of March 2025, 1,371 RoadIE requests have been completed, and 1,333 Bicycle Inventory Requests have been completed. These applications have allowed the GIS data team to keep a record of data requests and monitor response times. This will allow us to measure accuracy improvement and how rapidly the GIS data team can respond to requests for updates moving forward.

In the last year, an Interchange Event layer for the Road Inventory was created. This event layer was built to help crash geocoding, risk safety analysis, and characterize the state's interchange locations and types. The Interchange type classification creates compliance with the MIRE 2.0 data standardization for critical data elements. Over 5,000 road segments were added to the interchange event.

Several quality control programs have been implemented in the last year. Workflow assignment and recordkeeping with a baked-in quality control step using the Wrike software for all data updates has been implemented and is handled by the GIS data team lead to improve data accuracy and quality. Standard editing procedures and data practices have been developed and implemented, and the editing staff has been trained with recurring refreshers. Best editing practice discussion occurs with the editing staff biweekly. In the last year, data quality for certain event layers was improved with the addition of calculation and constraint attribute rules. These rules have been expanded to numerous events to ensure that attributes are correctly calculated based on appropriate logic based on the existing information.

2.3 Driver Data System

System Key Points

Driver records are maintained by the RMV and kept in ATLAS, but the MRB updates operator driving history records consisting of at-fault crash claim records, comprehensive claim records, out-of-state incidents, and civil and criminal traffic citation information. ATLAS includes records for approximately five million commercial and non-commercial drivers.

The RMV has implemented six (6) service packs and has completed a version upgrade since Atlas "go live" in 2018. These Service/Sync Packs are vital in maintaining system health, providing access to new functionality, and implementing security updates to ensure the system is up to date with the core product.

RMV migrated Atlas to the FAST-Hosting Service (FHS) in November 2020. FHS is the preferred managed infrastructure service provider for the FAST application and results in a turnkey solution that is highly performant, secure, and reliable.

With creation of the new RMV database in 2018, ATLAS, by FAST Enterprise, improvements were made to ensure the integrity of data fields for person, vehicle, violations, etc. by expanding field level validation. Use of third-party tools, such as NADA, improved the accuracy and completeness of vehicle descriptions. For person identity, checks with NAPHSIS, DPH Vital Statistics, CIS (SAVE), SPEX (S2S), USPVS (Passport checks) were included. The data dictionary is proprietary and maintained by FAST Enterprises.

The Massachusetts State Police (MSP) Office of Alcohol Testing manages testing for blood alcohol concentration (BAC). The results from breathalyzer tests conducted in the field are broadcast to the MSP every 90 minutes. The MSP relays the information to the RMV nightly, which enables the RMV to have current information on file and to take immediate actions on cases pending receipt of BAC test results.

In 2008, the RMV, the MRB, and the Massachusetts Trial Court (MTC), including the District Court Department and the Boston Municipal Court Department, worked together to develop an electronic interface between the MTC and the MRB. Virtually all adjudication decisions are transferred electronically each night by MTC to the MRB. This

information is used to suspend or revoke licenses and to adjust in the insured's automobile insurance premium when applicable. This change closed a significant gap in communications and has substantially improved the process of using conviction data to suspend or revoke licenses and to adjust the insured's automobile insurance premium.

With FFY 2022 405-c funding, the MDPH Injury Surveillance Program (ISP) developed a limited Driver Data Dictionary describing the name, description, format, values, and value definitions for driver data it received from the RMV for integration into MA CRISS. ISP provided this limited data dictionary to the RMV in February 2022.

The MDPH ISP also used FFY 2022 405-c funding to assess the quality of the Driver data received from the RMV for integration into MA CRISS. These were records of drivers involved in 2015-2018 crashes in linked MA CRISS data. Data were assessed for completeness and uniformity.

System Performance Measurement(s)

The RMV legacy database, ALARS, was replaced by a web-based database titled ATLAS, which was developed in cooperation with FAST Enterprises. There is a team of RMV managers and staff who meet regularly with FAST developers to monitor and improve this new system and its functionality as business operations prove the need.

System Accessibility

The Driver's Privacy Protection Act (DPPA), 18 USC § 2721, is a federal law that limits what information about individuals may be shared by state auto administrators. This law limits who the RMV can consider for RMV system access.

On July 1, 2023, Chapter 81 of the Acts of 2022, An Act Relative to Work and Family Mobility (WFMA) went into effect and the regulations promulgated thereunder, 940 CMR 37.00, provide state limitations on what information the RMV can share and who they may share with.

The RMV works within the legal framework of these laws and requires entities requesting access to confirm they are legally allowed to receive the information, certify to the use of the information, and sign a legally binding Agreement for Access.

Training & Technical Assistance Opportunities

The RMV Training Department provides training to end users of the new system as requested and needed. FAST developers provide technical assistance as requested and needed.

Recent Developments & Challenges

The RMV implemented the first phase of its upgraded, web-based license and registration system known as ATLAS in March 2018. The Issuance License/Driver portion was successfully implemented. Release two of ATLAS to enhance the Vehicle and Registration portion was done in November 2019. The previous database, Automated License and Registration System (ALARS), contains historical data of both vehicle and operator data and can be queried, if needed. Since the ATLAS rollout, a team of system creators and RMV managers and staff meet to provide critical feedback to developers of the system to ensure data quality and control issues are addressed. The Director of Driver Licensing is integral to, and involved in, these meetings. These meetings continue to occur on a regular basis. New and more efficient processes continue to be put into action to ensure efficiency and accuracy.

2.4. Vehicle Data System

System Key Points

The RMV manages vehicle title and registration information using the ATLAS system, which contains approximately seven million commercial and non-commercial registrations.

As of April 2025, below is registration and title issuance activity for 2022-2025.

Year	Registrations	Titles
2022	603,724	1,157,452
2023	125,931	244,020
2024	583,986	200,767
2025	386,412	578,487

A registrant is identified with a Massachusetts driver license number or an assigned non-driver identification number if the registrant is not a driver.

Registration and title applications must include proof of insurance. A Manufacturer's Certificate of Origin or a previous title also must be presented along with an odometer reading as part of the title application. After receiving the registration document, plates

and expiration decals, a vehicle safety inspection is required within seven days. Thereafter, annual safety inspections are required. Odometer readings are recorded in connection with safety inspections and any required emissions inspections.

Application for title must be done within 10 days of acquiring a vehicle or trailer unless the type of vehicle is exempt from titling. Information on previous title data, including brand information, is acquired through the National Motor Vehicle Title Information System (NMVTIS) of the American Association of Motor Vehicle Administrators (AAMVA). Massachusetts is a full participant in NMVTIS enabling immediate electronic inquiries with other NMVTIS Jurisdictions. Massachusetts also uses the Electronic Lien and Title (ELT) system. ELT enables direct interactions with lien holder institutions.

Title and registration transactions are also completed by dealers, insurance companies/agents and fleet companies through the RMV's Electronic Vehicle Registration (EVR) Program using a Service Provider application that interfaces with ATLAS. Approximately 50% of the total new title and registration transactions are processed through the EVR Program.

System Performance Measurement(s)

The RMV utilizes the Power BI dashboard, ATLAS generated reports, and Vehicle Census dashboard to obtain vehicle information for accuracy.

System Accessibility

Vehicle information is obtained via the Vehicle Services portion of the ATLAS system.

Training & Technical Assistance Opportunities

The RMV Training Department provided training to end users of the new system as requested and needed. FAST developers provide technical assistance as requested and needed.

Recent Developments & Challenges

The new Vehicle Services portion of the ATLAS system went live in November 2019. The new system introduced point of sale scanning, an automated plate inventory system, integrated case management functionality, and the expansion of service

channels and business partnerships.

The rollout of Phase 3 of the Electronic Vehicle Registration (EVR) Program began in 2021. The EVR Lite Program allows car dealers and insurance agencies to complete select RMV transactions for their direct customers. There are 97 locations on EVR Lite as of spring 2025. Twenty-two of those are car dealers, the rest are insurance agencies.

2.5 Citation/Adjudication Data System

System Key Points

The MRB is the sole repository for all Motor Traffic Citations issued in the Commonwealth. The MRB receives copies of citations from Massachusetts police departments and courts and hearing requests and payments from violators and applies these records to an individual's driving history record.

Civil Motor Vehicle Infractions (CMVI) citations are sent directly to the MRB from the issuing police department. The MRB applies the citation to the violator's driving history record. The violator has 20 days from the date of violation to either pay the total amount due or to request a clerk-magistrate hearing. The payment or hearing request (accompanied by a $25.00 Court Filing Fee payment) is submitted to the MRB by the violator. Failure to do either action results in late and release fees being added to the citation, as well as future suspension of their driver's license or registration. If a payment is made, it is adjudicated as an admission of responsibility. If no response is provided within 20 days, the violator is found responsible and can be charged late fees and may face additional penalties, including suspension of license.

Requests for clerk-magistrate hearings along with a filing fee are processed and a file of hearing request records is sent via batch FTP transfer to the Massachusetts Trial Court (MTC). Upon disposition, MTC transmits a file of hearing results records via batch FTP transfer to MRB. These results are uploaded to the RMV and processed, updating the operator driving history records with the submitted results. Payments from violators are processed and the citation is adjudicated as responsible.

Multiple copies of a criminal citation are delivered to the court by the issuing police department. The court forwards a copy of the criminal citation to the MRB. The MRB applies the citation to the violator's driving history record. The court is responsible for conducting a hearing and rendering a disposition in a criminal matter. Upon issuance

of a disposition, the court electronically submits the findings to the MRB. Upon receipt of the disposition, the MRB updates the citation record.

While the exchange of criminal citation adjudication results and clerk-magistrate hearing requests and results between MTC and MRB is now almost exclusively electronic, much of citation processing remains a paper-based process. This includes audit sheets, which are completed by officers to account for every citation, specifically citations that are destroyed or voided.

An eCitation process, known as the Motor Vehicle Citation and Crash System (MACCS), transmits demographic and offense-specific information captured on the Massachusetts Uniform Citation electronically and this information is then validated against the ATLAS database. The data validations built into the eCitation system, in conjunction with quality controls at the MRB, have shown promising results in improving data quality.

Operators who are issued MACCS citations receive an eCitation Receipt on an 8.5x11 inch sheet of paper. The eCitation should be available for inspection in ATLAS within 72 hours, with 80.1% currently available for inspection within 24 hours.

The MRB in collaboration with the MTC continued its efforts to streamline and improve efficiency in the processing of criminal motor vehicle violation citations by working to add Juvenile Courts and Superior Courts to the electronic file transfer process to submit criminal traffic citation judgment records to the MRB. Testing was completed and all changes to MRB applications were migrated into the ATLAS production environment. All Juvenile Courts and 10 Superior Courts are now submitting electronic records to the MRB.

The RMV/MRB can promptly suspend/revoke the driver license of individuals found guilty of criminal charges by these courts. These efforts rectify any lapses in updating driving history records and ensure future records are current and sanctions promptly applied.

The registrant is identified with a Massachusetts driver license number or an assigned non-driver identification number if the registrant is not a driver.

System Performance Measurement(s)

The RMV legacy database, ALARS, was replaced by a web-based database titled ATLAS, which was developed in cooperation with FAST Enterprises. There is a team of RMV managers and staff who meet regularly with FAST developers to monitor and improve this new system and its functionality as business operations prove the need.

The MRB and its partners have worked to increase the timeliness of processing citation submissions received from state and local police, particularly the MACCS project. Between 5/1/23 and 4/30/24 an improvement in timeliness was achieved by reducing the average number of days to post to the system the paper and electronic citations from Massachusetts state and local police by four days, from 11 to 7 days. 5/1/24 – 4/30/25, timeliness was again improved via reduction to 6 days.

System Accessibility

Statutes require the MRB collect, gather, and compile citation data for drivers.

Training & Technical Assistance Opportunities

The RMV Training Department provides training to end users of the new system as requested and needed. FAST developers provide technical assistance as requested and needed.

Recent Developments & Challenges

The Department of Criminal Justice Information Services continued to use 405-c funding to roll-out MACCS to additional local police departments and undertake system enhancements. As of March 2025, there are 328 local police departments participating in MACCS. Approximately, 98% of the Massachusetts State Police participate in MACCS. Between the launch of MACCS in April 2017 and March 2025, the State Police issued 1,916,222 citations through MACCS and local police issued 1,387,422 citations through MACCS. E-Crash reporting through MACCS is limited at this point, as the State police and most local police use the e-Crash reporting functions of their own records management systems to report to RMV's Crash Data System.

Using 405c funding, the Boston Police Department installed 370 printers in department cruisers and motorcycles to enable their officers to start using MACCS for e-citation submissions in summer 2023.

In spring 2022 the MRB started a multi-phase effort to enhance the ability of traffic records stakeholders and the public to view and analyze traffic citations data and trends. The greater accessibility to this data will assist planning efforts of these stakeholders to reduce traffic crashes and resulting fatalities, injuries, and

economic loss in Massachusetts. The proposed public Internet portal would make available select citation data in both summary and detail format. This project is being conducted in two phases, with this task providing 405c funding for only the first phase.

In Phase 1 the MRB's project team used MassDOT IT contractors to identify data needs and system requirements from stakeholders to develop a detailed project scope, schedule, and budget for Phase 2. This first phase also saw the development of the necessary procurement documentation to hire a vendor to complete Phase 2. Additionally in Phase 1, improvements were made to the current data dictionary of the citation data system.

In Phase 2 of the project that started January 2023 the selected vendor worked with MassDOT IT and MRB staff to build and implement the portal to feature a data dictionary for the citation data system. The Citation Portal officially launched on May 15, 2025 and has data loaded from 1/1/13 – Present. Within the portal, users can engage with data through easy-to-understand, pre-built reports and interactive dashboards, or conduct their own self-driven analysis.

Opportunities still exist for improving linkages among various system components – such as adjudications with both the vehicle and crash files, which could improve the efficiency of vehicle-based administrative suspensions and revocations, as well as to increase the ability of the data in the system to support research. These opportunities will continue to be investigated.

2.6 Injury Surveillance/EMS Data System

System Key Points

Massachusetts Ambulance Trip Record Information System (MATRIS)

MATRIS managed by MDPH collects Emergency Medical Services (EMS) trip information that complies with the National EMS Information System (NEMSIS) dataset. The department is currently collecting NEMSIS V3, as the V3 system launched 2/28/19. As of 3/31/22, all 311 licensed ambulance services had migrated and were submitting data to MATRIS NEMSIS V3 using V3.4. The NEMSIS V3 data is superior to the previous V2 data because DPH developed comprehensive Schematron validation rules that are enforced as

criteria for acceptance to MATRIS. DPH upgraded from V3.4 to V3.5 starting in July 2023 with updates needed to the Schematron validation rules to incorporate the V3.5 differences and to improve quality. DPH began submitting the NEMSIS V3 data to the NEMSIS national repository in July 2021 and continues with V3.5. As of January 2025, all services had migrated successfully to NEMSIS V3.5.

MDPH generates and sends annual data quality reports to all ambulance services as part of their re-licensure and regularly works with ambulance services to improve their quality. MATRIS data quality control improved with the migration to NEMSIS V3 which allows for rejection of records that do not meet quality standards. MDPH reviewed and amended the over 200 validation rules and implemented with the migration to V3.5 in 2023.

Massachusetts Hospital Case-Mix Data

Hospital discharge data (HD), emergency department (ED) discharge, and outpatient observation stay (OOS) data, collectively referred to as "Case-mix Data", are submitted by all Massachusetts acute care hospitals to the Center for Health Information and Analysis (CHIA). DPH receives the data from CHIA and conducts its own data quality checks and coding for DPH programs. Relevant data include ICD-10-CM diagnosis codes, which indicate the type of injury and body location affected, and external cause codes, which indicate the mechanism and injury intent (unintentional, assault, self-inflicted, etc.), type of place the injury occurred, and activity the person was involved in when the injury occurred, patient demographics, including race and ethnicity, a unique patient identifier, medical record number, hospital facility, dates of medical care, length of stay, discharge disposition, services and procedures performed, hospital charges, and whether the visit is for active treatment, routine treatment, or treatment of sequelae. Diagnosis codes in case-mix data can also be used to identify hospitalized drivers and non-motorists who were under the influence of alcohol and/or drugs at the time of the crash, acute medical events that may have precipitated a crash, and serious health impacts, such as traumatic brain and spinal cord injuries. MDPH prioritizes racial equity in all its work and therefore analyzes data by race/ethnicity whenever possible and strives to identify underlying structural, environmental, and social factors contributing to racial inequities in MV crash injuries.

The MDPH Office of Data Management and Outcomes Assessment (ODMOA) routinely assesses the quality of hospital case-mix data received from the Center for Health Information and Analysis (CHIA). ODMOA also creates several injury-related fields from ICD-10-CM diagnosis codes in case-mix data, including external cause of injury, place of injury, and activity being done when the injury occurred, for use by

MDPH programs. The MDPH Injury Surveillance Program (ISP) also periodically assesses the quality of these injury-related fields. These assessments found variability in hospitals reporting of external cause codes for the location where an injury occurred ("injury place") and activity at the time of an injury ("injury activity"). Overall, through 2024, there continues to be incomplete reporting of injury place and injury activity by acute care hospitals in case-mix data. The MDPH Injury Surveillance Program is working with CHIA to try to improve reporting of this information.

Massachusetts All Payer Claims Database (MA APCD)

MA APCD **i**ncludes health insurance claims data collected from commercial payers, third party administrators and public programs (Medicare and MassHealth (the Massachusetts' Medicaid program) by the CHIA. Due to state health care reform law which had the aim of providing health insurance to all residents, Massachusetts leads states with the most complete population insurance coverage, 97% of its residents have health insurance. Therefore, the MA APCD is one of the most comprehensive sources of state health claims data from public and private payers in Massachusetts. These data sets come both from medical insurers and from specialty insurers and administrators of "carved-out" services including pharmacy, mental health/chemical dependency, dental, and vision. While several states have All Payer Claims Databases, the MA APCD has a unique focus on the efficiencies to be achieved by having a single independent agency (the Center for Health Information and Analysis)– as opposed to multiple state agencies. While the case mix data collects data only from Massachusetts acute care hospitals, the MA APCD includes health care data from all health care providers regardless of care settings or geographic location. The ambulance, ED, hospitalization, rehab, and pharmaceutical claims for Massachusetts motor vehicle crash victims receiving care in state and out of state are all in the Massachusetts APCD. CHIA has also enhanced the MA APCD by creating a member link entity identifier which enables cross carrier analysis. This type of enhancement facilitates analysis of injured patients across the entire continuum of care from prehospital care to rehabilitation even if the patient changes insurance carriers.

Trauma Registry

Trauma Registry data, collected by MDPH, comes from all hospitals that treat trauma patients and their trauma inpatient discharges, all trauma observation stays, deaths resulting from the traumatic injury, and transfer patients from one acute care hospital to another acute care hospital. These data include patient blood pressure, respiratory rate, pulse, protective devices, airbag deployment, child specific restraints, cause of injury and location of injury e-codes, hospital-based drug and alcohol test results, injury date, injury

city, mode of transport to hospital, abbreviated injury scale (AIS), Glasgow coma scores, complications, and comorbidities. After submission by hospitals, MDPH may add other fields such as geocoded census data and several survival probability metrics including revised trauma score, shock index, injury severity score, new injury severity score, and AIS-based trauma mortality prediction model using up to five worst injuries, ICD-based trauma mortality prediction model, and an indicator for multiple injuries to the same body region. The system was upgraded to include approximately 60 data elements with ICD-9-CM codes updated to ICD-10-CM and AIS 2005/2008 in 2016. Enhancements were also made in 2017 to meet the NTDB 2016 and 2017 updates and ability to accept multiple submission years simultaneously.

Traumas reported to Massachusetts Trauma Registry by Calendar Year (CY)*	
2023	2024 Q1-Q3
38,155	28,701

*Massachusetts Trauma Registry, current as March 26, 2025.

During the FFY 2019, additional upgrades were made to conform to new National Trauma Databank (NTDB) data submission requirements. Comorbidity and complications fields were removed in accordance with NTDB requirements and replaced with yes/no indicator fields. The option to enter 'not recorded' or 'unknown' for some fields was added and new fields were included to allow entry of Initial Field GCS, if collected. The Drug Screen field was also updated to capture when a patient had more than five classes of drug detected on a toxicity screen. Finally, the edit check on a small number of fields were adjusted to require a high level of completion in each quarterly submission

Data quality reports are prepared and disseminated to data submitters at least annually. Migration of historic data was completed and validated 2021-2022 and the Massachusetts Trauma Registry includes all hospital trauma data submitted since 2008.

Death Certificates

The Massachusetts Registry of Vital Records and Statistics collects certificates for all deaths that occur within Massachusetts as well as deaths of Massachusetts residents that occur outside of the Commonwealth. Vital Information Partnership (VIP) is the electronic death registration system. Relevant data include ICD-10 diagnostic codes for underlying and secondary causes of death (which describe injury cause, MV-person type, the nature and body location of injuries and other conditions present), open-text fields for description of

injury mechanism and location where injury incident occurred, patient demographics, including occupation and industry, and date of death. Revisions to the death certificate are underway and planned to be implemented in 2025.

Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Survey (YRBS) and Youth Health Survey (YHS)

These anonymous surveys collect statewide estimates on self-reported behaviors either annually (BRFSS) or bi-annually (YRBS and YHS). The BRFSS is a telephone survey administered to a sample of adult MA residents ages 18 and older. The YRBS and YHS are written surveys administered to a sample of MA public high school students, with the YHS also administered to public middle school students. The BRFSS and YHS surveys are administered by the MDPH. The YRBS is administered by the MA Department of Elementary and Secondary Education.

Specific questions related to motor vehicle injuries include seat belt use (BRFSS, YRBS, YHS), riding in a car driven by someone who had been drinking alcohol (YRBS, YHS middle school), riding in a car driven by someone who had been using marijuana (YHS middle school), driving a car after drinking alcohol (BRFSS, YRBS, YHS), driving a car after using marijuana (YHS), texting or emailing while driving (YRBS), and falling asleep while driving (YHS). All questions ask about experiences or behaviors in the past 30 days. Responses can be broken down by respondent demographics, other risk behaviors, and social determinants of health.

System Performance Measurement(s)

MDPH had a benchmark/performance measure to evaluate the completeness of the MATRIS data by tracking the number of ambulance services submitting Version 3 reports to the system. For FFY 2021, the benchmark/performance measure was to improve completeness of MATRIS by increasing the number of ambulance services submitting NEMSIS Version 3 reports to the system from 304 between 4/1/20 to 3/31/21 to 309 between 4/1/21 to 3/31/22. As of 3/31/22, all 311 licensed Ambulance services had migrated and were submitting data to MATRIS NEMSIS V3.

In 2019 and 2020, the MDPH Office of Data Management and Outcomes Assessment (ODMOA) developed a new process to assess the quality of Hospital Case-mix data received from the Center for Health Information and Analysis (CHIA). The results of these assessments are summarized in standard reports available to MDPH epidemiologists. ODMOA communicates any serious data quality problems to CHIA and requests a new file. ODMOA also standardizes variable names and formats across the three data types (hospital discharge, emergency department discharge, and

observation stay data) in the datasets analyzed by the Injury Surveillance and other programs.

System Accessibility

MATRIS data is summarized and reported for quarterly opioid surveillance statistics. These reports are posted to the Mass.gov website and available to the public at www.mass.gov/lists/current-overdose-data on the EMS Regional Opioid Related Incident Dashboard. In 2024 a new dashboard on healthcare capacity was developed incorporating MATRIS data and can be found at https://www.mass.gov/info-details/health-care-capacity-interactive-dashboard.

Starting in SFY 2021 submission process began sending MATRIS data to the NEMSIS national repository making it accessible for the national dashboards and available for national IRB use. MATRIS data has been shared in 2023 and 2024 with the Injury Surveillance Program for linkage with Crash, Hospital and Trauma Registry data and incorporated in the MA Crash Related Injury Surveillance System (MA CRISS). MATRIS data has been shared in previous years via the IRB process with other TRCC members and integrated with Crash data for analysis; provided to the Motorcycle Safety program for inclusion in training materials and conference presentation.

The Massachusetts Trauma Registry (TR), launched 12/1/21, is more user friendly and allows for easier data submissions from our hospital partners. By selecting a national trauma vendor who adheres to the IDTX trauma submission format, this TR streamlines submissions for trauma centers using hospital-based trauma vendor software. Community hospitals with no trauma registry continue to receive DPH and vendor-based support to assist with data submissions.

Trauma Centers will be able to extract pre-validated data from their hospital-based registries and upload directly to the new web-based Massachusetts Trauma Registry, provided by ESO. The universal IDTX format supports high-quality, uniform data meeting the national data standards. Community hospitals will have DPH and vendor support to create files, under the same standards, from their medical records systems. This data can either be direct data entered into the trauma registry web-portal or uploaded using the same process as trauma centers.

The MDPH Injury Surveillance Program (ISP) analyzes MA Hospital Case-mix, Death, BRFSS, YRBS, and YHS data to track fatal and nonfatal MV-traffic injuries, and identify disproportionately impacted populations, health outcomes, and risk factors, including being under the influence of alcohol or drugs at the time of the crash. ISP works with

the MDPH Injury Prevention and Control Program to develop and disseminate data briefs and fact sheets based on findings from these analyses. Announcements about the release of data products and key data findings are disseminated to a broad range of traffic safety partners electronically. ISP **has**a specific webpage for public access to transportation injury data, including data from the MA Crash-Related Injury Surveillance System (MA CRISS): www.mass.gov/info-details/transportation-injury-data. ISP data products that include transportation and other types of injuries are available at: www.mass.gov/injury-surveillance-program. BRFSS reports are available at: www.mass.gov/behavioral-risk-factor-surveillance. YRBS reports are available at: www.doe.mass.edu/sfs/yrbs and YHS reports are available at: www.mass.gov/lists/massachusetts-youth-health-survey-myhs.

Traffic safety partners and others can also make specific data requests to ISP. ISP also frequently presents MA MV injury data at MA Traffic Safety Coalition meetings. MDPH staff, including ISP, IPCP, and BHCSQ staff, also participated in and provided relevant injury surveillance/EMS data to Emphasis Area workgroups that helped develop the 2023 MA Strategic Highway Safety Plan, released in early 2023.

Recent Developments & Challenges

Trauma Registry: A Trauma Registry Legacy dataset, combining all registry data through federal fiscal year (FFY) 2020, was shared with the Injury Surveillance Program (ISP) for linkage to the MA Crash-Related Injury Surveillance System (MA CRISS) in Fall 2021. In 2023, ISP assessed the quality and completeness of federal fiscal year (FFY) 2019 and FFY 2020 Trauma Registry records involving MV crash injuries and provided BHCSQ with a summary of findings. BHCSQ and ISP staff met to discuss the findings, improvements in the data collection process since 2020, and BHCSQ's ongoing efforts to improve data quality. ISP also linked MV injury cases in FFY 2020 Trauma Registry with Hospital Case-mix data as part of the MA Crash-Related Injury Surveillance System (MA CRISS) in 2023. ISP summarized the linkage process, linkage rate (80%), and barriers to linkage and worked with BHCSQ to resolve some of these barriers. In 2024, ISP deterministically linked MV injury cases in FFY 2020 Trauma Registry data with crash data. Overall, 56% of MV injury cases in FFY 2020 Trauma Registry data linked with a crash record. Note that crash data did not include crash reports from Boston at that time, which likely affected the linkage rate. ISP provided linkage rates by person-type, age group, sex, and race/ethnicity to BHCSQ and the DOT Highway Safety Section. ISP also assessed the validity of pairs matched by the linkage algorithm and some pairs that matched on only some of the required criteria. They sampled 344 pairs of cases representing all person-types and found that 98.5% (339) of the sampled pairs were accurately identified as true positive or true

negative matches. Only 5 pairs of cases were adjudicated as unclear (2), likely, but not definite, true positives (2), or a likely false negative (1).

BHCSQ developed a comprehensive data dictionary for the Trauma Registry legacy dataset that includes variable names, descriptions, values, years collected, and whether variables are required of all acute care hospitals or just trauma centers. BHCSQ also releases data specification guides annually to inform facility data submission.

MATRIS: The NEMSIS V3 data is imported in a timelier manner, often within a day, due to the added requirement in the standard for ePCR software to automate importing to the state system, MATRIS. The data quality improved because of a superior validation rule execution process implemented in V3 where the state rules are packaged into a file and integrated on the ePCR software used by the ambulance services. This process is managed with a technology called Schematron. During the update to NEMSIS V3.5 in late 2023 the validation rules were enhanced leading to improved data accuracy, uniformity and completeness as the ambulance services began submitting using NEMSIS V3.5.

BHCSQ provided the Injury Surveillance Program (ISP) with 2020 MATRIS data for linkage into the MA Crash-Related Injury Surveillance System (MA CRISS). In 2024, ISP developed criteria to identify MV injury cases and person-type in V2 and V3 MATRIS data. ISP then developed algorithms to deterministically link MV injury cases in 2020 V2 and V3 MATRIS data with crash data. This required different linkage algorithms as some variables and values differ between V2 and V3 data. Overall, 72% of MV injury cases in 2020 V2 MATRIS data and 68% of MV injury cases in 2020 V3 MATRIS data linked to a crash record. Note that the City of Boston Police Department did not submit crash reports to the state Crash Data System in 2020, which likely affected linkage rates. ISP provided linkage rates for 2020 V2 and V3 data by person-type, age group, sex, and race to BHCSQ and DOT Traffic Safety Section.

2.7 Data Use and Integration

- UMassSafe's Data Linkage Project linked EMS and Crash Data was concluded in December 2018. A final project report from March 2019 is available at https://www.mass.gov/doc/2019-utilization-of-crash-and-medical-data-to-reduce-motor-vehicle-crash-severity-findings/download.
- The MA Crash-Related Injury Surveillance System (MA CRISS) was developed by the MDPH Injury Surveillance Program (ISP) in 2016 with funding from the MassDOT Highway Division. MA CRISS currently includes crash, MATRIS,

hospital case-mix, Trauma Registry, and driver data. As of 2024, all data sources are linked to crash data and some are directly linked to each other, such as hospital case-mix and Trauma Registry data. Linked hospital case-mix and crash data are available from 2012 to 2020, and hospital case-mix data is linked to preliminary 2021 crash data, as final data were not available in 2024. Other data sources are available for fewer years, but ISP is working on accessing more years of each data source. Each data source provides critical information that can be analyzed to inform and evaluate traffic safety strategies, particularly those aimed at reducing racial/ethnic inequities in MV crash injuries. Reports based on the analysis of MA CRISS data are available at: https://www.mass.gov/info-details/transportation-injury-data

FFY 2022 and 2023 405-c funding supported traffic safety decision-makers' and the public's access to findings from the analysis of integrated MA CRISS data by supporting skilled personnel capable of conducting analysis of this complex data system. Specifically, ISP analyzed 2018 – 2019 MA CRISS data to assess the accuracy, completeness, and uniformity of the alcohol and drug fields in MA crash data. Key findings from the assessment of the alcohol and drug fields included that all seven fields studied had high percentages of missing or invalid values, ranging from 37% - 93%. Among hospitalized drivers, alcohol and/or drug use was identified three times as often in hospital records as in crash records (24% vs. 8%). In 2024, MA Department of Public Health administrators worked with the Registry of Motor Vehicles (RMV) and the RMV Law Enforcement Liaison to provide the MA Chiefs of Police and the MA Municipal Police Training Committee with recommendations to improve the completeness, uniformity, and accuracy of the alcohol and drug fields in crash data.

- ISP used FFY 2023 405-c funding to integrate new driver data into MA CRISS, conduct a survey of traffic safety partners' priorities, and complete an analysis of their top priority, which was injured drivers identified as speeding, using FFY2017 – FFY 2019 linked crash, injury surveillance, and driver data. This analysis focused on 1) driver and crash characteristics associated with speeding, 2) whether speeding violations are equitably adjudicated, and 3) the impact of being convicted of or admitting to speeding on future at-fault crashes. A report summarizing the findings from this analysis was submitted to OGR in February2024. Characteristics significantly associated with being identified as speeding were being male, under age 35, White, non-Hispanic, under the influence of alcohol and/or drugs, not wearing a seatbelt, and having a history of speeding. Drivers identified as speeding were significantly more likely to be hospitalized or killed than drivers not identified as speeding.

One in seven drivers (14.4%) identified as speeding were found responsible for speeding, and this did not differ significantly by race/ethnicity. One in five drivers (20.1%) identified as speeding had one or more at-fault crashes in the 3 years following the index crash. Being held responsible for speeding was not associated with fewer future at-fault crashes. Results were presented to the MA Traffic Safety Coalition in June 2024 and to the ETRCC in January 2025.

- In FFY 2024 the MATRIS system migrated to the NEMSIS V3.5 standard. A new feature to this release is the Universally Unique ID (UUID) that can identify an EMS run with a unique ID. This value is also included in the new ACS National Trauma Data Bank requirements and may facilitate linkage.

  The UUID was incorporated in the FFY 2021 Massachusetts Trauma Registry, and hospital partners began submitting the linkage data element in early CY 2022.

  - Public access to data in the CDS is through the IMPACT Crash Data Portal at apps.impact.dot.state.ma.us/cdp/home.

2.8 Related Planning Documents/Resources

- MassDOT's Strategic Highway Safety Plan at www.mass.gov/service-details/strategic-highway-safety-plan

- MassDOT's State Transportation Improvement Program at www.mass.gov/service-details/state-transportation-improvement-program-stip

- MassDOT's Highway Safety Improvement Plan at www.mass.gov/service-details/highway-safety-improvement-program

- MA State Police's Commercial Motor Vehicle Plan at www.mass.gov/orgs/massachusetts-state-police

- OGR's Annual Grant Application, Safety Belt Survey and Cell Phone Survey at https://www.mass.gov/collections/research-and-reports

3.0 Traffic Records Assessment

In September 2023, OGR with assistance from the TRCCs finished a NHTSA-approved Traffic Records Self-Assessment for Massachusetts, guided by NHTSA's *Traffic Records Program Assessment Advisory, 2018 Edition*. The OGR and the TRCCs plan to update this self-assessment every three years.

This section includes the resulting recommendations from the 2023 assessment. After each one there is information about what Massachusetts is or is not planning to do regarding the recommendation in FFY 2026.

Where action is being taken, the entry will highlight if the effort involves a 405c funded project included in OGR's proposed FFY 2026 Annual Grant Application (AGA) and in Section 4 of this plan. Such an entry needs to address an unmet recommendation from the 2023 assessment, improve a minimum of one performance attribute (accessibility, accuracy, completeness, integration, timeliness, and uniformity) of a core system, and have at least one benchmark and performance measure. Ideally the project also provides a benchmark and performance measure that can demonstrate quantitative improvement in an attribute of a core system as described in the 405-c funding guidance.

If the Commonwealth is unable to address a recommendation in FFY 2026, this will be explained below in this section.

With its FFY 2026 405-c application, Massachusetts is submitting the following two performance measures to show quantitative improvements in the performance attributes of core systems. These measures were developed using NHTSA's *Model Performance Measures for State Traffic Records Systems, 2024 edition* and the 405-c funding guidance. These measures were also provided to NHTSA separately in Interim Progress Reports as part of our 405-c application.

#1. When the Citation Data System was queried in June 2025 for the performance period 5/1/24 – 4/30/25, it showed a timeliness improvement from the baseline period's 7 days on average to post a citation (either electronically or through paper submission) to 6 days in the current value period – an improvement of 1 day.

#2. When the Roadway Data System was queried, it showed a completeness improvement from the baseline date's (3/18/24) 213,878 routes to 213,984 on the current value date of 4/1/25 – an improvement of 106 new routes.

Developing similar performance measures for other core systems and projects of the Commonwealth will be a focus for our TRCCs in FFY 2026.

OGR conducted in spring 2024 an Availability of Grant Funds (AGF) process to identify new projects to use available Section 405-c funding. With TRCC input, six projects to help address recommendations from the 2023 Assessment were identified for 405-c funding in June 2024. These projects were approved by NHTSA in the Massachusetts FFY 2025 AGA. These projects will be completed by the end of 2025 and are described in Section 4 of this plan.

OGR conducted an AGF in spring 2025 to identify new 405-c projects to complete in FFY26. The projects recommended for funding by the AGF review team were approved by the ETRCC during their meeting on 7/1/25, with the understanding that OGR may work with prospective subrecipients to enhance performance measures and/or to update scopes, timelines, and budget based on the outcome of the federal AGA process. OGR finalized the FFY26 Strategic Plan for Traffic Records Improvements in July 2025, with updates made in February 2026 to reflect the progress made from completed FFY25 projects and changes to core database staff.

3.1 Traffic Records Coordinating Committee Management

The 2023 assessment did not have any related recommendations for TRCC management.

However, the TRCC still needs to continue to work on developing benchmarks and performance measures for all its six core traffic records systems. Also, to better highlight and address unmet technical assistance and training needs for all six systems.

For the FFY 2025 405-c application, the Massachusetts TRCCs had to meet the requirement for receipt of Section 405-c funding by meeting a minimum of three times before the application submission. During FFY25, the ETRCC met on 1/21/25, 5/20/25, and 7/1/25.

3.2 Strategic Planning

The 2023 assessment identified the following recommendation related to Strategic Planning.

1. Strengthen the TRCC's abilities for strategic planning that reflect best practices identified in the Traffic Records Program Assessment Advisory.

To address in part this recommendation, ETRCC members have been asked to review NHTSA's State Challenges to Improving Traffic Safety Coordination (dot.gov). Also the Traffic Records Data Quality Management Guide: Update to the Model Performance Measures for State Traffic Records Systems (dot.gov). These documents were provided to the ETRCC members in January 2024.

3.3 Crash System

The 2023 assessment identified the following recommendations:

1. **Improve the applicable guidelines for the Crash Data System (CDS) that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   Given sufficient state funding for the new CDS project, at this time no 405c grant funded work on this recommendation is planned for FFY 2026.

2. **Improve the interfaces with the CDS that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   Given sufficient state funding for the new CDS project, at this time no 405c grant funded work on this recommendation is planned for FFY 2026.

3. **Improve the data quality control program for the CDS that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   Given sufficient state funding for the new CDS project, at this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

3.4 Roadway

The 2023 assessment identified the following recommendations:

1. **Improve the data dictionary for the Roadway Data System (RDS) that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   Given sufficient state-funding for work on this recommendation, at this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

2. **Improve the data quality control program for the RDS that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   Given sufficient state-funding for work on this recommendation, at this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

3.5 Driver

The 2023 assessment identified the following recommendations:

1. **Improve the data quality control program for the Driver Data System (DDS) that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

3.6 Vehicle

The 2023 assessment identified the following recommendations:

1. **Improve the description and contents of the Vehicle Data System (VDS) that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

2. **Improve the data quality control program for the VDS that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

3.7 Citation / Adjudication

The 2023 assessment identified the following recommendations:

1. **Improve the description and contents of the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.**

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

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

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

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

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

3.8 Injury Surveillance/EMS

The 2023 assessment identified the following recommendations:

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

The RMV and DPH continue to consider an interface between EMS and RMV data for the Massachusetts Fatality Analysis Reporting System (FARS) project. However, given the significant statute barriers this is not expected to occur anytime soon.

At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

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

   MATRIS will be upgraded to the newest version of the NEMSIS standard V3.5.1 in FFY 2026 with technical improvements, data elements and values additions to allow for more robust reporting.

   At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

3.9 Data Use and Integration

The 2023 assessment identified the following recommendation:

1. **Improve the traffic records systems capacity to integrate data that reflects best practices identified in the Traffic Records Program Assessment Advisory.**

   Currently, the MA Department of Public Health's MA Crash-Related Injury Surveillance System (MA CRISS), managed by the MDPH Injury Surveillance Program (ISP), is integrating the largest number of MA traffic record data sources. MA CRISS currently includes crash, MATRIS, hospital case-mix, Trauma Registry, and driver data. All data sources are linked to crash data and some are directly linked to each other, such as hospital case-mix and Trauma Registry data. Linked hospital case-mix and crash data are available from 2012 to 2021, although ISP only had preliminary 2021 crash data at the time. Other data sources are available for fewer years, but ISP is working on accessing more years of each data source. CDC funding supported ISP's integration of crash and Trauma Registry data and. MassDOTfunding supported integration of crash and MATRIS data.

MassDOT funding also supports a MA CRISS epidemiologist to manage MA CRISS data, integrate additional years of other data sources, and analyze the linked data.

At this time no 405-c grant funded work on this recommendation is planned for FFY 2026.

4.0 Traffic Records Projects

This section lists projects planned for FFY 2026 as well as projects recently completed in FFY 2025. This section details whether projects are funded through 405-c funding or other sources of funding.

For FFY 2025 and 2026 405-c funded projects, this section provides key project updates/deliverables as available, anticipated performance attribute impacts (i.e., improvements in accessibility, accuracy, completeness, integration, timeliness, and uniformity), and how projects address, ideally with quantitative improvement, recommendations from the 2023 Traffic Records Self-Assessment. Projects that helped achieve measurable progress for the FFY 26 405-c application are also below.

4.1 FFY 2026 405-c Funded Projects

University of Massachusetts – Modernizing Crash Data Quality: AI Audit of Vulnerable User Fields

AGA Task: TR-26-01
Budget: $286,263

This project will provide funds to support personnel, indirect, and contractor/consultant costs related to UMassSafe's efforts to improve crash reporting by identifying errors and inconsistencies within VRU crash report fields and using these findings to enhance the overall understanding of the data, guide trainings, and improve usability. Using natural language processing, leveraging machine-learned terminology, and data dictionary and ANSI D.16, UMass will conduct a data quality audit that will analyze crash narratives to detect inconsistencies within the coded VRU fields. The goal is to identify data quality patterns relevant to VRU fields, highlight crash scenarios prone to misclassification, and inform the technical assistance and training needs of law enforcement stakeholders, including updates to the Law Enforcement Crash Report E-Manual at masscrashreportmanual.com.

This project will enhance the accessibility, accuracy, completeness, timeliness, and uniformity of the Massachusetts crash data system. The project will help to address the unmet recommendation for the data quality control program for the Massachusetts crash data system from the 2023 Massachusetts Traffic Records Self-Assessment.

Lawrence Police Department – MACCS Mobile Upgrades

AGA Task: TR-26-02
Budget: $44,915

This project will allow the Lawrence Police Department (LPD) to finish outfitting all its vehicle fleet used for traffic enforcement with mobile data terminals and printers necessary to e-report to the Massachusetts citation data system through the Motor Vehicle Automated Citation and Crash System (MACCS). LPD is coordinating this effort with the Massachusetts Department of Criminal Justice Information Services (DCJIS) that oversees MACCS, primarily developed and maintained with 405c-funding. LPD will receive training support on MACCS from DCJIS to ensure staff have proper training on the new equipment as well as technical assistance from the RMV's Crash Data System Law Enforcement Liaison on proper crash reporting requirements.

This project will enhance the accuracy, completeness, and timeliness of the Massachusetts citation/adjudication data system. The project will help to address the unmet recommendation for the data quality control program for the Massachusetts citation data system from the 2023 Massachusetts Traffic Records Self-Assessment.

West Brookfield Police Department – Improving Crash Data Accuracy

AGA Task: TR-26-03
Budget: $48,600

This project will enable the West Brookfield Police Department (WBPD) to improve the crash investigation abilities of the Central Massachusetts Law Enforcement Council's (CEMLEC) Crash Reconstruction Unit. WBPD's Police Chief is the Control Chief for CEMLEC's Crash Reconstruction Unit. This unit has 24 members, serving 77 municipalities across five counties. Equipment purchased via this project will enhance the accuracy, completeness, and timeliness of the Massachusetts Crash Data System.

Purchases will include the following event data recorders: Bosch CDR900 DLC, Hyundai EDR 2.0 DLC, Kia EDR 2.0 DLC, and Tesla CDR900 DLC along with related software, cables, a laptop, and training.

This project will enhance the accuracy, completeness, and timeliness of the Massachusetts citation/adjudication data system. The project will help to meet the unmet recommendation for the data quality control program for the Massachusetts citation data system from the 2023 Massachusetts Traffic Records Self-Assessment.

Massachusetts State Police – Improvements to Electronic Surveying Processes

AGA Task: TR-26-04
Budget: $184,249

MSP will equip each member of its Collision Analysis & Reconstruction Section (CARS) team with electronic surveying equipment to forensically document crash scenes. This will enable MSP-CARS to memorialize short-lived evidence quickly and accurately, minimize time spent on-scene investigating and completing reports, and provide vital information to stakeholders in a timely manner. Ten sets of electronic surveying equipment will be purchased. Each set includes Leica data collectors, antennae, and surveying poles, GLONASS receivers, GALILEO receivers, BEIDOU receivers, GPS/GNSS antennae containers, and batteries. CARS members will also be trained on forensic mapping.

This project will enhance the accuracy, completeness, and timeliness of the MA Crash Data System. The project will help to meet the unmet recommendations for the data quality control programs for the Massachusetts crash data system from the 2023 Massachusetts Traffic Records Self-Assessment.

Berkshire Regional Planning Commission – Berkshire County High Injury Network Dashboard

AGA Task: TR-26-05
Budget: $40,000

The Berkshire Regional Planning Commission (BRPC) will purchase a one-year license for Citian's CRASH software which will provide a High Injury Network (HIN) Dashboard specific to Berkshire County with more enhanced crash diagrams than Massachusetts' existing public-facing crash portal. BRPC will work in conjunction with Berkshire County's Vision Zero Task Force, which includes local police, EMS, public health, planning, and transportation stakeholders. This HIN Dashboard will improve crash data accessibility for the public and for county traffic safety stakeholders, allowing them to better analyze problem intersections and corridors and work towards making safety improvements.

This project will enhance the accessibility of Berkshire County's data in the Massachusetts Crash Data System. The project will help to meet the unmet recommendations for the data quality control programs for the Massachusetts crash data system from the 2023 Massachusetts Traffic Records Self-Assessment.

Traffic Records Projects

AGA Task: TR-26-06
Budget: $1,300,000

One or more Availability of Grant Funding (AGF) processes will be conducted to provide 405c funding on a competitive basis to measurable projects to improve the accessibility, accuracy, completeness, integration, timeliness, and uniformity (a performance attribute) of one or more of the following six core traffic records systems: crash data system, roadway inventory file, vehicle registration, driver history, citation/adjudication, and EMS/injury surveillance system. Improving these systems will enhance the ability to identify priorities for a diverse range of local, state, and federal traffic safety programs impacting multiple areas of Massachusetts. Permissible projects could also evaluate the effectiveness of efforts to improve these six systems; link these systems with other state or federal data systems; and enhance the ability of stakeholders to observe and analyze local, state, and national trends in crash occurrences, rates, outcomes, and circumstances.

Only units of state and local government or not-for-profit organizations with a public purpose would be eligible to apply for funding. All funded projects must help to meet at least one unmet recommendation from the Commonwealth's 2023 Traffic Records Self-Assessment. The project must also have a minimum of one measurable benchmark, and one performance measure related to a performance attribute of one of the state's six systems. AGF responses will be reviewed and recommended by an OGR-selected AGF review committee and the Executive-Level Traffic Records Coordinating Committee. Those projects approved for funding would then be submitted to NHTSA and EOPSS for review and approval.

Each resulting project will support one or more of the FFY 2024-2026 performance targets listed in the 2024-2026 Massachusetts HSP.

4.2 Non-405-c Funded Projects

Fatality Analysis Reporting System (FARS)

Registry of Motor Vehicles
Budget: $120,000
(NHTSA Cooperative Agreement)

NHTSA will continue to be provided by the Registry of Motor Vehicles (RMV) with motor vehicle-related fatality data from Massachusetts for the national FARS and FastFARS through a dedicated RMV position. This FARS Analyst position will be

supported with NHTSA as well as state funding. The Massachusetts FARS Manual will continue to be enhanced.

Citation Data System

MassDOT/Registry of Motor Vehicles/Merit Rating Board
Budget: $11,575,658
(state funding)

The Merit Rating Board operates a statewide citation data system. See Sections 2.5 and 3.7 for more information. MRB and its partners have many ongoing efforts to increase the timeliness of processing citation submissions received from state and local police, particularly the MACCS project.

Roadway Inventory System Data Completeness and Quality including Route Development Project

MassDOT/Office of Transportation Planning
Budget: $230,638
(state funding)

The MassDOT Office of Transportation Planning (OTP) continues to improve the completeness of the Route Feature Class of the Massachusetts Roadway Inventory System (RIS). Route Feature Class is the network feature layer for the Roadway Inventory File that serves as the backbone for the data organization of all the Road Inventory event layers. More information on MassDOT's roadway data system can be found in Sections 2.2 and 3.4 as well as the following link: https://geodot-massdot.hub.arcgis.com/

MA Crash-Related Injury Surveillance System Project

MDPH Injury Surveillance Program
Budget: $213,380
MassDOT/Highway Division/Traffic Safety Section and Centers for Disease Control and Prevention, State Violence and Injury Prevention Program

This project supports expansion, data quality improvement, and increased utilization of the Massachusetts Crash-Related Injury Surveillance System (MA CRISS). MA CRISS

includes multiple linked traffic records data sources and is maintained by the Injury Surveillance Program (ISP) at the Massachusetts Department of Public Health (MDPH). Current linked data sources are crash, driver license/history, hospital case-mix data (hospital discharge, observation stay, and emergency department (ED) discharge data), and Trauma Registry data. Under this project, ISP developed an algorithm to deterministically link MV injury cases in 2020 V2 and V3 MATRIS with crash data. Cases were linked using patient date of birth, crash date, city/town of crash, residential zip code, and hospital the patient was transferred to. ISP also updated the hospital case-mix crash data linkage algorithm to improve matching cases by person-type and updated the substance use indicators in hospital case-mix data to exclude codes for opioids given for pain after the crash. ISP conducted analysis with MA CRISS data to identify homeless non-motorists injured in a MV crash, people using wheelchairs or motorized mobility scooters struck by MVs, and roadway-related suicides and suicide attempts. This information was shared with the MassDOT Traffic Safety Section and the DPH Suicide Prevention Program.

Integration of Trauma Registry and Crash Data

MDPH Injury Surveillance Program
Budget: $60,000.00
CDC State Violence and Injury Prevention Program funding

In this project, the MDPH Injury Surveillance Program developed an algorithm to deterministically link FFY 2020 Trauma Registry and crash data into the Massachusetts Crash-Related Injury Surveillance System. We utilized patient date of birth, crash/admission date, city/town of crash, residential zip code, and hospital name to link records. We calculated linkage rates by person-type, sex, age group, and race/ethnicity. ISP also conducted a study of 344 pairs of matched records to validate the accuracy of the linkage algorithm. This study showed that the linkage algorithm was highly accurate. ISP also assessed the quality of key variables related to MV crash injuries in Trauma Registry data, including protective device use, airbag deployment, and substance use. Additional analysis was conducted using the Abbreviated Injury Severity (AIS) scores in Trauma Registry data to compare injury severity and most severely injured body regions by person-type. The results of this analysis were shared with the Bureau of Health Care Safety and Quality, which manages Trauma Registry data, and the MassDOT Traffic Safety Section.

4.3 FFY 2025 Projects Completed with 405-c funds

University of Massachusetts – MA Law Enforcement Crash Report E-Manual

Annual Report Task: TR-25-01
Total 405-c Expenditures: $375,657
Total Project Cost: $471,705

UMassSafe worked closely with the Massachusetts RMV on this project, which encountered issues to a delayed deployment of the automated Crash Data System (CDS) extraction process. This caused an extension of the project period into FY26 with a revised end date of December 31st. Recently wrapping up, UMassSafe enhanced the E-Manual by publishing: 1) Updates to the 22 VU data dictionary pages including definitions, data field attributes, representative example imagery added into the field descriptions; 2) Interactive overlays of the updated data dictionary in crash report forms on the various Record Management Systems used by MA law enforcement agencies; and 3) An updated Crash Report Quality Scorecard which includes the new VU fields. UMassSafe also created and distributed promotional materials to stakeholders announcing the completed updates.

This project enhanced the accessibility, completeness, and integration of the crash data systems in Massachusetts. The project helped, in part, to address the unmet recommendations to improve the interfaces of the CDS, specifically with the injury surveillance/EMS data sets, and its data quality control program from the 2023 Massachusetts Traffic Records Self-Assessment.

Lawrence-Motor Vehicle Automated Citation & Crash System (MACCS) Mobile Upgrades

Annual Report Task: TR-25-02
Total 405-c Expenditures: $273,514
Total Project Cost: $341,893

The LPD purchased 32 Getac Tablets and 32 Brother PocketJet thermal printers which were installed into department vehicles in March 2025 with officers receiving training on proper usage. This project helped to address the system's unmet data quality control program recommendation from the 2023 Massachusetts Traffic Records Self-Assessment.

Abington-Motor Vehicle Automated Citation & Crash System (MACCS) Mobile Upgrades

Annual Report Task: TR-25-03
Total 405-c Expenditures: $39,953
Total Project Cost: $49,953

This project was delayed until June 2025 due staff turnover and APD having difficulty locking down their 20% match commitment. Once the town agreed to commit the match, the APD was able to purchase 7 Getac Tablets and Brother PocketJet thermal printers which gave 100% of their vehicle fleet electronic citation reporting capability. While existing officers began e-reporting citations in August, seven new officers graduated from the academy in October and began working in Abington shortly thereafter.

This project enhanced the accuracy, completeness, integration, timeliness, and uniformity of the citation/adjudication and crash data system in Massachusetts. This project helped, in part, to address the unmet data quality control program for the citation/adjudication and crash data systems from the 2023 Massachusetts Traffic Records Self-Assessment.

Massachusetts State Police – Improving Data Accuracy

Annual Report Task: TR-25-06
Total 405-c Expenditures: $136,244

MSP acquired the Bosch and Tesla kits in December 2024 and conducted EDR Analysis Level 2 training for CARS team members. Hyundai/Kia kits and software were received in June 2025. This project enhanced the accessibility of the crash and roadway data systems in Massachusetts. The project helped meet the unmet recommendations for the data quality control programs for the Massachusetts crash and roadway data systems from the 2023 Massachusetts Traffic Records Self-Assessment.

Massachusetts State Police – Enhancing Efficiency

Annual Report Task: TR-25-07
Total 405-c Expenditures: $79,865

MSP acquired laptops and software in January 2025, but ran into vendor supply chain issues related to the purchase of the drones. As a result, the drones were not received

until August 2025 and were issued to licensed operators shortly thereafter. This project enhanced the accuracy and completeness of the crash and roadway data systems in Massachusetts.

Ipswich Police Department – Vulnerable Road Users Crash Safety Data Exchange

Annual Report Task: TR-25-08
Total 405-c Expenditures: $12,287
Total Project Cost: $15,359

IPD purchased and received a Bosch CDR kit in January 2025, with their Crash Reconstructionist attending training related to the usage of the equipment and software. This project enhanced the accuracy and completeness of the crash and roadway data systems in Massachusetts.

4.4 Update on FFY 2025 Performance Targets

Below is an update on the work done to meet the performance targets in the FFY 2025 Massachusetts Annual Grant Application and its Strategic Plan for Traffic Records Improvement:

Traffic Records Performance Target #1 – From January-May 2025, the Abington Police Department (APD) submitted 570 citations to the MA citation data system, with 49% of these citations being electronically reported to the system through MACCS, and the balance via paper submissions. For January-May 2026, the APD aims to electronically report 85% of its citations through MACCS to the citation data system, an increase of 36%.

Progress – This project faced significant delays due to the town's initial reluctance to commit to the required 20% match. Once committed, APD worked with OGR to revise the benchmark and performance measures and the tablets, printers, and accessories were ordered in June 2025. Thus far in 2026, APD has issued 112 citations with 92% being submitted electronically.

Traffic Records Performance Target #2 – From January-June 2024, the Lawrence Police Department (LPD) submitted 2,892 citations to the MA citation data system, with 40.70% of these citations being electronically reported to the system through MACCS, and the

balance via paper submissions. For April-September 2025, the LPD aims to electronically report 60% of its citations through MACCS to the citation data system, an increase of nearly 20%, with the remaining balance through paper submission.

Progress – 405-c funds were used to purchase and install mobile data terminals and printers in 32 LPD vehicles with officers receiving the necessary training in March 2025. For April-September 2025, the LPD submitted 2,483 citations to the MA citation data system, 61.70% of which were submitted electronically via MACCS.

Traffic Records Performance Target #3: In CY 2023, based on MA crash data system, the percentage of vulnerable road user fields that had missing data was 54.7% (2,846 of 5,201 per MassDOT Impact tool). By 12/31/26, UMassSafe aims for a 10.8% reduction of vulnerable road user fields with missing data, to 43.9% (based on MassDOT Impact tool).

Progress – TBD for one-year period after project completion on 12/31/2025

Traffic Records Performance Target #4: From October – December 2022, MSP-CARS responded to 30 crashes involving a vulnerable user, with 16% of these imaged on scene from data collected from EDRs. For June – September 2025, MSP aims to image on scene 70% of the vulnerable road user crashes its CARS team responds to, an increase of 54%.

Progress – MSP purchased and received 22 Bosch CDR900 kits and 3 EDR Tesla, and members of their CARS team received EDR Analysis Level 2 training. Additional Hyundai/Kia kits and software were received in June 2025. From June-September 2025, MSP-CARS responded to 25 crashes involving a vulnerable road user with 78% imaged on scene from data collected from EDRs.

Traffic Records Performance Target #5: From January-June 2024, the Ipswich Police Department (IPD) downloaded information from zero crashes because it lacked the equipment capability to do so. For January-June 2025, IPD will purchase a Bosch CDR kit and utilize it in 75% of the crashes where a download would be applicable.

Progress – IPD purchased and received the Bosch CDR kit, and their Crash Reconstructionist received training from the MSP-CARS. For January-June 2025, IPD has mapped 100% of the crash scenes warranting a reconstruction investigation.

Traffic Records Performance Target #6: In 2023, MSP-CARS responded to 368 incidents; of these, 183 (50%) were forensically mapped by the 8 drones currently

deployed by CARS. MSP shall purchase 6 new drones and aim to forensically map 64% of crashes that CARS responds to for January-June 2025, an increase of 14%.

Progress – During September 2025, the first month for which the new drones were available, CARS responded to 32 crashes, of which 72% were forensically mapped by a UAS.