



State of Connecticut

Traffic Records Assessment

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National Highway Traffic Safety Administration

Technical Assessment Team





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Introduction

The Traffic Records Program Assessment Advisory and this peer assessment provide voluntary guidance and describe the ideal traffic records systems from which States can assess their capabilities. The benefit for States to align with the description of the ideal traffic records system is to ensure that high-quality traffic safety data is collected, analyzed, and made available for decision making to reduce injuries and deaths caused by crashes. The ideal described in the Advisory is aspirational, and there is no expectation that States align perfectly with this ideal system.

This Traffic Records Program Assessment is the second of the online question-and-answer evaluations of Connecticut's Traffic Records System. This review builds on the previous assessment conducted five years ago. Since the last assessment, Connecticut has made substantial improvements in many aspects of the traffic records system. Compared to the 2017 assessment, the ratings contained an additional 42 meets the ideal ratings and 23 fewer does not meet ratings.

The Connecticut Traffic Records Coordinating Committee (TRCC) sets an example for other States. The TRCC management and Strategic Planning modules both received ratings of meets the ideal for every question. Including IT representatives on the TRCC helps them to move technology projects forward and keep apprised of new technology. Connecticut's comprehensive traffic records inventory helps to encourage cooperation and data linkage. The TRCC has a Data Integration subcommittee that facilitates data sharing and access. This is another area in which Connecticut excels.

The Crash system has also made improvements and will serve the State well in data-driven decision making. The partnership with the University of Connecticut (UConn) includes data quality measurement and enhanced data analysis capabilities for stakeholders. There are opportunities for data linkage and enhancements in crash locating.

The assessors also rated the Roadway system very high, all but one question earned a meets ideal rating. CTDOT's Transportation Enterprise Data (TED) contains several integrated transportation datasets, and the department has done a good job with documentation.

The State Department of Motor Vehicles is the custodian for both the Driver and Vehicle systems. The Driver system incorporates national standards and has well-documented procedures and processes. The majority of the Driver system ratings meet the ideal. The Vehicle system operates in real-time, so information is immediately available to those who need it.

Connecticut has a unified court system and maintains a Centralized Infractions Bureau database. The Connecticut Online Law Enforcement Communications Teleprocessing (COLLECT) system provides real-time online access to driver and vehicle histories. The State tracks several data quality performance measures.

Connecticut has all five major components of a traffic records injury surveillance system (i.e., EMS, trauma registry, emergency department, hospital discharge, vital records). The EMS data system update to NEMSIS v. 3.5 provides an opportunity to develop a data dictionary and create data quality performance measures.

Overall, the Connecticut traffic records program and the TRCC exhibit many best practices, and the State should be proud of the advances made. The State is encouraged to maintain this high level of quality





through increased data linkage and performance measurement.

Assessment Results

A traffic records system consists of data about a State’s roadway transportation network and the people and vehicles that use it. The six primary components of a State traffic records system are: Crash, Driver, Vehicle, Roadway, Citation/Adjudication, and Injury Surveillance. Quality traffic records data exhibiting the six primary data quality attributes—timeliness, accuracy, completeness, uniformity, integration, and accessibility—is necessary to improve traffic safety and effectively manage the motor vehicle transportation network, at the Federal, State, and local levels. Such data enables problem identification, countermeasure development and application, and outcome evaluation. Continued application of data-driven, science-based management practices can decrease the frequency of traffic crashes and mitigate their substantial negative effects on individuals and society.

State traffic records systems are the culmination of the combined efforts of collectors, managers, and users of data. Collaboration and cooperation between these groups can improve data and ensure that the data is used in ways that provide the greatest benefit to traffic safety efforts. Thoughtful, comprehensive, and uniform data use and governance policies can improve service delivery, link business processes, maximize return on investments, and improve risk management. NHTSA recognizes the benefit of independent peer reviews for State traffic records data systems. These assessments help States identify areas of high performance and areas in need of improvement in addition to fostering greater collaboration among data systems.

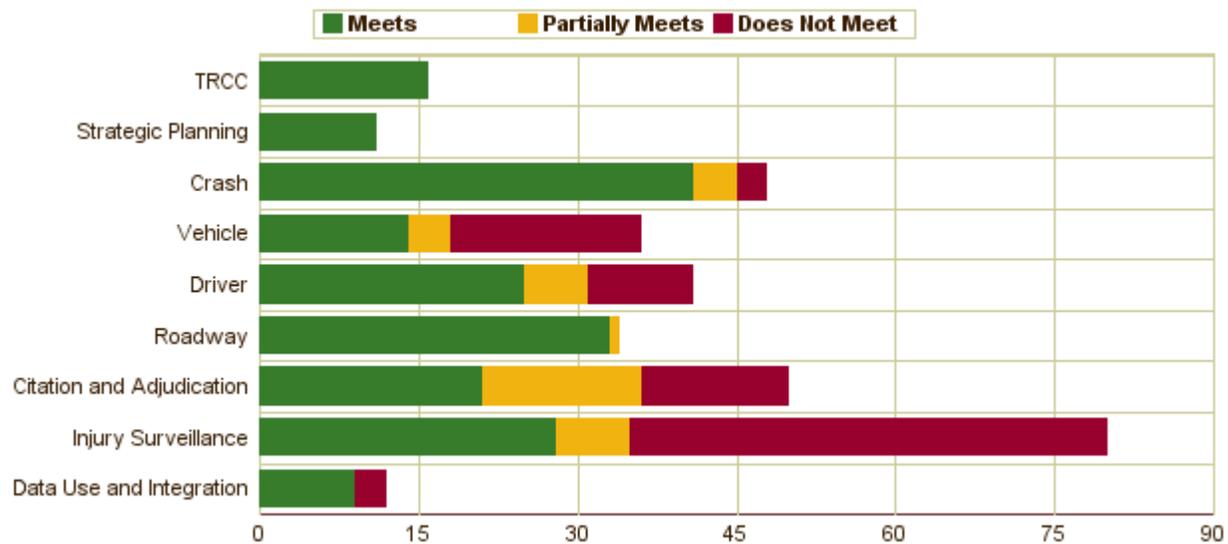
Out of 328 assessment questions, Connecticut met the Advisory ideal for 198 questions (60%), partially met the Advisory ideal for 37 questions (11%) and did not meet the Advisory ideal for 93 questions (28%).

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





Figure 1: Rating Distribution by Module



States are encouraged to use the recommendations, considerations and conclusions of this report as a basis for the State data improvement program strategic planning process, and are encouraged to review the report at least annually to gauge how the State is addressing the items outlined.

Recommendations & Considerations

According to 23 CFR Part 1300, §1300.22, applicants for State traffic safety information system improvements grants are required to maintain a State traffic records strategic plan that—

“(3) Includes a list of all recommendations from its most recent highway safety data and traffic records system assessment; (4) Identifies which such recommendations the State intends to implement and the performance measures to be used to demonstrate quantifiable and measurable progress; and (5) For recommendations that the State does not intend to implement, provides an explanation.”

The following section provides Connecticut with the traffic records assessment recommendations and associated considerations detailed by the assessors. The broad recommendations provide Connecticut flexibility in addressing them in an appropriate manner for your State goals and constraints. Considerations are more detailed, actionable suggestions from the assessment team that the State may wish to employ in addressing their recommendations. GO Teams, CDIPs (Crash Data Improvement Program) and MMUCC Mappings are available for targeted technical assistance and training.

TRCC Recommendations

None

Considerations for implementing your TRCC recommendations

- Given that all of the TRCC elements meet the ideal standard, there are really no considerations to recommend. If there is one potential improvement to make, it would be to capture more detail on the





discussion between TRCC meeting attendees in the meeting notes for future reference.

Summary

Connecticut has a well-formed TRCC that includes all the right representation for the six core data systems, with both technical representation and executive TRCC members who direct their respective agency resources. There are appropriate IT members on the TRCC who are involved in the development of projects.

The TRCC Charter authorizes the TRCC, outlines its mission, goals, and responsibilities to annually approve the strategic plan and performance measures. It also identifies and spells out responsibilities for the TRCC Chair and Traffic Records Coordinator.

The TRCC is scheduled to meet six times a year, which is more often than the required frequency to qualify for 405(c) funding. These meetings allow agencies to seek feedback from the members on major TRCC related projects and provide time for meaningful coordination between agencies. The TRCC reviews all projects submitted for funding and votes on funding allocation of the 405c grant funds, as well as recommends projects funded by 402, 405(c), SaDIP, and FMCSA. They support the University of Connecticut Transportation Research Center in providing training and technical assistance.

Connecticut has created a comprehensive traffic records inventory document with traffic records data sources, system custodians, software platforms, programming language, data elements and attributes, linkage variables, linkages useful to the State, and data access policies.

With all of the elements meeting the ideal standard, the TRCC should be very proud of having the ideal TRCC structure and documentation!

Strategic Planning Recommendations

None

Considerations for implementing your Strategic Planning recommendations

- Given that all of the Strategic Planning elements meet the ideal standard, there are really no considerations to recommend.

Summary

The Connecticut Traffic Records Strategic Plan (TRSP) is comprehensive and contains many of the elements recommended in the Advisory. The Plan outlines all of the countermeasures and the performance measures the State has implemented for continued improvement.





The TRSP includes all of the deficiencies recommended from the most recent Traffic Records Assessment that sets the framework for improving all aspects of the State's traffic records system. The State has described the process used to update the Plan annually but could benefit from adding the detailed process to the Plan.

The Connecticut TRCC is comprised of representatives that oversee both technical and executive aspects of all six traffic records systems that are included in the regular meetings. The TRCC designates a project manager for each project that is responsible to update the group until the project is completed, which keeps the TRCC included in the progress.

The TRCC Strategic plan includes projects that are using new technology to improve safety issues and the process to develop these projects such as the Transportation Enterprise Database and the GIS data visualization data mapping. Connecticut has a comprehensive strategic planning process that will continue to improve the State's traffic records.

Crash Recommendations

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

Considerations for implementing your Crash recommendations

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

Summary

The Connecticut Department of Transportation (CTDOT) and its partners have made great strides in improving the crash reporting and crash data management processes over the last few years. The Crash system under the guidance of the CT-TRCC and State safety partners has evolved into a system that meets





almost all the components of the Traffic Records Program Assessment Advisory, 2018 Edition.

Some notable improvements have been fully implemented and serve the State well in their safety data-driven decision making. Connecticut collects and submits 100% of statewide crash data electronically. Connecticut has implemented and is reportedly fully compliant with the NHTSA-supported MMUCC version 4 crash form and database. The State has put in place a formal, comprehensive crash quality management program as described in the Advisory. The crash quality management program includes Performance measures and reporting for five of the six quality characteristics. The State implemented a statewide crash data repository at the University of Connecticut (UConn) that supports data quality measurement reports, enhanced data analysis capabilities, and the flexibility to put in place system improvements as they are identified by safety stakeholders. The State implemented a series of edit checks and validation rules in the field data collection systems that have significantly improved crash data accuracy in the last few years.

Connecticut is commended for the above accomplishments and has used a successful phased improvement process to obtain its goal of a state-of-the-practice crash records system. This phased approach would not have been as successful without the strategic partnership between CTDOT, the CT-TRCC, and UConn. UConn has been critical to the system's success through its efforts in developing the State's Transportation Research Center, developing and managing the statewide crash data repository, and continuing to provide support to the State's traffic safety community through efforts in data entry, geocoding, analysis, and system enhancements.

The continuous system improvement experienced by Connecticut requires a strategic approach, ongoing planning, and constant vigilance to the system's health through its performance reporting. The State is encouraged to monitor the system's status and continue collaborative efforts by safety stakeholders to maintain and improve an already proficient crash records system.

There are a few opportunities identified through the assessment that the State might consider for improvement. There are already efforts in place to establish real-time interfaces between the crash system and the driver, vehicle, citation/adjudication, and injury surveillance systems. Completing and implementing these interfaces will enhance data entry processes and improve data quality. As the interfaces are put in place, crash system documentation might be improved to identify data elements populated in the crash system from other systems by the interfaces.

Crash locating is based on the original crash location being collected manually by law enforcement and submitted from the crash scene. Automated tools used by quality control staff assist in their review and correction of any errors. If these tools, in the form of smart mapping technology, were deployed to the electronic field data collection systems, a more accurate crash location could be collected at the crash scene by law enforcement by using the roadway system interface to auto-populate the location data elements in the crash system. CTDOT makes roadway system data available to the crash data collection vendors, but they are not required to use the data. The State is encouraged to renew their efforts to deploy this





technology to the field.

Vehicle Recommendations

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

Considerations for implementing your Vehicle recommendations

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

Summary

The vehicle data system for the State of Connecticut has some excellent attributes, first and foremost that it operates in real-time, providing access to vehicle data as quickly as possible to those with the need and authority to view it. The State Department of Motor Vehicle is the Custodian of the vehicle data. Vehicle identification numbers in the system are verified with VINA software and the VINs are sent real-time to the National Motor Vehicle Title Information System, which is also queried prior to issuance of any title within the State. Out of State titles transferred to Connecticut maintain the brand history from prior states of record.

Connecticut uses AAMVA-recommended vehicle brands and is a participant at the enhanced level in the Performance Registration Management System (PRISM). Additionally, there is a complete and useful data dictionary and the data system has edit checks embedded. The DMV has developed written procedures for various transactions performed within the system.

There are potential improvements that can be made to the system itself and its management. Most important is linkage with the driver system and usage of the same conventions for personal identifiers for vehicle owners and drivers.

The addition of a barcode to the registration document would allow for the quick, easy, and accurate addition of vehicle ownership information to electronic crash reports and citations by law enforcement





officers.

Development of process flows for various types of transactions helps to ensure that all staff are aware of the correct steps in every process and allows for the review of processes to remove inefficiencies and redundancies.

Sample-based audits and trend analyses help to ensure that the data are correct and that processes are performed correctly. Another way to make this determination is to develop performance measures as part of a genuine data quality management program. The aspects of quality data are different than the aspects of employee efficiency and each should be managed. Data quality can tend to degrade very slowly as a result of changes in staff, legislation, or procedures and can go unnoticed until it is difficult to mitigate.

Measuring and sharing data quality with the TRCC allows for upgrades or replacements of data systems when necessary, as deficiencies will become readily apparent.

Driver Recommendations

6. Improve the data dictionary for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
7. Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Driver recommendations

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

Summary

The Connecticut Department of Motor Vehicles has custodial responsibility for the driver system, including commercial license driver data. The State's driver data system captures and maintains all license and permit issuance history including endorsements, novice driver and motorcycle training as well as driver improvement courses. All driver information is maintained in the system to accommodate interaction with the National Driver Register's PDPS and CDLIS.





The Driver Data System is documented in a data dictionary with definitions for each field, however, the dictionary should be revised and enhanced to provide users with specific values that can be used in fields instead of field lengths. The System has limited edit checks and validations as documented in the dictionary. Updates to the dictionary occur when there are system changes due to changes in the Federal or AAMVA systems that are interfaced with or when legislation is implemented. The State would benefit from developing a policy statement, so everyone is fully aware of when the dictionary updates are required.

The State's procedures and processes appear to be defined, maintained, and revised or updated when appropriate. System operators perform a variety of driver records transactions and are guided, as needed, by two documents titled DMV Operator Control Procedures and the Driver Services Procedures. The two documents define the process for handling errors. The State maintains flow diagrams showing how the data is stored in the data warehouse and the integration of the driver system with other data systems.

There are several processes such as facial recognition and examiner training to aid in the prevention of license fraud. Additionally, the DMV's Document Integrity Unit conducts random and requested audits on third parties, the internal staff of the DMV, and on the driver data.

There is not a DUI tracking system in the State of Connecticut, but the Division does have administrative authority to suspend licenses based on a DUI arrest and receives the necessary data from law enforcement electronically. The driver system also receives court convictions electronically from the Court.

Connecticut's DMV uses the AAMVA CDLIS Timeliness and Accuracy Report to monitor some performance measures for their commercial driver data. The State is strongly encouraged to develop performance measures for the other data that is in the driver system so that errors and data enhancements can be recognized and implemented.

Roadway Recommendations

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

Considerations for implementing your Roadway recommendations

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

Summary

Connecticut DOT is responsible for approximately 4,500 miles of public roads. This is just over 20% of public roads. The State has two linear referencing systems for all public roads. The Roadway Inventory System (RIS) is a non-geospatial LRS that uses unique Route/Road IDs and milepoints. The AssetWise





Linear Referencing Services (AWLRS) is a geospatial LRS that also uses unique Route/Road IDs. Segments and milepoints are adjusted so that the geospatial LRS (AWLRS) and non-geospatial LRS (RIS) match. CTDOT uses both of these LRS systems to locate traffic and roadway elements. The older non-geospatial LRS (RIS) utilizes a custom application to organize and edit data elements while the new geospatial LRS integrates roadway and traffic data elements within the AWLRS environment. CTDOT receives crash data in multiple ways including GPS coordinates, location description, and within the crash diagram. This information is used to assign the appropriate route/road milepoint or locate on the geospatial LRS using the GPS coordinates.

CTDOT's Transportation Enterprise Data program (TED) operates as a data warehouse. TED contains not only location data, but also road and traffic element data such as the bridge information system (InspectTech), the project document management system (ProjectWise), traffic signal control areas, and the maintenance paving vendor-in-place (VIP) program.

Connecticut integrates crash and roadway databases and uses this information to conduct safety analysis and planning. A safety analysis database hosted at the University of Connecticut (UConn), the Connecticut Roadway Safety Management System (CRSMS), integrates crash and roadway data from the most current available version of the roadway file. CTDOT makes the data available to UConn through TED. UConn is able to deploy key components of its safety analysis tool including network screening and diagnosis of crash and roadway attributes using this information. The DOT also has a GIS-enabled intersection viewing tool that captures MIRE-related intersection attributes. Users can filter data by intersection type and/or roadway characteristics. High crash locations can then be added as an additional layer for further analysis.

On the planning side of things, an application known as ATLAS tracks the phases of capital projects from planning until completion. This allows design engineers to pull in all LRS and roadway-related features when creating their original project designs. Changes to the network as a result of the capital projects are fed back to the roadway file and then validated through field inspections.

MIRE FDEs are collected for all public roadways geospatially located. The state cannot locate MIRE attributes on Federal and Tribal roads as it currently doesn't have these roads geospatially located. These elements as well as other MIRE elements are documented in the Asset Metadata model and are available to all CTDOT staff and other safety data users. Data received from the local or municipal sources are entered into the system using the AWLRS and RIS data dictionaries ensuring that the data not collected by the State complies with the data dictionary. Steps for incorporating new elements include an asset readiness assessment. CTDOT has created a form to include the necessary considerations and the potential flow of collection and maintenance of the new element.

Historical data is archived in two different ways. AWLRS has a feature that adds end dates when changes are made that locks in the date of the activity. The system date can then be modified to reflect the date that is being looked at. The RIS is backed up on an annual basis. This creates a snapshot on December 31st each year which has a year stamp attached. This is then archived and can be accessed for future report





generation.

Since Connecticut is such a small state, local agencies are not responsible for collecting much of the roadway information. The process for integrating the roadway data collected by the local agencies is documented. Agencies provide the information using a form that was created by the State. The information is then entered into the database by State personnel in the Roadway Inventory Section at the DOT.

The State has a field collection manual that provides guidance for those roadway elements that are collected using the non-geospatial LRS. The State also utilizes ARNOLD requirements, HPMS guidelines, and the MIRE field collection guidebook to help with the proper collection within the geospatial LRS.

A variety of coding methodologies are used for the roadway information systems. They are convertible and compatible and include GPS decimal degrees, GPS ‘degrees, minutes, seconds,’ route/road mile point, approximate mile point, or approximate GPS point. This also includes the local roadway system information as it is mostly collected by the State. Discrete roadway information systems are linked in the TED system based on the unique route/road milepoints on the network.

Roadway information data is available through a link on the Connecticut DOT webpage. Project location is accessible through this link as well as roadway mapping and volume data. The Connecticut Transportation Safety Research Center developed a dashboard that allows the querying of crash data as well as some road network attributes. Publicly available maps that include functional classification and other information are also available.

A check-out/check-in process is used when changes are made to the network of the RIS which needs office approval. Once newly collected information has been “checked back in”, an audit is done to ensure uniformity, quality, completeness, and accuracy of the data. For the AWLRS, the Transportation Intelligence Gateway (TIG) runs a report to identify gaps or errors in critical data elements. Errors involving geometry and measure information are prioritized as they are considered critical to the integrity of the system.

Quality control information is shared via weekly meetings with the roadway inventory field data collectors as well as the TED development group. The TED meetings include updates from the individual data asset stewards on the quality and asset integration.

The State has established performance measures with goals for timeliness, accuracy, completeness, uniformity, accessibility, and integration. These are included in the Traffic Records Strategic Plan and are updated annually. Data quality management reports are also included in the Traffic Records Strategic Plan.

The State of Connecticut has an excellent roadway data system. They have done a great job providing documentation of their system.





Citation and Adjudication Recommendations

9. Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
10. Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
11. Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Citation and Adjudication recommendations

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

Summary

The Centralized Infractions Bureau (CIB), part of the Court Operations Unit of the Judicial Branch of the State of Connecticut oversees infractions from every law enforcement agency in the state, pursuant to Connecticut General Statutes Section 51-164n. CIB issues unique citation numbers utilizing a classic Mod7 check-digit methodology. This bureau also issues unique numbers through the electronic citation system. Approximately 80 percent of citations are issued electronically.

Citation issuances and dispositions are stored in the Centralized Infractions Bureau database, which serves as the court case management system. Connecticut has a unified court system, and all citations are disposed through the judicial branch. Dispositions are transmitted electronically to the Department of Motor Vehicles for posting on the driver record.

The Connecticut On-line Law Enforcement Communications Teleprocessing (COLLECT) system provides real-time on-line access to driver and vehicle histories. Over 180 law enforcement agencies, parole agencies, probation agencies, and courts within the State participate in and have access to COLLECT.

The State reports DUIs and other vehicular/driving felonies following UCR reporting guidelines and uses NIEM guidelines for XML transmittals. The Judicial Branch uses NSCS standards for court records.

The sample data dictionary provided included table layouts and field types and values; it did not include





other typical elements of a data dictionary, including plain language field descriptions, data criteria and edits, or linkages to other data sources. Clearer and more complete documentation would improve its usability.

The court case management system data dictionary is updated as laws change. The data dictionary was last updated in October 2021 to reflect new laws regarding cannabis. The Office of the Chief Court Administrator is responsible for updates to the citation tracking/court case management system. Updates to the data dictionary sync with updates to guidance provided to law enforcement agencies by mail and email.

Citations can be tracked from issuance to disposition and recording to the driver record, with information from the court case management system (citation and adjudication tracking), eCitation, law enforcement agencies, and the records of the Department of Motor Vehicles.

Dispositions, including resolution of appeals, deferrals, and dismissals, are posted to the driver record. All payments are entered as convictions, and it is difficult to discern from the driving record whether the offender paid or pled. The Department of Motor Vehicles applies administrative sanctions based on the court action; it does not appear that administrative sanctions are applied outside of court action.

Juvenile offenses can be monitored through ad hoc reporting. The State does not have a separate impaired driving tracking system.

The Judicial Branch does not purge its records. Records are maintained electronically indefinitely and are accessible to requesters based on the statutorily defined public accessibility. Purging records is a best practice for record maintenance, helping mitigate maintenance costs and ensure data quality.

Access to the court case management system is managed through development standards and access authorization. Protocols for determining the level of access to edit or modify records, for example, were not provided.

Timeliness, accuracy, and uniformity performance are measured and monitored, while integration, accessibility, and completeness are not. Timeliness for citations is measured in terms of days from issuance to entry into the database. Timeliness for adjudication is measured in terms of days from issuance to adjudication, which is a process measure and not a data measure. The State could reassess performance measures, as measures and targets can help identify system and process improvements for data quality. This is important when considering strategic investments.

Although the State is audited, the example provided is a financial audit, not a data audit. It is unknown if sample-based audits are periodically performed to review data quality. Data quality management reports are not provided to the TRCC regularly. Both sample-based audits and review of data reports by the TRCC are methods to improve data quality.





Injury Surveillance Recommendations

12. Improve the data dictionary for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
13. Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
14. Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Injury Surveillance recommendations

- Use the update of the EMS data system to NEMSIS v. 3.5 as an opportunity to complete the development of a data dictionary and document edit checks, validation rules, and error-correcting processes.
- Continue to support the trauma registry and its efforts to make the data accessible for analysis.
- Develop comprehensive data quality management systems for each component of the Injury Surveillance System. It is important that such systems include the establishment and tracking of performance measures.

Summary

An injury surveillance system provides information about the characteristics and trends in non-fatal injuries, identifies emerging injury problems, identifies at-risk persons, and informs decision making for programs and policies. An ideal statewide Injury Surveillance System (ISS) is minimally comprised of data from five core components: pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and vital records. This information is invaluable when determining the injury severity, costs, and clinical outcomes of the individuals involved.

Connecticut has all five major components of a traffic records injury surveillance system and the available data is accessible to both traffic safety stakeholders, as well as the public through either aggregate summary tables or agency-approved data use agreements. The Connecticut Department of Public Health's (DPH) Statistics and Surveillance Section utilizes the hospital data systems and vital records information to quantify the burden of injury. Each of the five systems is governed by State statutes to ensure consistency, data governance, and stability of the programs.

The pre-hospital data collection system, known as the Connecticut EMS Tracking and Reporting System (CEMSTARS), is managed by the DPH. The state system is NEMSIS-compliant to version 3.4, with plans to update to 3.5 in the near future, and utilizes the ImageTrend platform. Past efforts to create a data dictionary have been stalled due to a lack of resources, so the State only has a partial document. Agencies may submit data to the State in a quarterly aggregate format or real-time incident level data. Patient care reports are also transmitted to the receiving hospital and maintained by the submitting agency's data collection vendor. CEMSTARS includes edit checks and validation rules, but they have not been





implemented on a mandatory level. An analytical report is shared with the Traffic Records Coordinating Committee (TRCC), but it does not include quality metrics. CEMSTARS would benefit from a robust data quality management system to include feedback loops between data managers, collectors, and users, means to return records for correction and resubmission, and regular trend analyses to track the health of the system using performance measures.

The statewide emergency department and hospital discharge data systems are managed by the Office of Health Care Access (OHCA). Data from both systems is shared with the DPH and may be accessible to outside parties upon approval from the DPH Health Investigations Committee. The Connecticut Hospital Association facilitates data collection and error correction with the State and reporting facilities. Policies, timelines, and thresholds have been established for submitting the data, but no performance measures have been developed or quality reports shared with the TRCC. It is also unclear if hospital records have been used for a traffic safety analysis, but there are plans for sharing records with the University of Connecticut Transportation Institute for an integration project.

There is a statewide trauma registry, which is also managed by the DPH. Although trauma registry data has not been used in traffic safety analyses, the system complies with the National Trauma Data Bank (NTDB) standard per State. The system contains limited edit checks and validation rules and performance measures and metrics have not been established. The trauma registry has gone through significant changes in the last five years and there are many plans to build a quality control process and analyze the data more. As key updates are made to the system, that information and data quality reports should be shared with the TRCC.

The DPH is responsible for managing all vital statistics data including death certificates, which are housed in the Database Application for Vital Events (DAVE). As with most other States, Connecticut collects death certificates and submits all data to the National Center for Health Statistics (NCHS) for quality review. The State uses a statewide electronic death registration system (EDRS) that contains many edit checks and validation rules beyond the NCHS standard. Data is available for analysis and a data-sharing agreement is in place between the Department of Transportation and DPH.

Data Use and Integration Recommendations

None

Considerations for implementing your Data Use and Integration recommendations

- Expand data integration activities to include the vehicle, citation, and driver files.

Summary

Connecticut's TRCC promotes data integration through its Data Integration Subcommittee. Several Memoranda of Understanding (MOUs) are in place to facilitate data integration activities. The University of Connecticut (UConn) Transportation Safety Research Center (CTSRC) leads traffic safety integration





efforts and regularly provides updates to the TRCC and Data Integration Subcommittee. Examples of current integrated data include crash, EMS, and trauma registry data used to evaluate child passenger safety and motorcycle helmet laws; crash and roadway data that allow for the importation of roadway elements into the crash file; and crime, citation, and toxicology data which were included in a technical report for Advancing the Behavioral Safety Analytical Tools Capabilities of the Connecticut Department of Transportation. Opportunities to increase the number of integrated databases exist. The crash file has yet to be integrated with the vehicle, citation, and driver files. Integrating these databases can allow for new means for identifying at-risk populations for unsafe driving behaviors and targeted interventions.

Connecticut is to be commended on data access. The Connecticut Crash Data Repository provides a publicly available web-based query tool to analyze crash data. Additionally, the CTSRC has five full-time staff who respond to data requests and make custom reports for decision makers, individuals, and agencies. Non-identifiable integrated crash and roadway data is also available online. Behavioral program managers make use of these resources as well as other in-state and federal data sources for problem identification and evaluating projects.





Assessment Rating Changes

For each question, a rating was assigned based on the answers and supporting documentation provided by the State. The ratings are shown as three icons, depicting ‘meets’, ‘partially meets’, or ‘does not meet’. The table below shows changes in ratings from the last assessment for all the questions that were unchanged (N=223). This does not include new questions (N=21) and questions that can be partially mapped to questions from the last assessment (N=84).

Legend:

| System | Rating Changes from Last Assessment | | |
|---|--|---|---|
| |  Meets |  Partially Meets |  Does not Meet |
| Traffic Records Coordinating Committee | | | |
| Traffic Records Coordinating Committee | +1 | -1 | 0 |
| Strategic Planning for the Traffic Records System | | | |
| Strategic Planning for Traffic Records Systems | +3 | -1 | -2 |
| Crash Data System | | | |
| Description and Contents of the Crash Data System | +1 | -1 | 0 |
| Applicable Guidelines for the Crash Data System | 0 | 0 | 0 |
| Data Dictionary for the Crash Data System | 0 | 0 | 0 |
| Procedures and Process Flows for Crash Data Systems | 0 | 0 | 0 |
| Crash Data Systems Interface with Other Components | +1 | -1 | 0 |
| Data Quality Control Programs for the Crash System | 0 | +2 | -2 |
| Vehicle Data System | | | |
| Description and Contents of the Vehicle Data System | 0 | 0 | 0 |
| Applicable Guidelines for the Vehicle Data System | 0 | 0 | 0 |
| Vehicle System Data Dictionary | +2 | 0 | -2 |
| Procedures and Process Flows for the Vehicle Data System | +1 | -1 | 0 |
| Vehicle Data System Interface with Other Traffic Record System Components | 0 | 0 | 0 |
| Data Quality Control Programs for the Vehicle Data System | -1 | +2 | -1 |
| Driver Data System | | | |
| Description and Contents of the Driver Data System | 0 | 0 | 0 |
| Applicable Guidelines for the Driver Data System | 0 | 0 | 0 |
| Data Dictionary for the Driver Data System | +1 | -1 | 0 |
| Procedures and Process Flows for the Driver Data System | +5 | -3 | -2 |
| Driver System Interface with Other Components | +1 | -1 | 0 |
| Data Quality Control Programs for the Driver System | +3 | -2 | -1 |





| System | Rating Changes from Last Assessment | | |
|---|---|--|--|
| |  Meets |  Partially Meets |  Does not Meet |
| Roadway Data System | | | |
| Description and Contents of the Roadway Data System | +1 | -1 | 0 |
| Applicable Guidelines for the Roadway Data System | +2 | -2 | 0 |
| Data Dictionary for the Roadway Data System | +2 | -2 | 0 |
| Procedures and Process Flows for the Roadway Data System | 0 | 0 | 0 |
| Intrastate Roadway System Interface | 0 | 0 | 0 |
| Data Quality Control Programs for the Roadway Data System | +1 | -1 | 0 |
| Citation and Adjudication Systems | | | |
| Description and Contents of the Citation and Adjudication Data Systems | 0 | 0 | 0 |
| Applicable Guidelines and Participation in National Data Exchange Systems for the Citation and Adjudication Systems | +1 | -1 | 0 |
| Data Dictionary for the Citation and Adjudication Data Systems | +1 | +3 | -4 |
| Procedures and Process Flows for the Citation and Adjudication Data Systems | +1 | 0 | -1 |
| Citation and Adjudication Systems Interface with Other Components | 0 | 0 | 0 |
| Quality Control Programs for the Citation and Adjudication Systems | 0 | 0 | 0 |
| Injury Surveillance Systems | | | |
| Emergency Medical Systems (EMS) Description and Contents | -1 | -3 | -4 |
| EMS – Guidelines | 0 | 0 | -3 |
| EMS – Data Dictionary | -2 | -1 | -1 |
| EMS – Procedures & Processes | -1 | -2 | -5 |
| Injury Surveillance Data Interfaces | 0 | 0 | 0 |
| EMS – Quality Control | 0 | -1 | +1 |
| Emergency Department and Hospital Discharge – Quality Control | +1 | 0 | -1 |
| Trauma Registry – Quality Control | +1 | -2 | +1 |
| Vital Records – Quality Control | 0 | +1 | -1 |
| Emergency Department - System Description | +1 | 0 | +1 |
| Emergency Department – Data Dictionary | +1 | 0 | 0 |
| Emergency Department – Procedures & Processes | +2 | 0 | 0 |
| Hospital Discharge – System Description | +2 | 0 | +1 |





| System | Rating Changes from Last Assessment | | |
|--|---|--|--|
| |  Meets |  Partially Meets |  Does not Meet |
| Hospital Discharge – Data Dictionary | +1 | 0 | 0 |
| Hospital Discharge – Procedures & Processes | +2 | 0 | 0 |
| Emergency Department and Hospital Discharge – Guidelines | 0 | 0 | +1 |
| Emergency Department and Hospital Discharge – Procedures & Processes | +1 | 0 | 0 |
| Trauma Registry – System Description | 0 | 0 | +2 |
| Trauma Registry – Guidelines | +2 | 0 | 0 |
| Trauma Registry – Data Dictionary | 0 | +1 | 0 |
| Trauma Registry – Procedures & Processes | +1 | 0 | +1 |
| Vital Records – System Description | 0 | +1 | 0 |
| Vital Records – Data Dictionary | +1 | 0 | 0 |
| Vital Records – Procedures & Processes | +1 | 0 | 0 |
| Injury Surveillance System | 0 | 0 | 0 |
| Data Use and Integration | | | |
| Data Use and Integration | +2 | -1 | -1 |
| | | | |
| <i>Total Change</i> | +42 | -19 | -23 |





Methodology and Background

In 2018, the National Highway Traffic Safety Administration updated the *Traffic Records Program Assessment Advisory* (Report No. DOT HS 811 644). This *Advisory* was drafted by a group of traffic safety experts from a variety of backgrounds and affiliations, primarily personnel actively working in the myriad State agencies responsible for managing the collection, management, and analysis of traffic safety data. The *Advisory* provides information on the contents, capabilities, and data quality of effective traffic records systems by describing an ideal that supports data-driven decisions and improves highway safety. Note that this ideal is used primarily as a uniform measurement tool; it is neither NHTSA's expectation nor desire that States pursue this ideal blindly without regard for their own unique circumstances. In addition, the *Advisory* describes in detail the importance of quality data in the identification of crash causes and outcomes, the development of effective interventions, implementation of countermeasures that prevent crashes and improve crash outcomes, updating traffic safety programs, systems, and policies, and evaluating progress in reducing crash frequency and severity.

The *Advisory* is based upon a uniform set of questions derived from the ideal model traffic records data system. This model and suite of questions is used by independent subject matter experts in their assessment of the systems and processes that govern the collection, management, and analysis of traffic records data in each State. The 2018 *Advisory* reduces the number of questions, eases the evidence requirements, and appends additional guidance to lessen the burden on State respondents.

As part of the 2018 update, the traffic records assessment process was altered as well. While it remains an iterative process that relies on the State Traffic Records Assessment Program (STRAP) for online data collection, the process has been reduced to two question-answer cycles. In each, State respondents can answer each question assigned to them before the assessors examine their answers and supporting evidence, at which point the assessors rate each response. At the behest of States who wanted increased face-to-face interaction, a second onsite review will now be held between the first and second rounds. The facilitator will lead this discussion and any input from this meeting will be entered into STRAP for the State's review. The second and final question and answer cycle is used to clarify responses and provide the most accurate rating for each question following the onsite review. To assist the State in responding to each question, the *Advisory* also provides State respondents with suggested evidence that identify the specific information appropriate to answer each assessment question.

The assessment facilitator works with the State assessment coordinator to prepare for the assessment and establish a schedule consistent with the example outlined in Figure 1. Actual schedules may vary as dates may be altered to accommodate State-specific needs.

Independent assessors rate the responses and determines how closely a State's capabilities match those of the ideal system outlined in the *Advisory*. Each system component is evaluated independently by two or more assessors, who reach a consensus on the ratings. Specifically, the assessors rate each response and determine if a State (a) meets the description of the ideal traffic records system, (b) partially meets the ideal description, or (c) does not meet the ideal description. The assessors write a brief narrative to explain their rating for each question, as well as a summary for each section and any considerations—actionable suggestions for improvement—that will be included with the assessment's recommendations.





Figure 2: Sample Traffic Records Assessment Time-Table

| | | |
|---|--|---|
| Upon NHTSA TR Team receipt of request | | Initial pre-assessment conference call |
| 1 month prior to kickoff meeting | | Facilitator introduction pre-assessment conference call |
| Between facilitator conference call and kickoff | | State Coordinator assigns questions, enters contact information into STRAP, and builds initial document library |
| Assessment | Monday, Week 1 | Onsite Kickoff Meeting |
| | Monday, Week 1 – 12pm EST, Friday, Week 3 | Round 1 Data Collection: State answers standardized assessment questions |
| | Friday, Week 3 – Wednesday, Week 5 | Round 1 Analysis: Assessors review State answers, rate all responses and complete all draft conclusions |
| | Thursday, Week 5 – Monday, Week 7 | Review Period: State reviews the assessors’ initial ratings in preparation for the onsite meeting. |
| | Tuesday, Week 7 | Onsite Review Meeting: Facilitator and State respondents meet to discuss questions; clarifications entered into STRAP |
| | Wednesday, Week 7 – 12pm EST, Friday, Week 9 | Round 2 Data Collection: State provides final response to the assessors’ preliminary ratings and onsite clarifications |
| | Friday, Week 9 – Monday, Week 11 | Round 2 Analysis: make final ratings |
| | Tuesday, Week 11 – Monday, Week 12 | Facilitator prepares final report |
| Week 12 | | NHTSA delivers final report to State and Region |
| (After completion of assessment, date set by State) | | NHTSA hosts webinar to debrief State participants |
| (After completion of assessment) | | (OPTIONAL) State may request GO Team, CDIP or MMUCC Mapping, targeted technical assistance or training |

In order for NHTSA to accept and approve an assessment each question must have an answer. When appropriate, however, a State may answer questions in the negative (“no,” don’t know,” etc.)”. These responses constitute an acceptable answer and will receive a “does not meet” rating. An assessment with unanswered or blank questions will not be acceptable and cannot be used to qualify for §405(c) grant funds.





Figure 3: State Schedule for the Traffic Records Assessment

| | |
|-----------------------------------|--------------------|
| Kickoff | September 09, 2021 |
| Begin first Q&A Cycle | September 09, 2021 |
| End first Q&A Cycle | October 01, 2021 |
| Begin Review Period | October 14, 2021 |
| Onsite Meeting | October 26, 2021 |
| Begin second Q&A Cycle | October 26, 2021 |
| End second Q&A Cycle | November 12, 2021 |
| Assessors' Final Results Complete | November 29, 2021 |
| Final Report Due | December 10, 2021 |
| Debrief | December 17, 2021 |





Appendix A: Question Details, Ratings and Assessor Conclusions

This section presents the assessment's results in more granular detail by providing the full text, rating, and assessor analysis for each question. This section can be useful to State personnel looking to understand why specific ratings were given and further identify areas to target for improvement.

Questions, Ratings and Assessor Conclusions

Traffic Records Coordinating Committee

1. *Does the TRCC membership include executive and technical staff representation from all six data systems?*

Meets Advisory Ideal

The TRCC membership includes both technical and executive representation for all the six core data systems as shown by the TRCC member list with title and data system represented.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

2. *Do the executive members of the TRCC regularly participate in TRCC meetings and have the power to direct the agencies' resources for their respective areas of responsibility?*

Meets Advisory Ideal

The TRCC charter and delegation letters demonstrate that the executive TRCC members have the power to direct their respective agency resources. The executive TRCC members reportedly regularly attend the meetings.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

3. *Do the custodial agencies seek feedback from the TRCC members when major projects or system redesigns are being planned?*

Meets Advisory Ideal

Custodial agencies seek feedback from the TRCC members on major projects, such as was done on the Transportation Enterprise Data (TED) project.

Change Notes: New Question.

4. *Does the TRCC involve the appropriate State IT agency or offices when member agencies are planning and implementing technology projects?*

Meets Advisory Ideal

The State regularly involves multiple IT departments in the development of projects, including the new Transportation Enterprise Data Warehouse and the new MMUCC PR-1 Crash Reporting system. This is also evidenced by at least five IT-related members on the TRCC roster.

Change Notes: Rating Unchanged.





5. *Is there a formal document authorizing the TRCC?*

Meets Advisory Ideal

The TRCC Charter authorizes the TRCC and outlines its mission, goals, and responsibilities.

Change Notes: Rating Unchanged.

6. *Does the TRCC provide the leadership and coordination necessary to develop, implement, and monitor the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

The TRCC charter outlines the TRCC's responsibilities to annually approve the strategic plan and performance measures. Page 8 of the strategic plan states "The Connecticut TRCC continues to operate and function as the organization responsible for the planning and implementation of the state traffic safety data system improvements."

Change Notes: Rating Unchanged.

7. *Does the TRCC advise the State Highway Safety Office on allocation of Federal traffic records improvement grant funds?*

Meets Advisory Ideal

The TRCC reviews all projects submitted for funding and votes on funding allocation of the 405c grant funds as demonstrated in the TRCC Strategic plan section 3.3 Project Selection Methodology and Selected Project Table.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

8. *Does the TRCC identify core system performance measures and monitor progress?*

Meets Advisory Ideal

On page 6 of the strategic plan, as part of the TRCC charter, it states that it is the TRCC's responsibility to approve the performance measures that demonstrate quantitative progress. The measures are determined by the projects being undertaken and tracked over time in the TRCC Strategic Plan.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

9. *Does the TRCC enable meaningful coordination among stakeholders and serve as a forum for the discussion of the State's traffic records programs, challenges, and investments?*

Meets Advisory Ideal

The TRCC has the right members, the charter describes coordination, and at least one presentation provided shows meaningful discussion and coordination.

Change Notes: Rating Unchanged.





10. Does the TRCC have a traffic records inventory?

Meets Advisory Ideal

There is a comprehensive traffic records inventory document with traffic records data sources, system custodians, software platforms, programming language, data elements and attributes, linkage variables, linkages useful to the State, and data access policies.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

11. Does the TRCC have a designated chair?

Meets Advisory Ideal

The TRCC chair is identified and their responsibilities are clearly documented.

Change Notes: Rating Unchanged.

12. Is there a designated Traffic Records Coordinator?

Meets Advisory Ideal

The Traffic Records Coordinator is identified and their responsibilities are clearly spelled out.

Change Notes: Rating Unchanged.

13. Does the TRCC meet at least quarterly?

Meets Advisory Ideal

The TRCC is scheduled to meet six times a year, even more often than the recommended frequency.

Change Notes: Rating Unchanged.

14. Does the TRCC review quality control and quality improvement programs impacting the core data systems?

Meets Advisory Ideal

The TRCC has shown how they review and discuss quality control in the Transportation Enterprise Data warehouse project slide presentation from the TRCC July 2021 meeting. The quality control and current measures are also included in the TRCC Strategic Plan.

Change Notes: Rating Unchanged.

15. Does the TRCC assess and coordinate the technical assistance and training needs of stakeholders?

Meets Advisory Ideal

The TRCC supports the University of Connecticut Transportation Research Center in providing training and technical assistance on the crash system to local and state police departments and other data users. The general support for addressing technical needs is also shown in the TED presentation on the last slide when it asks, "What are the safety data needs of the TRCC members?"





Change Notes: Rating Improved.
From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

16. *Do the TRCC's program planning and coordination efforts reflect traffic records improvement funding sources beyond § 405(c) funds?*

Meets Advisory Ideal

The TRCC's program coordination and recommendations include projects funded by 402, 405(c), SaDIP, and FMCSA.

Change Notes: Rating Unchanged.

Strategic Planning for Traffic Records Systems

17. *Does the State Traffic Records Strategic Plan address existing data and data systems areas of opportunity and document how these are identified?*

Meets Advisory Ideal

The TRCC Strategic plan's deficiency section details the State's process to identify deficiencies by documenting the strengths, limitations, and improvement opportunities for each of the core systems.

Change Notes: Rating Unchanged.

18. *Does the State Traffic Records Strategic Plan identify countermeasures that address at least one of the performance attributes (timeliness, accuracy, completeness, uniformity, integration, and accessibility) for each of the six core data systems?*

Meets Advisory Ideal

The State Traffic Records Strategic Plan identifies countermeasures and addresses all the performance attributes (timeliness, accuracy, completeness, uniformity, integration, and accessibility) for each of the six core data systems. Each system deficiency analysis and performance goals along with countermeasure for each of the performance attributes is included in the Traffic Records Strategic Plan. The Connecticut Plan does a commendable job of focusing and addressing Performance Measures for each of their data systems. In addition, all current improvement projects must address and target at least one performance attribute. These projects are also included in the Strategic Plan. The Traffic Records Strategic Plan is a data-driven plan that sets the framework for highway safety programs and supports State and local stakeholders.

Change Notes: Rating Unchanged.

19. *Does the TRCC have a process for identifying at least one performance measure and the corresponding metrics for the six core data systems in the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

The State Traffic Records Strategic Plan includes a description of each of the six performance measure areas for all six core data systems. The TRCC using the NHTSA Model Performance Measures for State Traffic Records System consulted with the stakeholders to establish the baseline metrics and updates the progress each year.





Change Notes: Rating Unchanged.

20. *Does the TRCC have a process for prioritizing traffic records improvement projects in the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

The TRCC uses the Project Selection Methodology which is on page 24 of the Traffic Records Strategic Plan for the selection and prioritizing of traffic records improvement projects. Projects are reviewed to ensure they meet the State Traffic Records improvement guidelines. The projects do not have to be funded through the Traffic Records Program. Members evaluate the selected projects based on the methodology and after final votes are tallied. The selected projects along with the priority list are presented to the State Highway Safety Office.

Change Notes: Rating Unchanged.

21. *Does the TRCC identify and address technical assistance and training needs in the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

The TRCC identifies and addresses technical assistance and training needs for specific project initiatives and or general areas as it pertains to data collection, use, integration and development of traffic safety programs in the state. An example is the Online Disposition System for the Criminal Justice System training included training Criminal Justice System Staff in the Use of the Online Disposition System, and Undertaking an Outreach effort to increase Public awareness.

Change Notes: Rating Unchanged.

22. *Does the TRCC have a process for establishing timelines and responsibilities for projects in the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

The State provided a narrative and March 2021 TRCC Project update to support the CT-TRCC's process of establishing timelines and responsibilities for projects in the State Traffic Records Strategic Plan. The narrative identifies the process as described in the Plan's Section 5. The section provides a list of improvement projects, the agency, the individual who submitted the project, project costs, identified deficiencies, performance measures, and associated metrics. The Project Manager as listed in the Project Submission is the responsible individual for the project and is required to give the project updates to the TRCC on a bi-monthly basis at the TRCC meeting. The Project schedule is established by the project manager and presented to the TRCC for review and approval. Updates and progress are presented to the TRCC meeting until the project is completed. The TRCC also reviews all ongoing projects during the annual evaluation and approval of projects submitted for funding in a new fiscal year. Any project schedule time lags and delays are presented and discussed during the TRCC meeting.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.





23. *Does the TRCC have a process for integrating and addressing State and local (to include federally recognized Indian Tribes, where applicable) data needs and goals into the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

As documented in the State Traffic Records Strategic Plan, the TRCC includes active members from state, local, and federal agencies. All data needs are discussed at the TRCC meetings with input from all members.

Change Notes: Rating Unchanged.

24. *Does the TRCC consider the use of new technology when developing and managing traffic records projects in the State Traffic Records Strategic Plan?*

Meets Advisory Ideal

The Connecticut CT-TRCC continues to pursue the use of new and innovative technologies when developing and managing traffic records projects as documented in the Traffic Records Strategic Plan on page 37, the new Transportation Enterprise Database (TED) is using various new technologies from GIS to data visualization and data mapping the use of new technology.

Change Notes: Rating Unchanged.

25. *Does the State Traffic Records Strategic Plan consider lifecycle costs in implementing improvement projects?*

Meets Advisory Ideal

The State Traffic Records Strategic Plan now includes a Project Selection Methodology that requires a lifecycle cost estimate of each project as shown on page 24 in the prioritization of the project.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

26. *Does the State Traffic Records Strategic Plan make provisions for coordination with key Federal traffic records data systems?*

Meets Advisory Ideal

Connecticut does have processes for coordinating with federal data systems, such as in the development of the Commercial Vehicle Reporting to SafetyNet. The submission of required electronic data for reportable commercial crashes was developed in coordination with the Volpe Center to define and upload data from the Crash system. Also included in the plan, are the various funding sources which show that the CT-TRCC does not solely depend on 405(c) but also utilizes FHWA, FMCSA, and other federal funding sources. In addition, the FARS analyst actively participates in the TRCC.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

27. *Is the TRCC's State Traffic Records Strategic Plan reviewed, updated and approved annually?*

Meets Advisory Ideal





The State has demonstrated that the TRCC members voted and approved the Strategic Plan along with the projects selected for the FY 2022 funding under the “Section 405 (c) Program” in the June 8, 2021 online vote. The narrative describes that the Traffic Records Assessment Plan of Action is updated and reviewed by the TRCC during the June and July meetings. The State could benefit from developing a process for an annual update to the Plan that is described within the TRCC plan.

Change Notes: Rating Unchanged.

Description and Contents of the Crash Data System

28. *Is statewide crash data consolidated into one database?*

Meets Advisory Ideal

All Connecticut traffic crash reports are submitted electronically through a secure file transfer protocol (SFTP) site to one consolidated crash database at the Connecticut Department of Transportation (CTDOT). When the data is transferred from the SFTP site, it is validated and checked for errors. After a final review by CTDOT staff of the crash location accuracy, overall data accuracy, and completeness, the crash report information is marked as complete and available for analysis.

Change Notes: Rating Unchanged.

29. *Is the statewide crash system's organizational custodian clearly defined?*

Meets Advisory Ideal

The Connecticut Department of Transportation CTDOT is the custodian of crash data for the state. Through a memorandum of understanding with UConn, completed crash records are uploaded to the Crash Data Repository at UConn every night. Per Connecticut Statute 14-108a: Sec. 14-108a. Uniform investigation of accident report. (a) The Commissioner of Transportation shall prescribe for the Division of State Police within the Department of Public Safety and for each police department and officer and other suitable agencies or individuals a uniform investigation of accident report, in such form as the commissioner shall prescribe, which form shall be followed in filing all such reports. (b) In each motor vehicle accident in which any person is killed or injured or in which damage to the property of any one individual, including the operator, in excess of one thousand dollars is sustained, the police officer, agency or individual who, in the regular course of duty, investigates such accident, either at the time of or at the scene of the accident or thereafter, by interviewing the participants or witnesses, shall, within five days after completing such investigation, complete and forward one copy of such report to the Commissioner of Transportation. Such report shall call for and contain all available detailed information to disclose the location and cause of the accident, the conditions then existing, the persons and vehicles involved and the names of the insurance companies issuing their automobile liability policies, as well as the enforcement action taken. The Commissioner of Transportation shall forward to the Commissioner of Motor Vehicles one copy of each report of any accident involving a school bus. The Commissioner of Motor Vehicles may inquire into or investigate any accident reported pursuant to this subsection and may request the assistance of the Division of State Police within the Department of Public Safety for such purposes.





Change Notes: Rating Unchanged.

30. *Does the State have criteria requiring the submission of fatal crashes to the statewide crash system?*

Meets Advisory Ideal

Connecticut Statute 14-108a: defines the reporting criteria for the submission of a fatal crash report to the statewide crash system and includes the following language: In each motor vehicle accident in which any person is killed or injured or in which damage to the property of any one individual, including the operator, in excess of one thousand dollars is sustained, the police officer, agency or individual who, in the regular course of duty, investigates such accident, either at the time of or at the scene of the accident or thereafter, by interviewing the participants or witnesses, shall, within five days after completing such investigation, complete and forward one copy of such report to the Commissioner of Transportation.

Change Notes: Rating Unchanged.

31. *Does the State have criteria requiring the submission of injury crashes to the statewide crash system?*

Meets Advisory Ideal

Connecticut Statute 14-108a: defines the reporting criteria for the submission of injury crashes to the statewide crash system and includes the following language: In each motor vehicle accident in which any person is killed or injured or in which damage to the property of any one individual, including the operator, in excess of one thousand dollars is sustained, the police officer, agency or individual who, in the regular course of duty, investigates such accident, either at the time of or at the scene of the accident or thereafter, by interviewing the participants or witnesses, shall, within five days after completing such investigation, complete and forward one copy of such report to the Commissioner of Transportation.

Change Notes: Rating Unchanged.

32. *Does the State have criteria requiring the submission of property damage only (PDO) crashes to the statewide crash system?*

Meets Advisory Ideal

Connecticut Statute 14-108a: defines the reporting criteria for the submission of property damage only (PDO) crash reports to the statewide crash system and includes the following language: In each motor vehicle accident in which any person is killed or injured or in which damage to the property of any one individual, including the operator, in excess of one thousand dollars is sustained, the police officer, agency or individual who, in the regular course of duty, investigates such accident, either at the time of or at the scene of the accident or thereafter, by interviewing the participants or witnesses, shall, within five days after completing such investigation, complete and forward one copy of such report to the Commissioner of Transportation.

Change Notes: Rating Unchanged.





33. *Does the State have statutes or other criteria specifying timeframes for crash report submission to the statewide crash database?*

Meets Advisory Ideal

Connecticut Statute 14-108a: defines the timeframe for the law enforcement agency to submit a crash report after completion of the investigation, the statutory language regarding the timeframe is the following: shall, within five days after completing such investigation, complete and forward one copy of such report to the Commissioner of Transportation.

Change Notes: New Question.

34. *Does the statewide crash system record the crashes that occur in non-trafficway areas (e.g., parking lots, driveways)?*

Meets Advisory Ideal

The CT PR-1 crash form allows law enforcement agencies to complete and submit a report in non-trafficway areas (e.g., parking lots, driveways). When submitted, the non-trafficway crash reports are processed the same as a reportable crash. The investigator manual does instruct the officer to mark the trafficway Class as non-Trafficway for crashes occurring off public roadways. This allows the analyst to include or exclude these crash types in their reviews. The statute for crash reporting (Connecticut Statute 14-108a) does not appear to address recording non-trafficway crashes. Therefore, it is not clear how uniform the reporting of these crashes might be across jurisdictions or years.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

35. *Is data from the crash system used to identify crash risk factors?*

Meets Advisory Ideal

Connecticut uses the crash system to identify crash risk factors. The response illustrates how the State uses the crash system to do network screening (examine locations), roadway features (implement the latest Highway Safety Manual (HSM) methods), behaviors, and driver characteristics (distracted driving). Excerpts from the Connecticut Safety Management System were provided to demonstrate how crash data risk factors at CTDOT are identified through network screening, diagnosis, countermeasure selection, economic appraisal, project prioritization, and safety effectiveness evaluations. In addition, the Connecticut Crash Data Repository User Guide was provided to support the suggested evidence. The repository provides both public and private access to crash data to allow users to research crash safety in their neighborhood, town, county, or state.

Change Notes: Rating Unchanged.

36. *Is data from the crash system used to guide engineering and construction projects?*

Meets Advisory Ideal

The CTDOT Division of Traffic Engineering uses the crash system to guide engineering and construction projects as described in the Strategic Highway Safety Plan (SHSP); they develop, implement, and evaluate the SHSP under the Highway Safety Improvement Program (HSIP). They manage the spot safety improvement program using the network screening tool in Connecticut Roadway Safety Management System (CRSMS) and they identify systemic safety issues by





identifying crash types or severities that are symptomatic of problem characteristics for candidate locations that do not necessarily have abnormally high crash rates. The Division of Traffic Engineering solicits system improvements from Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs), on behalf of their member towns, to address identified hazardous elements. The SHSP and HSIP were provided to support the suggested evidence.

Change Notes: Rating Unchanged.

37. *Is data from the crash system regularly used to prioritize law enforcement activity?*

Meets Advisory Ideal

Connecticut law enforcement agencies regularly use the crash system to prioritize law enforcement activity. The CT Crash Data Repository provides law enforcement with DDACTS analysis. The State through the University of Connecticut provides two retired law enforcement officers that assist police departments in conducting analysis and using crash data for submitting grant applications to support selective enforcement activities. The CT Crash Data Repository is very popular among statewide law enforcement with over 2500 users. The tool also has emphasis areas developed based on crash data and trends. For example, but not limited to DUI, seatbelt use, speeding, teen drivers, elderly drivers, commercial vehicle, motorcycle, bike, pedestrians, etc.

Change Notes: Rating Unchanged.

38. *Is data from the crash system used to evaluate safety countermeasure programs?*

Meets Advisory Ideal

Connecticut uses the crash system to conduct countermeasure program evaluations. The Highway Safety Office uses crash data to develop programs based on improving driver and other roadway user behaviors. Additionally, the Connecticut Roadway Safety Management System (CRSMS) is used to review and recommend safety countermeasures and conduct safety effectiveness evaluations for construction projects. The CTDOT Traffic Engineering Division and Safety Engineering Unit have adopted fundamentals included in Part C of the HSM and use CRSMS to conduct these types of analyses and countermeasure evaluations.

Change Notes: Rating Unchanged.

Applicable Guidelines for the Crash Data System

39. *Is there a process by which MMUCC is used to help identify what crash data elements and attributes the State collects?*

Meets Advisory Ideal

MMUCC Version 4 was used as the foundation (data element and attribute definitions) for a major revision of Connecticut's crash report form (PR-1) in 2015. Connecticut reports being 99.7 percent MMUCC Version 4 compliant and only lacks BAC information and county information (CT does not have a county system or government) on the crash report form. The CTDOT continues to review MMUCC updates to plan appropriate changes to the crash system data collection and analysis process.





Change Notes: Rating Unchanged.

40. *Is there a process by which ANSI D.16 is used to help identify the definitions in the crash system data dictionary?*

Meets Advisory Ideal

ANSI D-16 and ANSI D-20 were reviewed and compared to MMUCC throughout the PR-1 revision process. If there were any discrepancies between ANSI and MMUCC, MMUCC was used as the standard. An investigator's guide and quick reference user guide was developed for the new PR-1 with definitions taken directly from MMUCC to clearly define data elements and their attributes for law enforcement.

Change Notes: Rating Unchanged.

Data Dictionary for the Crash Data System

41. *Does the data dictionary provide a definition for each data element and define that data element's allowable values/attributes?*

Meets Advisory Ideal

The State has a crash data dictionary that provides a definition for each data element and defines that data element's allowable values and attributes.

Change Notes: Rating Unchanged.

42. *Does the data dictionary document the system edit checks and validation rules?*

Meets Advisory Ideal

The XML Shema and EDIT Rules document was provided to support the suggested evidence and includes 115 validation rules and 28 warning/informational rules.

Change Notes: Rating Unchanged.

43. *Is the data dictionary up-to-date and consistent with the field data collection manual, coding manual, crash report, database schema and any training materials?*

Meets Advisory Ideal

The data dictionary is up-to-date and consistent with the field data collection manual, coding manual, crash report, database schema, and the training materials. The original system documentation was developed in 2014. The XML Schema and EDIT rules include a change log and documents updates that have been made periodically as new error and warning rules have been added. The team meets weekly to review crash data quality issues. Connecticut is working on new edit rules and revisions to the document which should be released before the end of the year. An email chain was provided that demonstrates the discussion to consider the updates being considered.

Change Notes: Rating Unchanged.





44. *Does the crash system data dictionary indicate the data elements populated through links to other traffic records system components?*

Partially Meets Advisory Ideal

The response indicates, the State followed the MMUCC v4 guidelines in 2015, when it created its new crash form and data collection system. Connecticut is looking forward to MMUCC 6 to redraft the system to link many data elements and reduce the data entry demand on law enforcement. Law enforcement uses vendor software to import data elements from other sources such as National Crime Information Center (NCIC) and Connecticut On-Line Law Enforcement Communications Teleprocessing (COLLECT). The University of Connecticut who developed and supports the Connecticut Crash Data Repository has worked on post-processing procedures to link roadway and injury data. Data quality analysts at CTDOT use a crash editor tool to link the crash location to the roadway inventory. However, CTDOT does not have these data elements expressly identified in the manual. It is anticipated a system improvement to update the crash editor will support populating many new fields through data linkage. The update will identify linked fields and will include an ICON next to the box that will indicate they are obtained through linkage and not from the police officer. This project is expected to start in July of 2022.

Change Notes: Rating Unchanged.

Procedures and Process Flows for Crash Data Systems

45. *Does the State collect an identical set of data elements and attributes from all reporting agencies, independent of collection method?*

Meets Advisory Ideal

Connecticut has a statewide uniform form, investigators guide, and XML schema that all vendors in the State on behalf of statewide law enforcement agencies must adopt and then be certified to collect and submit data to the statewide crash repository.

Change Notes: New Question.

46. *Does the State reevaluate their crash form at regular intervals?*

Meets Advisory Ideal

The State plans to update its crash report form at a maximum of 10 years or every other version of MMUCC. CTDOT has a committee that conducts weekly data quality meetings to review crash issues and discuss the form. Meeting agendas and email communications were provided to show the types of discussions that take place regarding possible form changes and potential new validation rules and edits to support the changes.

Change Notes: New Question.

47. *Does the State maintain accurate and up-to-date documentation detailing the policies and procedures for key processes governing the collection, reporting, and posting of crash data-including the submission of fatal crash data to the State FARS unit and commercial vehicle crash data to SafetyNet?*

Meets Advisory Ideal





Connecticut has accurate and up-to-date documentation detailing the policies and procedures for key processes governing the collection, reporting, and posting of crash data. A narrative and crash data flow diagram was provided to support the suggested evidence. The current response (narrative) is the same as the previous 2017 assessment. Connecticut might consider adding annotation to the steps in the crash data flow diagram about some of the detail for each step, as well as the time to complete each step. This might include what happens during the error notification phase and how many crash reports are submitted by RMS processes vs the fillable pdf upload process. Performance measures, if not already in place, could be developed to identify and report the number of errors by vendor or agency as well as progress to move those agencies using the fillable pdf form to electronic crash data collection and submission.

Change Notes: Rating Unchanged.

48. *Are the quality assurance and quality control processes for managing errors and incomplete data documented?*

Meets Advisory Ideal

Connecticut developed a series of internal reports to track the number of rejected crash reports based on the errors causing the rejection. These reports are used to develop new training, validation rules, or information edits. They are also used to provide feedback to software vendors and law enforcement on high-frequency errors. Sample internal reports and the crash data flow chart showing the error notification process were provided to support the suggested evidence.

Change Notes: Rating Unchanged.

49. *Do the document retention and archival storage policies meet the needs of safety engineers and other users with a legitimate need for long-term access to the crash data reports?*

Meets Advisory Ideal

The Connecticut Crash Data Repository retains crash data starting in 1995. The State Retention Policy is to retain the records for 10 years, but all crash data is archived to provide a full history for analysis. Crash reports are not stored at the CTDOT, but starting in 2012, they began scanning the crash report and they are now available for review. In 2015 with the development of electronic data submission the CTDOT created the ability to generate an electronic PR-1 from the XML file. The electronic PR-1 may include changes from the CTDOT quality control processes. CTDOT might consider a process to track quality control changes to the PR-1 and make the change history available to analysts.

Change Notes: Rating Unchanged.

50. *Do all law enforcement agencies collect crash data electronically?*

Meets Advisory Ideal

100 percent of law enforcement crash reports in Connecticut are collected electronically. All reports are investigated at the crash scene and almost all data is collected electronically in the field, only a small portion are recorded back at the station for those agencies that do not have laptops in the cruisers. All reports completed at the station are done electronically, and all reports are submitted to CTDOT electronically. The CTDOT does not accept crash reports on paper.

Change Notes: Rating Unchanged.





51. Do all law enforcement agencies submit their data to the statewide crash system electronically?

Meets Advisory Ideal

100 percent of law enforcement crash reports are electronically submitted to the State via the XML standard through the secure FTP site. No paper reports are accepted.

Change Notes: Rating Unchanged.

52. Do all law enforcement agencies collecting crash data electronically in the field apply validation rules consistent with those in the statewide crash system prior to submission?

Meets Advisory Ideal

All software vendors in the State on behalf of statewide law enforcement agencies are required to incorporate the standard edits and validation rules in their electronic crash data collection software. If an agency is not using a data collection software vendor they use the fillable PDF which incorporates all the CTDOT edit and validation rules. The edits and validation rules are applied multiple times during the submission process. When a crash report is submitted to the State SFTP site that does not pass the validation rules, it is rejected and sent back to the agency for correction.

Change Notes: Rating Unchanged.

Crash Data Systems Interface with Other Components

53. Does the crash system have a real-time interface with the driver system?

Does Not Meet Advisory Ideal

The Crash System at the CTDOT does not currently interface with the driver system. However, recent discussions with DMV have resulted in an agreement of sharing Driver and Vehicle information with the CTDOT. It is hopeful these discussions will result in processes to develop interfaces to link crash to driver and vehicle data.

Change Notes: Rating Unchanged.

54. Does the crash system have a real-time interface with the vehicle system?

Does Not Meet Advisory Ideal

The Crash System at the CTDOT does not currently interface with the DMV system. However, recent discussions with DMV has resulted in an agreement of sharing Driver and Vehicle information with the CTDOT. It is hopeful these discussions will result in processes to develop interfaces to link crash to Driver and vehicle data.

Change Notes: Rating Unchanged.

55. Does the crash system interface with the roadway system?

Meets Advisory Ideal

CTDOT Data Quality Control Staff have access to the roadway system and an automated process using the CRSMS Tool to review and correct the submitted crash location. This is a real-time interface between the crash coder and the roadway linear referencing system. The crash location





tool shows the coder the roadway segments and the geolocation of the crash to allow for accurate placement and linkage of data. The University of Connecticut has merged roadway elements into the crash file. Staff now have the ability to view and compare 40 different data elements from the roadway file with the crash file to validate the location. This process all happens after the original crash location has been collected manually and submitted from the crash scene. The CT DOT does provide their roadway file to crash software vendors in the state, but they can't require them to use the file. The State is encouraged to continue efforts to develop electronic field data collection processes where officers can collect an accurate crash location at the crash scene using a real-time interface to the roadway system.

Change Notes: Rating Improved.
From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

56. *Does the crash system interface with the citation and adjudication systems?*

Meets Advisory Ideal

Connecticut has made progress since the previous traffic records assessment in developing an interface with the citation and adjudication systems. The University of Connecticut who maintains and supports the CT Crash Data Repository has successfully put in place a data sharing MOU with the Connecticut Judicial Branch, Central Infractions Bureau (CIB). The MOU allows post-processing linking of citation and adjudication data from 2000 to the present with crash data. CIB and the Judicial Branch have a project with the Criminal Justice Information System (CJIS) that provides statewide access to data at the time of a crash. Recent developments have resulted in the release of a Beta system to demonstrate an interface with the citation and adjudication systems. Improvements and more widespread use will come as more people are aware and accept the interface with the system. Screen shots were provided that demonstrate a functioning interface between citation data and crash data.

Change Notes: Rating Improved.
From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

57. *Does the crash system have an interface with EMS?*

Does Not Meet Advisory Ideal

The University of Connecticut has recently established an MOU with the Connecticut Department of Public Health (CTDPH) to collect EMS data through an interface with crash data. Recent developments in an EMS to Crash system interface show that UCONN has recently started pulling data from CTDPH and the new data-sharing agreement will provide expanded access to the EMS data.

Change Notes: Rating Unchanged.

Data Quality Control Programs for the Crash System

58. *Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?*

Meets Advisory Ideal





Connecticut has a series of edits and validation rules that are enforced in three places, in the field, upon submission to CTDOT, and on review by a Crash data quality analyst. As data is being collected in the field, the validation rules are applied before it can be submitted to CTDOT. After a law enforcement agency submits a crash record, CTDOT's automated system validates the report against an XML schema and validation rules before it's imported into the State's crash system. Any report that does not pass validation is rejected and the agency is required to correct the problem and re-submit the report. When the data is submitted crash data quality staff review the data, crash location and apply the validation rules the third time. Connecticut has a series of validation rules (115 error rules and 28 warning rules). The rules and XML schema were provided to support the suggested evidence.

Change Notes: Rating Unchanged.

- 59. *Is limited State-level correction authority granted to quality control staff working with the statewide crash database to amend obvious errors and omissions without returning the report to the originating officer?***

Meets Advisory Ideal

The CTDOT data quality control staff have limited State-level correction authority to amend obvious errors and omissions to the submitted crash data without returning the report to the originating officer. They do not modify the actual police report. They are also responsible for correcting errors in the crash location including the route and milepoint as well as latitude and longitude.

Change Notes: Rating Unchanged.

- 60. *Are there formally documented processes for returning rejected crash reports to the originating officer and tracking resubmission of the report in place?***

Meets Advisory Ideal

If a crash does not pass the import rules setup on the CTDOT SFTP site then the report is rejected and an automated email is sent to the supervisor on record for the department that the crash data was rejected. The email contains a notification as to the error and the report case ID. A sample rejection email was provided to support the suggested evidence. Error reports are tracked and 2 crash data liaisons contact law enforcement agencies about any late or unreturned crash reports.

Change Notes: Rating Unchanged.

- 61. *Does the State track crash report changes after the original report is submitted by the law enforcement agency?***

Meets Advisory Ideal

The crash database at the CTDOT has an audit log. Each time a crash is submitted, the original XML file is logged and stored in the database. When the crash editor touches data in the crash file the change is logged in an audit history table. The change, person making the change, date, and time of the change are logged with the event in case it's necessary to review information about the change to the report. It's not clear if the audit/history table is available to the originating law enforcement agency so they can see when/what changes are made to the submitted crash data.

Change Notes: New Question.





62. *Are there timeliness performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

CTDOT has internal reports to track the timeliness of crash reporting from receipt of the crash report to posting on the crash data repository for analysis. Sample timeliness reports were provided to support the suggested evidence. The level and completeness of CTDOT's timeliness reporting is impressive. Crash timeliness reporting is also included in the State's Traffic Records Strategic Plan. The attached Timeliness reports demonstrate comprehensive timeliness tracking at the system level. It is not clear if similar metrics are shared with the submitting vendor, law enforcement agency, or the CT-TRCC.

Change Notes: Rating Unchanged.

63. *Are there accuracy performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

CTDOT has an errors and warnings report that is used to assist the staff and software vendors in identifying potential data quality issues. The list of errors and warnings are provided to support the suggested evidence. Deploying the edit and validation rules to electronic field collection software and validating the data upon submission have dramatically improved the CTDOT's quality of crash data. The CTDOT rejects any reports that don't pass edit and validation rules and the submitting agency is required to correct and re-submit the report. Any data values that are invalid according to the constraints defined in the database schema are also rejected. A list of crash system accuracy measures was provided in the performance measures document and the Traffic Records Strategic Plan. The documents include the baseline and actual values.

Change Notes: Rating Unchanged.

64. *Are there completeness performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The question response cites the errors and warnings report that identifies any instances where a required field is missing. The report is attached to support the suggested evidence. A list of crash system completeness measures were provided in the performance measures document and the Traffic Records Strategic Plan. The documents include the baseline and actual values.

Change Notes: Rating Unchanged.

65. *Are there uniformity performance measures tailored to the needs of data managers and data users?*

Partially Meets Advisory Ideal

The question response cites the errors and warnings report that identifies any instances where a required field does not comply with the XML schema. The report is attached to support the suggested evidence. The State has cited the errors and warning report as a process to measure performance-related accuracy, completeness, and uniformity. The only uniformity measure supported in the Strategic Plan was 100 percent compliance to the MMUCC 4th Edition. The





narrative or the Strategic Plan does not reference ongoing uniformity performance measures beyond looking forward to the release of MMUCC 6TH Edition and analyzing their systems to determine compliance to the new release. There was no evidence provided regarding uniformity baseline or actual measures. MMUCC compliance is an external uniformity measure. Since the State is looking forward to the MMUCC Edition which may require changes in reporting procedures and the development of new data elements and/or attributes, the State might consider internal performance measures of uniformity. This would allow monitoring uniformity reporting across jurisdictions(agency) and years as the changes in reporting procedures are implemented.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially Meets Advisory Ideal'.

66. *Are there integration performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The University of Connecticut is working on data linkage across state agencies. They are tracking the number of records that are linked with crash and other datasets. A data linkage reporting tool has been developed for fatal crashes. This tool allows the user to evaluate how many other data sources are linked to the crash data primarily for fatal and serious injury crashes. A list of crash system integration measures was provided in the Traffic Records Strategic Plan. The document includes the baseline and actual values.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

67. *Are there accessibility performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The University of Connecticut crash data repository has the ability to track the number of users, queries, and downloads. UConn also has the ability to survey users of their system and has done so in the past to understand how the system is used and if there are any improvements that users would like. Users have been surveyed twice, once in 2013 and once in 2014. The State also included in their response that the system has 1566 users with 175 that were active in the last 30 days. A series of graphs were attached showing the ability to track users, the number of crash data repository queries, and the number of data exports. This is excellent information to add and support the development of new Accessibility Performance measures. A list of crash system accessibility measures was provided in the Traffic Records Strategic Plan. The document includes the baseline and actual values.

Change Notes: Rating Unchanged.

68. *Has the State established numeric goals-performance metrics-for each performance measure?*

Partially Meets Advisory Ideal

The State has established numeric goals-performance metrics for each of the current performance measures. A processing backlog report and the Strategic Plan were provided to support the suggested evidence.





Change Notes: Rating Improved.
From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

69. *Is there performance reporting that provides specific timeliness, accuracy, and completeness feedback to each law enforcement agency?*

Meets Advisory Ideal

CTDOT has developed a “crash report card” that outlines how well a law enforcement agency is doing with submitting crash reports and resubmitting rejected reports. The feedback is not provided to all agencies. CTDOT only sends it to agencies that they have identified with reporting issues. It also appears the reports include only accuracy and possibly completeness performance information and do not include timeliness data. The "crash report card" is a good process to share reporting feedback. Connecticut might consider sharing the reporting with all agencies as well as expanding it to other performance measures. Data collectors always appreciate positive feedback.

Change Notes: Rating Unchanged.

70. *Are detected high-frequency errors used to prompt revisions, update the validation rules, and generate updated training content and data collection manuals?*

Meets Advisory Ideal

The University of Connecticut employs two Crash Data Liaisons (retired police officers) and this is their primary job. They use the internal reports generated by CTDOT that identify high-frequency errors and error patterns to update and produce new training content for law enforcement agencies across Connecticut. They receive calls daily from agencies on how to handle specific reporting issues. Bi-weekly meetings with the CTDOT data quality analyst ensure they are aware of the most recent issues which are addressed in a monthly newsletter produced by UConn for the law enforcement community.

Change Notes: Rating Unchanged.

71. *Are quality control reviews comparing the narrative, diagram, and coded contents of the report considered part of the statewide crash database's data acceptance process?*

Meets Advisory Ideal

Quality control analysts use the crash narrative and crash diagram to validate data, review and correct the crash location, and develop new validation rules. Deploying the validation rules to field crash data collection systems and applying the validation rules again at the time of the crash report submission has dramatically improved the accuracy and completion of Connecticut crash data.

Change Notes: Rating Unchanged.

72. *Are sample-based audits periodically conducted for crash reports and related database content?*

Partially Meets Advisory Ideal

The CTDOT does not currently have a process to review crash data against hardcopies of reports since 100% of the data is received electronically. The State does periodically validate that the CTDOT database and the UConn database are in agreement by checking the number of crashes, vehicles, and persons contained in the SQL database. In addition, CTDOT reviews the crash report when quality issues are identified through their regular quality control processes. Independent





sample-based audits have value even when all reports are submitted electronically. Often, reporting inconsistencies can be identified when comparing coded values to the officer's diagram and report narrative.

Change Notes: Rating Unchanged.

73. *Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?*

Meets Advisory Ideal

The CTDOT has an internal report that tracks the number of reports historically submitted by each law enforcement agency. The report monitors an agency's current crash frequency compared with its historical crash frequencies. The process can track this on a month-by-month basis. The current number of crashes submitted is compared to the total number of crashes in the same month of previous years. The report compares one month at a time, but the user can easily run the report for all 12 months in the year if desired. A sample report was provided to support the suggested evidence.

Change Notes: Rating Unchanged.

74. *Is data quality feedback from key users regularly communicated to data collectors and data managers?*

Meets Advisory Ideal

The University of Connecticut and CTDOT have extensive processes to encourage communications between data users and data collectors/managers. UCONN, which supports the Connecticut Crash Data Repository and provides much of the accessibility to the State's crash data, encourages email, messaging, and monthly newsletters between users and managers about data quality, proper use, and the application of validation rules. A number of those communications were provided to show open communications between those using the data and those that manage the data. In addition, the CT-TRCC has a monthly meeting attended by crash data managers, collectors, and users where the group can provide feedback and raise questions or concerns about crash data.

Change Notes: Rating Unchanged.

75. *Are data quality management reports provided to the TRCC for regular review?*

Meets Advisory Ideal

Dr. Eric Jackson, the manager of the Connecticut Crash Data Repository since its inception, attends the TRCC each month and provides an update on crash data quality, and data analysis, the crash data repository status, and new projects that the safety center and highway safety office are working on.

Change Notes: Rating Unchanged.

Description and Contents of the Driver Data System





76. *Does custodial responsibility for the driver data system—including commercially-licensed drivers—reside in a single location?*

Meets Advisory Ideal

Custodial responsibility for Connecticut's driver data system, including commercial and non-commercial driver's license, belongs to the Connecticut DMV.

Change Notes: Rating Unchanged.

77. *Does the driver data system capture details of novice driver, motorcycle, and driver improvement (remedial) training histories?*

Meets Advisory Ideal

The State's driver data system captures Court conviction and classroom retraining from four Operator Retraining Program vendors. The data is captured on the driver history, with processes in place to manually process any errors. The data system also captures novice driver and motorcycle training.

Change Notes: Rating Unchanged.

78. *Does the driver data system capture and retain the dates of original issuance for all permits, licensing, and endorsements (e.g., learner's permit, provisional license, commercial driver's license, motorcycle license)?*

Meets Advisory Ideal

The State's driver data system maintains driver license and permit issuance history including endorsements, and non-driver identification cards.

Change Notes: Rating Unchanged.

Applicable Guidelines for the Driver Data System

79. *Is driver information maintained in a manner that accommodates interaction with the National Driver Register's PDPS and CDLIS?*

Meets Advisory Ideal

CT DMV driver data is maintained in compliance with CDLIS 5.3.2 and PDPS. The driver system interacts with the PDPS and CDLIS during the production of a license or permit.

Change Notes: Rating Unchanged.

Data Dictionary for the Driver Data System

80. *Are the contents of the driver data system documented with data definitions for each field?*

Meets Advisory Ideal





While there is information and abbreviations that make it possible to determine the intended data to be captured, data definitions are mostly minimal in Connecticut's data dictionary. It is important to have full data definitions that are completely understood by users, collectors, and managers of data. This provides consistency in use and interpretation that increases data integrity, particularly with new staff and one-time data users and researchers.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

81. *Are all valid field values-including null codes-documented in the data dictionary?*

Partially Meets Advisory Ideal

In reviewing the data dictionary provided, each data element is listed, as is the number of characters required, but almost no further information is provided. For example, eye color is 3 characters, but no explanation of appropriate abbreviations is found in the data dictionary provided, nor are the appropriate values for elements such as restrictions. The data dictionary indicates the size is 3, for example, but does not further indicate whether those 3 are alpha, numeric, or alpha-numeric and the codes for the various restrictions are not given.

Change Notes: Rating Unchanged.

82. *Are there edit checks and data collection guidelines for each data element?*

Does Not Meet Advisory Ideal

While it is noted that edit checks and data collection and validation guidelines exist for data entered into the driver system, no list of such checks or edits was provided further than the two documents submitted, the DMV license file and Data Dictionary and the DMV Sanctions table. These documents do not provide enough detail to substantiate there are edit checks and validation guidelines in place. An edit check might be that the court date cannot occur prior to the arrest date.

Change Notes: Rating Unchanged.

83. *Is there guidance on how and when to update the data dictionary?*

Partially Meets Advisory Ideal

CT's driver system data dictionary is updated when system changes are completed due to updates from AAMVA's UNI or any of the federal systems that are used in the issuance of a license. Additionally, if Connecticut's IT does system updates the data dictionary is updated. The narrative explains when the data dictionary is updated but does not provide evidence there are guidelines on how and when the dictionary should be updated. It would be helpful to develop a short policy statement, to ensure that IT staff and production staff are fully aware of the policy and the likelihood that any new legislation or federal policy is captured in the Connecticut data. Currently, the process is not well-defined. For example, a policy could note that the system would be updated within "X" months of the end of each legislative session, or when changes to the AAMVA data dictionary occur.

Change Notes: Rating Unchanged.





84. *Does the custodial agency maintain accurate and up-to-date documentation detailing: the licensing, permitting, and endorsement issuance procedures; reporting and recording of relevant convictions, driver education, driver improvement course; and recording of information that may result in a change of license status (e.g., sanctions, withdrawals, reinstatement, revocations, cancellations and restrictions) including manual or electronic reporting and timelines, where applicable?*

Meets Advisory Ideal

The Connecticut driver system is supported by detailed procedure documents titled DMV Operator Control Procedures and the Driver Services Procedure. AAMVA's ACD code manual and the DMV's Sanction chart also provide process assistance to the staff.

Change Notes: New Question.

85. *Is there a process flow diagram that outlines the driver data system's key data process flows, including inputs from other data systems?*

Meets Advisory Ideal

The State's key processes are defined in process flow diagrams that show input and output into key systems.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

86. *Are the processes for error correction and error handling documented for: license, permit, and endorsement issuance; reporting and recording of relevant convictions; reporting and recording of driver education and improvement courses; and reporting and recording of other information that may result in a change of license status?*

Meets Advisory Ideal

The processes for handling errors are defined in the CT DMV Operational manual.

Change Notes: Rating Unchanged.

87. *Are there processes and procedures for purging data from the driver data system documented?*

Partially Meets Advisory Ideal

The purging of applicant documents and the retention of conviction and administrative actions in the driver data system are governed by Connecticut Statute. Licensing information is not purged from the driver data system. No data is purged from the driver license system. The fact that data is not purged from the system should be included in a policy for the DMV driver system.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially Meets Advisory Ideal'.

88. *In States that have the administrative authority to suspend licenses based on a DUI arrest independent of adjudication, are these processes documented?*

Meets Advisory Ideal





The State's DMV Administrative Per Se Unit is responsible for handling the administrative DUI program. The step-by-step procedures were supplied to support the process is documented.

Change Notes: Rating Unchanged.

89. *Are there established processes to detect false identity licensure fraud?*

Meets Advisory Ideal

Connecticut's DMV DIU is the entity that handles the processes that are used to prevent identity fraud. In addition to a facial recognition program, the state also uses audits to validate credential transactions are done correctly, AAMVA document and fraud training for employees, and a check and balance system where three separate individuals verify the work done by others.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

90. *Are there established processes to detect internal fraud by individual users or examiners?*

Meets Advisory Ideal

The State has provided a narrative of fraud-prevention procedures. Other helpful means of detecting internal fraud include periodic audits of individual examiner's work, review of issuance times to ensure that no document is issued before- or after-hours or on weekends or holidays, as well as verification software to detect fraudulent breeder documents that might be provided.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

91. *Are there established processes to detect CDL fraud?*

Meets Advisory Ideal

The State uses most of the same methodology for detecting CDL fraud as it does for DL fraud. Training for law enforcement and inter-jurisdictional cooperation and investigation add to this positive effort. CDL testing is an important avenue for fraud to enter the CDL licensure endeavor, and covert investigations into testing agents and facilities should be ongoing. Central issuance is an important feature in preventing putting a permanent document into the hands of an applicant until all preliminary investigations are complete.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

92. *Does the State transfer the Driver History Record (DHR) electronically to another State when requested due to a change in State of Record?*

Partially Meets Advisory Ideal

The State uses CDLIS to send driver histories electronically to a new State of Record when one is processed for individuals who have a CDLIS pointer. Currently, it does not appear the driver history is transferred for the Non-CDLIS pointer drivers when they relocate to another state. The State's response does advise this electronic exchange will occur when they join AAMVA's State to State System in September of 2023.

Change Notes: New Question.





93. *Does the State obtain the previous State of Record electronically upon request?*

Meets Advisory Ideal

Connecticut receives the driver history from previous states of record electronically, reviews and takes administrative sanctions not previously addressed.

Change Notes: New Question.

94. *Does the State run facial recognition prior to issuing a credential?*

Meets Advisory Ideal

CT DMV uses facial recognition as a fraud deterrent before the issuance of a driver credential. The data system employs both a 1:1 and a 1:many batch process along with central issuance to deter license/id fraud. Recently, the State working through AAMVA received a grant to implement a cross-jurisdictional facial recognition program.

Change Notes: New Question.

95. *Does the State exchange driver photos with other State Licensing agencies upon request?*

Meets Advisory Ideal

Even though the electronic State-to-State (S2S) program has not yet been deployed in Connecticut, the State appropriately shares images with other States and Law Enforcement upon request. Additionally, Connecticut participates in a multi-state program to share images in an effort to prevent CDL fraud.

Change Notes: New Question.

96. *Are there policies and procedures for maintaining appropriate system and information security?*

Meets Advisory Ideal

CT DMV data systems are maintained within the CT Department of Administrative Services Bureau of Information technology. DMV staff is required to follow their rules of access to the data and must complete annual security training. Additionally, the system access is subject to audit by the State's Auditor of Public Records.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

97. *Are there procedures in place to ensure that driver system custodians track access and release of driver information?*

Meets Advisory Ideal

Both State staff and third-party staff who have access to driver information are monitored and the release of such information is tracked and audited.

Change Notes: Rating Unchanged.

Driver System Interface with Other Components





98. *Does the State post at-fault crashes to the driver record?*

Does Not Meet Advisory Ideal

Crash involvement is not captured on driver records. Having such data as part of the driver history provides a warning system for drivers who are involved in multiple motor vehicle crashes, even if not at-fault, which can be indicative of a lack of defensive driving skills. The State has no statutory authority at this time to retain crash information on non-CDL drivers.

Change Notes: Rating Unchanged.

99. *Does the State's DUI tracking system interface with the driver data system?*

Partially Meets Advisory Ideal

The DMV administers and collects data required for impaired drivers on the DUI system, which is integrated with the driver history records system. There is no integration or interface, however, with the Judicial records. Judicial personnel have access to all DMV records. If this data were to be interfaced or integrated, it would be more useful to all those who deal with impaired drivers in the State. The infrastructure and data for a comprehensive DUI tracking system exist, but there does not appear to be a DUI tracking system that the driver data system interfaces with.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially Meets Advisory Ideal'.

100. *Is there an interface between the driver data system and the Problem Driver Pointer System, the Commercial Driver Licensing System, the Social Security Online Verification system, and the Systematic Alien Verification for Entitlement system?*

Meets Advisory Ideal

Interfaces with AAMVA, PDPS, CDLIS, SSOLV, and SAVE prior to licensure takes place in Connecticut by law. Central issuance provides a methodology by which to prevent issuance when licensing processes occur during federal system downtime.

Change Notes: Rating Unchanged.

101. *Does the custodial agency have the capability to grant authorized law enforcement personnel access to information in the driver system?*

Meets Advisory Ideal

The State's DMV provides access to driver data to law enforcement through its telecommunications system COLLECT. Memoranda of Agreement are used to ensure that data users follow appropriate DPPA guidelines.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

102. *Does the custodial agency have the capability to grant authorized court personnel access to information in the driver system?*

Meets Advisory Ideal

CT DMV has the authority to grant access to driver data to the Courts and authorized





representatives such as prosecutors and public defenders. Memorandums of Understanding are in place.

Change Notes: Rating Unchanged.

Data Quality Control Programs for the Driver System

103. *Is there a formal, comprehensive data quality management program for the driver system?*

Does Not Meet Advisory Ideal

The State's response asserts the State's driver system must conform to CDLIS, AAMVA UNI, and several other federal interfaces regarding driver data quality approved formatting. The system has edits in place to not allow bad data in and that when there are issues, coordinated efforts with business partners are taken to correct the issues. However, having a system in place does not necessarily imply that that system is efficient or effective. To determine actual data integrity of the driver system requires measurements of each of these data quality attributes, taken at given intervals and after system changes. Such measurements provide an early warning sign of problems or lack of data integrity in any attribute. Baseline measures must be taken; then goals can be set for improvement or maintenance of the system as necessary. No measures have been provided.

Change Notes: Rating Unchanged.

104. *Are there automated edit checks and validation rules to ensure entered data falls within a range of acceptable values and is logically consistent among data elements?*

Meets Advisory Ideal

The response includes a list of data elements and the required format of these for entry. It is important that this list of edits and data collection rules be made part of the data dictionary, to ensure that data collection, use and management are all subject to the same set of guidelines. It also helps to ensure consistency if this information is part of the data dictionary.

Change Notes: Rating Unchanged.

105. *Are there timeliness performance measures tailored to the needs of data managers and data users?*

Partially Meets Advisory Ideal

The State uses the Federal timeliness mandates of posting conviction and withdrawal data, pointer maintenance, and Change State of record completion as their timeliness performance measures. They use AAMVA's report of CDL Timeliness and Accuracy as the tool to track the State's progress in meeting these timeframes. There was no information provided if the same measures are used and tracked for non-CDL data. The State advises that data is received and posted real-time to the driver data system, but there should still be measures in place to ensure data is recorded timely. The State's measures could involve the timeliness of correcting errors received in the real-time update.

Change Notes: Rating Unchanged.





106. *Are there accuracy performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The State did not provide any accuracy measures with baselines, goals, and actual values. An example of an accuracy measurement, as noted in the Traffic Records Program Assessment Advisory is, "Percentage of driver records with no errors in critical data elements. Critical data elements could include the data that aids in identifying an individual or any of the data the is stored in the driver history.

Change Notes: Rating Unchanged.

107. *Are there completeness performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The State asserts that CT DMV systems and processing require that license-related transactions must have a minimum set of data available in order to complete a transaction. However, there is no complete list of driver system completeness measures, and there are no baselines/actual values presented.

Change Notes: Rating Unchanged.

108. *Are there uniformity performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The response makes the case for a Connecticut uniformity measure, but does not demonstrate it with a measure and measurement. An example might be the number of standards-compliant data elements in the Connecticut driver database.

Change Notes: Rating Unchanged.

109. *Are there integration performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The State has not provided a measure or measurement of integration for the Connecticut driver system. Performance measurement is the measure of data quality attributes listed in the Traffic Records Program Assessment Advisory. It requires baseline measurement, goal setting, metrics, consistent measurement, and reporting. Due to statutory, procedure, programming, or personnel changes, it is often possible for data quality to slowly degrade without the knowledge of system managers. The data quality measurement and recording, provide a clear picture of any needed upgrades, tweaks to the system, or retraining of personnel before a problem becomes unmanageable. Such measures can also be used to understand and justify the need for improvements provided by developing or updating a data system.

Change Notes: Rating Unchanged.





110. *Are there accessibility performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The State's narrative and attached evidence do not support the State has in place accessibility performance measures tailored to the need of data managers and users that includes baselines, actual values, and targets.

Change Notes: Rating Unchanged.

111. *Has the State established numeric goals-performance metrics-for each performance measure?*

Does Not Meet Advisory Ideal

The State's driver data system does not appear to have a comprehensive data quality management program with numeric goals-performance metrics for each performance area.

Change Notes: Rating Unchanged.

112. *Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?*

Meets Advisory Ideal

The State has provided a narrative of the steps taken to address high-frequency errors. There is no indication of what is considered a high-frequency error, but the process for remediation is documented. It might be helpful to address what criteria are used to label error as high-frequency and develop a written procedure that outlines the steps noted in the response.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

113. *Are sample-based audits conducted periodically for the driver reports and related database contents for that record?*

Meets Advisory Ideal

The State's Document Integrity Unit provides audits of data on a random basis for transactions at DMV offices and those conducted by third parties. The review includes data, transaction or recording errors. Random selection of transactions to be audited could be as simple as choosing a small percentage of total transactions to be reviewed.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

114. *Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?*

Meets Advisory Ideal

CT DMV uses periodic comparative and trend analysis to ensure the efficiency of operations and to identify and plan for deltas.

Change Notes: Rating Improved.





From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

115. *Is data quality feedback from key users regularly communicated to data collectors and data managers?*

Meets Advisory Ideal

The State relies on its Document Integrity Unit (DIU) to find frequent errors and inform users (in-house or third-party) or the IT staff as appropriate. What constitutes high frequency is a determination of the DIU. The DIU works with business unit managers to address changes needed to mitigate errors.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

116. *Are data quality management reports provided to the TRCC for regular review?*

Does Not Meet Advisory Ideal

Since there are no data quality measures or goals listed, it is unlikely that data quality measurements are provided to the TRCC. The point of such measures is to provide guidance for the TRCC for data improvement efforts or funding.

Change Notes: Rating Unchanged.

Description and Contents of the Vehicle Data System

117. *Does custodial responsibility of the identification and ownership of vehicles registered in the State-including vehicle make, model, year of manufacture, body type, and adverse vehicle history (title brands)-reside in a single location?*

Meets Advisory Ideal

The custodial agency with responsibility for records containing the description and ownership of vehicles registered in the state of Connecticut is the Department of Motor Vehicles. Vehicle records include vehicle make, model, year of manufacture, body type, and any adverse vehicle history.

Change Notes: Rating Unchanged.

118. *Does the State or its agents validate every VIN with a verification software application?*

Meets Advisory Ideal

The State or its agents validate every VIN via the CVINA software. CVINA software is integrated with the Connecticut vehicle system (CIVLS) so each time a vehicle registration is processed CVINA is accessed to validate vehicle record information.

Change Notes: Rating Unchanged.





119. *Are vehicle registration documents barcoded—using at a minimum the 2D standard—to allow for rapid, accurate collection of vehicle information by law enforcement officers in the field using barcode readers or scanners?*

Does Not Meet Advisory Ideal

Connecticut vehicle registration documents do not contain a 2D barcode to allow for rapid, accurate collection of vehicle information by law enforcement officers in the field using barcode readers or scanners. Some documents contain a linear barcode but not enough vehicle information is encoded to be useful for completing crash or citation documents.

Change Notes: Rating Unchanged.

Applicable Guidelines for the Vehicle Data System

120. *Does the vehicle system provide title information data to the National Motor Vehicle Title Information System (NMVTIS) at least daily?*

Meets Advisory Ideal

The State provides VINs to NMVTIS daily on a real-time basis as an automated function of the vehicle system transaction process.

Change Notes: Rating Unchanged.

121. *Does the vehicle system query NMVTIS before issuing new titles?*

Meets Advisory Ideal

A screenshot was provided as evidence that the State queries NMVTIS prior to issuance of a new title.

Change Notes: Rating Unchanged.

122. *Does the State incorporate brand information recommended by AAMVA and/or received via NMVTIS on the vehicle record, whether the brand description matches the State's brand descriptions?*

Meets Advisory Ideal

Connecticut adheres to AAMVA's/NMVTIS title brand guidelines. A description of the title brands was provided.

Change Notes: Rating Unchanged.

123. *Does the State participate in the Performance and Registration Information Systems Management (PRISM) program?*

Meets Advisory Ideal

The State provided documentation that it participates in the Performance Registration System and Management (PRISM) Program at the enhanced level.

Change Notes: Rating Unchanged.





Vehicle System Data Dictionary

124. *Does the vehicle system have a documented definition for each data field?*

Meets Advisory Ideal

The Connecticut vehicle data system has a data dictionary with definitions available for each data field and element A copy of the data dictionary with fields and descriptions was provided.

Change Notes: Rating Unchanged.

125. *Does the vehicle system include edit check and data collection guidelines that correspond to the data definitions?*

Meets Advisory Ideal

Connecticut vehicle system edit checks are performed on VINs and vehicle description (year, make, model, etc.). Edit checks were provided in the system data dictionary business rules that were provided in response to this item.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

126. *Are the collection, reporting, and posting procedures for registration, title, and title brand information formally documented?*

Meets Advisory Ideal

The Connecticut vehicle system is supported by written procedures for adding title brands. A sample of the process documentation for applying a junk vehicle title brand was provided.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Procedures and Process Flows for the Vehicle Data System

127. *Is there a process flow that outlines the vehicle system's key data process flows, including inputs from other data systems?*

Does Not Meet Advisory Ideal

The State indicates there is a process flow for its vehicle data system, but not for data inputs in that system. One thing that process flow development can establishment is a full understanding by staff of the correct procedures for various processes within the vehicle system, as well as ensuring, through the process of memorializing the processes, that there are no extra steps or inefficient processes.

Change Notes: Rating Unchanged.





128. *Does the vehicle system flag or identify vehicles reported as stolen to law enforcement authorities?*

Partially Meets Advisory Ideal

The Connecticut vehicle system stops any title or registration processing for a stolen vehicle reported in NMVTIS. Additionally, it is reported that the vehicle record is flagged in the system for vehicles reported stolen to law enforcement via NCIC. However, no information was provided describing the process for receiving information and posting flags on vehicle records reported stolen by law enforcement in NCIC.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

129. *If the vehicle system does flag or identify vehicles reported as stolen to law enforcement authorities, are these flags removed when a stolen vehicle has been recovered or junked?*

Does Not Meet Advisory Ideal

The Connecticut vehicle program contains a manual process for adding or removing a record flag when a vehicle's plates or registration is reported stolen. However, it is unclear what process is used to determine whether registration or plates have been reported stolen or recovered and to determine if the flag is applied to the vehicle record when a vehicle is reported stolen to law enforcement.

Change Notes: Rating Unchanged.

130. *Does the State record and maintain the title brand history (previously applied to vehicles by other States)?*

Meets Advisory Ideal

The Connecticut vehicle system records and maintains title brand history from other states.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

131. *Are the steps from initial event (titling, registration) to final entry into the statewide vehicle system documented?*

Meets Advisory Ideal

Process flow documents for Connecticut titling and registration steps have been provided.

Change Notes: Rating Unchanged.

132. *Is the process flow annotated to show the time required to complete each step?*

Does Not Meet Advisory Ideal

This question is asking whether the flow charts include an average amount of time that it takes for each step of a process to be completed. The response does not address that issue.

Change Notes: Rating Unchanged.





133. *Does the process flow show alternative data flows and timelines?*

Does Not Meet Advisory Ideal

What we were asking here is, Do the process flow documents show alternate ways of completing a transaction, if necessary, perhaps if the system were down? The response does not address whether there are directions for employees when a transaction is not standard.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.

134. *Does the process flow include processes for error correction and error handling?*

Does Not Meet Advisory Ideal

The vehicle system is not supported by a process flow diagram that includes processes for error correction and error handling.

Change Notes: Rating Unchanged.

Vehicle Data System Interface with Other Traffic Record System Components

135. *Are the driver and vehicle files unified in one system?*

Does Not Meet Advisory Ideal

Connecticut vehicle and driver records are not contained in a unified database nor are the systems linked.

Change Notes: Rating Unchanged.

136. *Is personal information entered into the vehicle system using the same conventions used in the driver system?*

Does Not Meet Advisory Ideal

The response indicates that personal information is entered in the same manner in all vehicle registration and titling, but the question is asking if the same naming conventions are used in both the driver and vehicle files.

Change Notes: Rating Unchanged.

137. *When discrepancies are identified during data entry in the crash data system, are vehicle records flagged for possible updating?*

Does Not Meet Advisory Ideal

The information provided does not indicate that a process exists for updating vehicle records when discrepancies are identified during data entry in the crash data system.

Change Notes: Rating Unchanged.

Data Quality Control Programs for the Vehicle Data System





138. *Is the vehicle system data processed in real-time?*

Meets Advisory Ideal

The Connecticut vehicle system processes registration and title transactions in real-time and commits the records to the database in real-time.

Change Notes: Rating Unchanged.

139. *Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?*

Partially Meets Advisory Ideal

The Connecticut vehicle system contains data checks to validate vehicle VIN with the related vehicle specifications. However, no information was provided that the system contains logical field edits to ensure that other record information is accurate (i.e., Title issuance date cannot be before the current date.)

Change Notes: Rating Unchanged.

140. *Are statewide vehicle system staff able to amend obvious errors and omissions for quality control purposes?*

Meets Advisory Ideal

The Connecticut vehicle system does allow the correction of records at DMV offices and by a Support Services Unit who can update and correct obvious errors and omissions for quality control purposes.

Change Notes: Rating Unchanged.

141. *Are there timeliness performance measures tailored to the needs of data managers and data users?*

Partially Meets Advisory Ideal

The State provided measures of process times for transactions. The assessment is measuring data attributes. The fact that vehicle data is real-time tends to make data timeliness one-and-the-same for transactions. However, to make measurements meaningful, as part of a data quality management system, it is important to use both baseline and interim measurements, with established goals. It is not clear that this has been done in Connecticut. Transaction times are measures of employee effectiveness and efficiency rather than data integrity. The traffic records program Advisory provides some examples of vehicle measures that are more likely to address data excellence than transaction times by employees.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

142. *Are there accuracy performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The Connecticut vehicle system is not supported by established accuracy performance measures as





a component of a comprehensive data quality management system envisioned in the ADVISORY.

Change Notes: Rating Unchanged.

143. *Are there completeness performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The State indicates that all data elements must be entered before a transaction is completed. While such a requirement is true in many systems, it often remains possible to enter "unknown" or "N/A" or incorrect data, thus circumventing the provision that accurate data must be entered in all fields. As a result, it is necessary to measure the completeness of the data to ensure that data quality does not degrade over time.

Change Notes: Rating Unchanged.

144. *Are there uniformity performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

One sure means of determining if data quality standards are met is to develop measures and regularly take measurements after baselines have been determined. No actual measure has been provided for data uniformity in this response.

Change Notes: Rating Unchanged.

145. *Are there integration performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

The response to this question addresses employee performance. The question is about the quality of the data. Integration measures address which systems interact with other systems, including what data can be accessed from system to system, such as crash to driver to vehicle systems. There is no measure or measurement provided of integration in this response.

Change Notes: Rating Unchanged.

146. *Are there accessibility performance measures tailored to the needs of data managers and data users?*

Does Not Meet Advisory Ideal

Accessibility of vehicle data, in this case, can be addressed as access by authorized users to the entire file, or access by individual authorized users of the data, such as courts or law enforcement entities. No performance measure or measurement has been provided in response to this question. Sample measures can be found in the Traffic Records Assessment Program Advisory.

Change Notes: Rating Unchanged.





147. *Has the State established numeric goals-performance metrics-for each performance measure?*

Does Not Meet Advisory Ideal

Connecticut is supported by an employee performance monitoring program; however, the performance and quality program inquired about in this Assessment deal with the quality of the data in the vehicle system and the data quality attributes of timeliness, accuracy, completeness, uniformity, accessibility, and integration. Individual employee performance may contribute to overall data system quality, but the measurement sought here is of the system only.

Change Notes: Rating Unchanged.

148. *Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?*

Partially Meets Advisory Ideal

The response indicates that errors are tracked to determine whether the issue is programming, procedural or individual, but stops short of explaining how that information is used to improve data, such as revising forms used in the program, or updating training, etc. An improved rating could result from additional information about the use of error reports.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially Meets Advisory Ideal'.

149. *Are sample-based audits conducted for vehicle reports and related database contents for that record?*

Does Not Meet Advisory Ideal

The State relies on federal program monitoring of State data for quality. It also reports that the IT department indicates the need for audits. Random, sample-based audits can be used to ensure that no programming or procedural problems have gone undiscovered. No information was provided indicating that the Connecticut vehicle system is supported by sample-based audits conducted for vehicle records and related database contents for each record to ensure the accuracy of the data.

Change Notes: Rating Unchanged.

150. *Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions within the State?*

Does Not Meet Advisory Ideal

Trend analyses are important in several ways: first, to ensure that year-over-year or jurisdiction-to-jurisdiction data are relatively consistent. If not, the analysis might point to a problem in the data or allow for planning for appropriate workload resources. Second, trend analysis is a good way to determine changes in the number and types of vehicles in use in the State and to review over- or under-representation of various types of vehicles in crash involvement or severity of injury in crashes. Such information has a variety of uses for traffic safety purposes.

Change Notes: Rating Unchanged.





151. *Is data quality feedback from key users regularly communicated to data collectors and data managers?*

Meets Advisory Ideal

Data quality is tracked by Information Technology for data discrepancy; however, users often note types of data issues that are important to the data collectors. This information should be passed on to and addressed by program managers. However, it is unclear if the system is also used to receive user suggestions for system improvement. This option for the trouble ticket system may tend to generate data system improvements.

Change Notes: Rating Unchanged.

152. *Are data quality management reports provided to the TRCC for regular review?*

Does Not Meet Advisory Ideal

The response indicates that data quality reports can be provided to TRCC as requested, but no measures appear to have been developed and no baseline data has been collected. The reason for regular reporting to the TRCC regarding data quality is so that data improvement can be monitored, championed and funding can be provided as it is needed.

Change Notes: Rating Unchanged.

Description and Contents of the Roadway Data System

153. *Are all public roadways within the State located using a compatible location referencing system?*

Meets Advisory Ideal

The State has two compatible linear referencing systems and is for both state and locally owned roadways. They have an older, non-geospatial LRS and a newer geospatially accurate LRS. The State maintains just over 20% of the public roadways.

Change Notes: Rating Unchanged.

154. *Are the collected roadway and traffic data elements located using a compatible location referencing system (e.g., LRS, GIS)?*

Meets Advisory Ideal

Connecticut has provided documentation showing roadway and traffic data elements located using their LRS systems. Both LRS systems, the AWLRS and the RIS, are used. Both state and local information is included.

Change Notes: Rating Unchanged.

155. *Is there an enterprise roadway information system containing roadway and traffic data elements for all public roads?*

Meets Advisory Ideal

The State has the Transportation Enterprise Database (TED), which is a data warehouse that links data pertaining to roadway and traffic elements to their location on the geospatial LRS for all state





and local public roads. They have attached a PDF outlining their linkages for the enterprise database (TED) between the road network (AWLRS), which contains road and traffic element data; the bridge information system (InspectTech), the project document management system (ProjectWise), and others. The traffic signal control areas and maintenance paving program are all updated directly within TED and its associated interface.

Change Notes: Rating Unchanged.

156. *Does the State have the ability to identify crash locations using a referencing system compatible with the one(s) used for roadways?*

Meets Advisory Ideal

Connecticut crashes are located using information from the non-geospatial LRS (RIS). Crash locations are assigned route/road and milepoint based on information provided which is provided in multiple ways. DOT personnel review the information to ensure accuracy and make corrections if necessary. Examples of crash locations on a map were provided.

Change Notes: Rating Unchanged.

157. *Is crash data incorporated into the enterprise roadway information system for safety analysis and management use?*

Meets Advisory Ideal

The State has made significant strides to ensure that crash data is incorporated into the roadway enterprise system for use in the development of safety programs and projects. They have enlisted the help of academia to support these analyses and move forward on a proactive systemic safety program.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

Applicable Guidelines for the Roadway Data System

158. *Are all the MIRE Fundamental Data Elements collected for all public roads?*

Meets Advisory Ideal

The State has included within the Strategic Plan a chart of MIRE elements, responsibility, compliance status, and applicability to certain roadway types.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

159. *Do all additional collected data elements for any public roads conform to the data elements included in MIRE?*

Meets Advisory Ideal

The State has provided evidence that their data model mimics the MIRE Data model.

Change Notes: Rating Improved.





From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

Data Dictionary for the Roadway Data System

- 160.** *Are all the MIRE Fundamental Data Elements for all public roads documented in the enterprise system's data dictionary?*

Meets Advisory Ideal

The State has provided evidence through their Asset Metadata model that the MIRE elements are contained in the data dictionary.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

- 161.** *Are all additional (non-Fundamental Data Element) MIRE data elements for all public roads documented in the data dictionary?*

Meets Advisory Ideal

The data dictionary contains MIRE data elements for all public roads.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

- 162.** *Does local, municipal, or tribal (where applicable) roadway data comply with the data dictionary?*

Meets Advisory Ideal

The State receives the information from the local sources indirectly and the CTDOT's Roadway Inventory Section ensures the data complies with the CTDOT data dictionary.

Change Notes: Rating Unchanged.

- 163.** *Is there guidance on how and when to update the data dictionary?*

Meets Advisory Ideal

The State has provided a narrative describing the process for updating the data dictionary. They also attached a document that is used for updating information.

Change Notes: Rating Unchanged.

Procedures and Process Flows for the Roadway Data System

- 164.** *Are the steps for incorporating new elements into the roadway information system (e.g., a new MIRE element) documented to show the flow of information?*

Meets Advisory Ideal

Connecticut uses their CTDOT Data Readiness Assessment Form that outlines the flow of information depending on the asset type.





Change Notes: Rating Unchanged.

165. *Are the steps for updating roadway information documented to show the flow of information?*

Meets Advisory Ideal

The State has provided a flow chart document that shows the process for updating the road network for both State and local roads. They also provided a narrative of the process.

Change Notes: Rating Unchanged.

166. *Are the steps for archiving and accessing historical roadway inventory documented?*

Meets Advisory Ideal

The State has provided a description of how the data is archived and has also provided a screenshot of how the past information can be accessed.

Change Notes: Rating Unchanged.

167. *Are the procedures used to collect, manage, and submit local agency roadway data (e.g., county, MPO, municipality, tribal) to the statewide inventory documented?*

Meets Advisory Ideal

Local agencies are not required to collect a lot of roadway information. The process is described in the narrative. The form used to submit changes was attached

Change Notes: Rating Unchanged.

168. *Are procedures for collecting and managing the local agency (to include tribal, where applicable) roadway data compatible with the State's enterprise roadway inventory?*

Meets Advisory Ideal

Since the State collects most roadway data on all public roadways, their well-developed systems and processes ensure compatibility with local agencies.

Change Notes: Rating Unchanged.

169. *Are there guidelines for collection of data elements as they are described in the State roadway inventory data dictionary?*

Meets Advisory Ideal

The State has attached their Roadway Inventory Field Manual which documents the collection of data elements.

Change Notes: Rating Unchanged.

Intrastate Roadway System Interface





170. *Are the location coding methodologies for all State roadway information systems compatible?*

Meets Advisory Ideal

The State has indicated that all location coding methodologies are compatible. They provide information on what location methods are used for each asset. While the location coding methods are not identical, the State has developed a process that allows them to be convertible and compatible.

Change Notes: Rating Unchanged.

171. *Are there interface linkages connecting the State's discrete roadway information systems?*

Meets Advisory Ideal

The State has described the linkages that are achieved in their Transportation Enterprise Database (TED) environment. They have provided an example of a query.

Change Notes: Rating Unchanged.

172. *Are the location coding methodologies for all regional, local, and tribal roadway systems compatible?*

Meets Advisory Ideal

The State collects the majority of the local roadway system information which ensures the location method coding methodologies are compatible. Individual asset data that may have different coding methods are easily converted to be compatible with the methods that exist within the LRS framework.

Change Notes: Rating Unchanged.

173. *Do roadway data systems maintained by regional and local custodians (e.g., MPOs, municipalities, and federally recognized Indian Tribes) interface with the State enterprise roadway information system?*

Partially Meets Advisory Ideal

While there is no direct linkage between the State and local entities, the State has provided a web-based method for updates from locals to their roadways. Developing such an interface would benefit the State.

Change Notes: Rating Unchanged.

174. *Does the State enterprise roadway information system allow MPOs and local transportation agencies (to include federally recognized Tribes, where applicable) on-demand access to data?*

Meets Advisory Ideal

The State has provided evidence of the ability to receive on-demand access of roadway and other data through various methods such as the CTSRC and DOT website.





Change Notes: Rating Unchanged.

Data Quality Control Programs for the Roadway Data System

175. *Do Roadway system data managers regularly produce and analyze data quality reports?*

Meets Advisory Ideal

The State has described their process for generating quality control reports. They have included the frequency of the reports. Two examples of reports were attached.

Change Notes: Rating Unchanged.

176. *Is there a formal program of error/edit checking for data entered into the statewide roadway data system?*

Meets Advisory Ideal

The State has described their process for checking the data entered into their system. They have also provided examples of their roadway inventory system audit errors as well as other examples.

Change Notes: Rating Unchanged.

177. *Are there procedures for prioritizing and addressing detected errors?*

Meets Advisory Ideal

The State has both manual and automated processes for detecting and prioritizing errors within the roadway system.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

178. *Are there procedures for sharing quality control information with data collectors through individual and agency-level feedback and training?*

Meets Advisory Ideal

The State has provided a narrative on how they share quality control information with data collectors. They include weekly meetings with those responsible for network location and attribution maintenance and weekly meetings of the Transportation Enterprise Database (TED development group).

Change Notes: Rating Unchanged.

179. *Are there timeliness performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The State has provided a timeliness performance measure that can be found in the Traffic Records Strategic Plan. They indicated that the mobile application was only recently deployed so a full year of data is not available but they do have an established goal.

Change Notes: Rating Improved.





From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

180. *Are there accuracy performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The State has established a performance measure for accuracy (% of roadway segment records with no errors in critical data elements). Through their strategic plan, they have documented their goals and actual data through 2022.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

181. *Are there completeness performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The State has developed a completeness performance measure (% of public roadway miles identified on the State's base map or roadway inventory file) and has documented goals and actual data through 2022.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

182. *Are there uniformity performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The State has provided a uniformity performance measure and has included actual values.

Change Notes: Rating Unchanged.

183. *Are there accessibility performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The State has provided an accessibility performance measure and has included actual values.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

184. *Are there integration performance measures tailored to the needs of data managers and data users?*

Meets Advisory Ideal

The State has developed a performance measure for integration (# of traffic records system component databases linked to the roadway database). They currently have 7 databases linked and have exceeded their 2021 goal by 2 databases. Goals and actual info have been established through 2022.

Change Notes: Rating Improved.





From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

185. *Has the State established numeric goals-performance metrics-for each performance measure?*

Meets Advisory Ideal

The State has provided a copy of their Traffic Records Strategic Plan which includes the goals and measures for each of their performance measures.

Change Notes: New Question.

186. *Are data quality management reports provided to the TRCC for regular review?*

Meets Advisory Ideal

Through the Strategic Plan, a data deficiency report is produced annually. It is suggested that a more regular schedule (possibly quarterly) be generated for the TRCC. It would provide the TRCC the opportunity to fix deficiencies earlier than annually.

Change Notes: New Question.

Description and Contents of the Citation and Adjudication Data Systems

187. *Is citation and adjudication data used for the prosecution of offenders; adjudication of cases; traffic safety analysis to identify problem locations, problem drivers, and issues related to the issuance of citations; and for traffic safety program planning purposes?*

Partially Meets Advisory Ideal

It appears through the electronic adjudication program, citation and adjudication data is used for the prosecution of offenders, using real-time driver histories, pending cases and cases not prosecuted. The State also uses the type and status of license credentials, registration information, driver histories to make determinations about prosecution, including increased charges and penalties for violation as a subsequent offender. Citation and adjudication data is made available to law enforcement agencies through COLLECT and through reporting of dispositions back to the agency at the conclusion of all judicial processes. Each agency develops its own strategies for enforcement based on this information and other factors known to the agency. Ad hoc reports are provided to the Highway Safety Office. A report of FY19 DUI citations was attached with no explanation for how this report is used.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

188. *Is there a statewide authority that assigns unique citation numbers?*

Meets Advisory Ideal

The Centralized Infractions Bureau (CIB), part of the Court Operations Unit of the Judicial Branch of the State of Connecticut is created and given the authority to handle infractions from every law enforcement agency in the state pursuant to Connecticut General Statutes Section 51-164n. CIB issues unique citation numbers utilizing a classic Mod7 check-digit methodology. This bureau also issues unique numbers through the electronic citation system. Approximately 80 percent of





citations are issued electronically, as evidenced by a monthly citation report. A copy of the paper citation was also provided.

Change Notes: Rating Unchanged.

189. *Are all citation dispositions-both within and outside the judicial branch-tracked by a statewide citation tracking system?*

Meets Advisory Ideal

Citation dispositions are reported to the Centralized Infractions Bureau database, which also houses all citations issued. Connecticut has a unified court system and all citations are disposed through the judicial branch. Dispositions are then transmitted electronically to the Department of Motor Vehicles for posting on the driver record; a sample transmission file was provided.

Change Notes: Rating Unchanged.

190. *Are final dispositions (up to and including the resolution of any appeals) posted to the driver data system?*

Meets Advisory Ideal

All final dispositions required to be posted to the driver record are, including resolutions of appeals. All dispositions are provided through the judicial process. The dispositions are electronically transmitted daily to the Department of Motor Vehicles for posting to the driver record; a sample transmission file was provided.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

191. *Are the courts' case management systems interoperable among all jurisdictions within the State (including tribal, local, municipal, and State)?*

Meets Advisory Ideal

The State has a unified court system with a single case management system. There are no local or municipal courts in Connecticut, and no Tribal courts with applicable jurisdiction.

Change Notes: Rating Unchanged.

192. *Is there a statewide system that provides real-time information on individuals' driving and criminal histories?*

Meets Advisory Ideal

The Connecticut On-line Law Enforcement Communications Teleprocessing (COLLECT) system provides real-time online access to driver and vehicle histories.

Change Notes: Rating Unchanged.

193. *Do all law enforcement agencies, parole agencies, probation agencies, and courts within the State participate in and have access to a system providing real-time information on individuals driving and criminal histories?*

Meets Advisory Ideal





In Connecticut, law enforcement agencies, parole agencies, probation agencies, and courts within the State participate in and have access to COLLECT which provided real-time information on individuals driving and criminal histories. Access to COLLECT is granted only to law enforcement and criminal justice agencies. The COLLECT system services over 180 local, State, and federal agencies.

Change Notes: Rating Unchanged.

Applicable Guidelines and Participation in National Data Exchange Systems for the Citation and Adjudication Systems

194. *Are DUI convictions and traffic-related felonies reported according to Uniform Crime Reporting (UCR) guidelines?*

Meets Advisory Ideal

The State reports DUIs and other vehicular/driving felonies following UCR reporting guidelines.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

195. *Do the appropriate portions of the citation and adjudication systems adhere to the NIEM Justice domain guidelines?*

Meets Advisory Ideal

All information transmitted in XML uses NIEM guidelines, including the electronic citation system. The eCitation System is implemented statewide and conforms to NIEM v2.0.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

196. *Does the State use any National Center for State Courts (NCSC) guidelines for court records?*

Meets Advisory Ideal

The Judicial Branch uses NSCS standards for court records. We suggest that the State document how its system uses NCSC standards.

Change Notes: Rating Unchanged.

Data Dictionary for the Citation and Adjudication Data Systems

197. *Does the statewide citation tracking system have a data dictionary?*

Partially Meets Advisory Ideal

The Connecticut Judicial Branch maintains the statewide citation tracking system does have a data dictionary. An excel spreadsheet was attached as evidence, however, the spreadsheet appears to be an excerpt from the database, reflecting fields contained in a data dictionary, more along the line of





a data layout document. It would benefit the State to explore, with system administrators (IT), the possibility of identifying a more comprehensive document with data dictionary definitions and flow diagrams reflecting processes used to move data through the system.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

198. *Do the courts' case management system data dictionaries provide a definition for each data field?*

Partially Meets Advisory Ideal

The court case management system and the citation tracking system are the same system. The Connecticut Judicial Branch maintains the statewide citation tracking system does have a data dictionary. An excel spreadsheet was attached as evidence, however, the spreadsheet appears to be an excerpt from the database, reflecting fields contained in a data dictionary, more along the line of a data layout document. It would benefit the State to explore, with system administrators (IT), the possibility of identifying a more comprehensive document with data dictionary definitions for each field and flow diagrams reflecting processes used to move data through the system.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

199. *Do the citation data dictionaries clearly define all data fields?*

Partially Meets Advisory Ideal

The State's citation system data dictionary partially defines each data field, describing the field type and whether it can be null or not. An actual description of each field is not included, nor are other items like whether the field is linked to other data sources.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

200. *Do the courts' case management system data dictionaries clearly define all data fields?*

Partially Meets Advisory Ideal

The data dictionary for the court's case management system (and the state citation tracking system) defines field types and values. It does not provide plain-language descriptions of fields or indicate which fields are linked from other data sources.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

201. *Are the citation system data dictionaries up-to-date and consistent with the field data collection manual, training materials, coding manuals, and corresponding reports?*

Meets Advisory Ideal

The citation tracking (and court case management) system data dictionary is updated as laws change. The data dictionary was last updated in October 2021 to reflect new legislation regarding cannabis. The Office of the Chief Court Administrator is responsible for updates to the citation tracking/court case management system. Updates to the data dictionary sync with updates to guidance provided to law enforcement agencies.





Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

202. *Do the citation data dictionaries indicate the data fields that are populated through interfaces with other traffic records system components?*

Partially Meets Advisory Ideal

The citation tracking/court case management system data dictionary provided shows which tables where each field is stored. The state indicated that this references linkages to other data sources, yet that seems not to be the case. Diagrams of eCitation and online adjudication systems were provided. It is not clear from the documentation that fields in the citation system are populated from eCitation or online adjudication systems. Clearer documentation is recommended.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

203. *Do the courts' case management system data dictionaries indicate the data fields populated through interface linkages with other traffic records system components?*

Partially Meets Advisory Ideal

The citation system/case management system data dictionary lists fields according to tables. The tables do not reflect tables from other data sources, like eCitation or the online adjudication system. While the state indicates that the data dictionary tables column does reflect these linkages, the documentation provided is not clear.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

Procedures and Process Flows for the Citation and Adjudication Data Systems

204. *Does the State track citations from point of issuance to posting on the driver file?*

Meets Advisory Ideal

Citations can be tracked from issuance to disposition and recording to the driver record. The CIB assigns and distributes unique citations. Law enforcement agencies submit citation data to the court when the citation is issued, then the adjudication is entered by the court. The court transmits a daily file to the Department of Motor Vehicles, who posts the disposition to the driver record. Workflows were not provided; the attachments are table diagrams/structure of eCitation and online adjudication systems. The explanation in the 2017 response was used for this rating.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

205. *Does the State distinguish between the administrative handling of court payments in lieu of court appearances (mail-ins) and court appearances?*

Partially Meets Advisory Ideal

Payments for citations are coded as such and transmitted as convictions for posting on the driver





record. It is not clear if the driver record posting differentiates between convictions from payment versus convictions from a hearing. The driver record provided shows convictions and one cannot tell if the citation was paid or if the defendant pled. It is implied that this information is stored in the court case management system.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

206. *Does the State have a system for tracking administrative driver penalties and sanctions?*

Partially Meets Advisory Ideal

The Department of Motor Vehicles updates the driver record with dispositions transmitted by the court. If the dispositions require administrative license suspense, the DMV takes that action, as evidenced by the attached sample driver record. It is not clear whether the State issues administrative driver sanctions outside the court process, for example, administrative suspension for refusing a breath test.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

207. *Does the State track the number and types of traffic citations for juvenile offenders?*

Meets Advisory Ideal

Juveniles 16 and over are treated as adults, and those 15 and under go to juvenile court. The court can run ad hoc reports of juvenile offenders based on age, as evidenced in the attached report.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

208. *Are deferrals and dismissals tracked by the court case management systems or on the driver history record (DHR) to insure subsequent repeat offenses are not viewed as first offenses?*

Meets Advisory Ideal

Dismissals and deferrals for DUIs and other traffic felonies are coded and tracked in the court's case management system. This information may be used to disqualify some program applicants on subsequent charges.

Change Notes: Rating Unchanged.

209. *Are there State and/or local criteria for deferring or dismissing traffic citations and charges?*

Meets Advisory Ideal

Deferrals result from participation in certain diversion or educational programs. When completed, cases may be dismissed. Records are kept to determine eligibility for participation in programs for future violations. Dismissals may also occur for traffic infractions at the discretion of the judge or prosecutor.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.





210. *Are the processes for retaining, archiving or purging citation records defined and documented?*

Partially Meets Advisory Ideal

The Judicial Branch does not purge its records. Records are maintained electronically indefinitely and are accessible to requesters based on the statutorily defined public accessibility. Best practices for record maintenance do include scheduled purges, which help mitigate maintenance costs and ensure data quality.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially Meets Advisory Ideal'.

211. *Are there security protocols governing data access, modification, and release in the adjudication system?*

Partially Meets Advisory Ideal

Standards exist for access to applications used by the court. Authorization is requested by form/application, with access determined by agency or need. A copy of the access authorization form was provided. Protocols for determining the level of access to edit or modify records, for example, were not provided.

Change Notes: Rating Unchanged.

212. *Does the State have an impaired driving data tracking system that uses some or all the data elements or guidelines of NHTSA's Model Impaired Driving Records Information System (MIDRIS), which provides a central point of access for DUI Driver information from the time of the stop/arrest through adjudication, sanctions, rehabilitation, prosecution and posting to the driver history file?*

Does Not Meet Advisory Ideal

The State does not have a DUI/impaired driving data tracking system.

Change Notes: Rating Unchanged.

213. *Does the DUI tracking system include BAC and any drug testing results?*

Does Not Meet Advisory Ideal

The State does not have an impaired driver tracking system, nor did the State indicate that the BAC is stored on the driver record.

Change Notes: Rating Unchanged.

Citation and Adjudication Systems Interface with Other Components

214. *Does the citation system interface with the driver system to collect driver information to help determine the applicable charges?*

Meets Advisory Ideal

At the time of a stop, a law enforcement officer can run a query in COLLECT and that information





can be used to populate the charging document and determine the applicable charges. The data retrieved is from NCIC/CJIS.

Change Notes: Rating Unchanged.

215. *Does the citation system interface with the vehicle system to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock)?*

Partially Meets Advisory Ideal

At the time of a stop, a law enforcement officer can query COLLECT to retrieve vehicle information from NCIC/CJIS. That data can be used to populate the charging document. No explanation was provided regarding how the citation and vehicle systems might interface with respect to carrying out vehicle sanctions.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

216. *Does the citation system interface with the crash system to document violations and charges related to the crash?*

Does Not Meet Advisory Ideal

The citation system does not interface with the crash system. Crashes can be noted on citations and crash reports can be submitted to the citation adjudication system by law enforcement officers.

Change Notes: Rating Unchanged.

217. *Does the adjudication system interface with the driver system to post dispositions to the driver file?*

Meets Advisory Ideal

The adjudication system generates a file of dispositions that are transmitted electronically each night to the Department of Motor Vehicles. The DMV uses the data to post dispositions to the driver record.

Change Notes: New Question.

218. *Does the adjudication system interface with the vehicle system to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock mandates, and supervision)?*

Partially Meets Advisory Ideal

The Department of Motor Vehicles houses both the driver and vehicle databases. The adjudication system sends a nightly electronic file to the DMV of disposition data. That data is used to update driver records. It is not clear whether sanctions for vehicles are also applied. The sample transmission file and screenshots show driver and vehicle data but, again, it's not clear that whether the actual databases are linked. Diagrams or additional documentation are recommended.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.





219. *Does the adjudication system interface with the crash system to document violations and charges related to the crash?*

Does Not Meet Advisory Ideal

In Connecticut, the adjudication system does not interface with the crash system to document violations and charges related to the crash. Because processes are in place to collect and disseminate this information, it is suggested the State explore the possibility of developing a formal system to exchange this information.

Change Notes: Rating Unchanged.

Quality Control Programs for the Citation and Adjudication Systems

220. *Are there timeliness performance measures tailored to the needs of citation systems managers and data users?*

Meets Advisory Ideal

The timeliness performance measure for the citation system is the number of days from issuance to entry into the citation database. The 2019 performance data was provided as the most current and reliable, given the interruptions caused by the pandemic in 2020 and 2021, particularly for paper citations.

Change Notes: Rating Unchanged.

221. *Are there accuracy performance measures tailored to the needs of citation systems managers and data users?*

Meets Advisory Ideal

The State of Connecticut uses a performance measure to evaluate the accuracy of citations: "Percentage of citation records with no errors in critical data elements." Whether the infractions are electronic or paper, entry into the centralized database triggers an electronic communication with the Connecticut Department of Motor Vehicles, comparing the entry to that external source of information. Sample reports from 2021 were provided.

Change Notes: Rating Unchanged.

222. *Are there completeness performance measures tailored to the needs of citation systems managers and data users?*

Does Not Meet Advisory Ideal

The State does not have completeness performance measures for the citation system.

Change Notes: Rating Unchanged.

223. *Are there uniformity performance measures tailored to the needs of citation systems managers and data users?*

Meets Advisory Ideal

The uniformity performance measure for the citation system is based on correct entry of violation





codes. For electronic citations, the issuance program entry of a violation code is required for the submittal of the citation. The State also monitors the percent of electronic and paper citations. Reports that monitor this performance measure would be helpful.

Change Notes: Rating Improved.
From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

224. *Are there integration performance measures tailored to the needs of citation systems managers and data users?*

Does Not Meet Advisory Ideal

The State does not have integration performance measures for the citation system.

Change Notes: Rating Unchanged.

225. *Are there accessibility performance measures tailored to the needs of citation systems managers and data users?*

Does Not Meet Advisory Ideal

The State does not have accessibility performance measures for the citation system.

Change Notes: Rating Unchanged.

226. *Has the State established numeric goals-performance metrics-for each citation system performance measure?*

Does Not Meet Advisory Ideal

The State has not established numeric metrics for its performance measures.

Change Notes: New Question.

227. *Are there timeliness performance measures tailored to the needs of adjudication systems managers and data users?*

Partially Meets Advisory Ideal

The timeliness measure relates to how long between the issuance and disposition of the citation. This is a due process measure - one that focuses more on the timeliness of the adjudication process than the timeliness of the data (the intent here). The 2017 response also included a measure related to data entry. It is unclear whether that measure is still used.

Change Notes: Rating Changed.
From 'Meets Advisory Ideal' to 'Partially Meets Advisory Ideal'.

228. *Are there accuracy performance measures tailored to the needs of adjudication systems managers and data users?*

Meets Advisory Ideal

The accuracy performance measure is based on citation dispositions returned by DMV for data that does not match the driver system. Current reports were provided as examples.

Change Notes: Rating Unchanged.





229. *Are there completeness performance measures tailored to the needs of adjudication systems managers and data users?*

Does Not Meet Advisory Ideal

The State has not adopted completeness performance measures. The citation and adjudication systems are the same.

Change Notes: Rating Unchanged.

230. *Are there uniformity performance measures tailored to the needs of adjudication systems managers and data users?*

Meets Advisory Ideal

The citation and adjudication systems are the same (the court case management system). The single uniformity performance measure is based on the correct entry of violation codes.

Change Notes: New Question.

231. *Are there integration performance measures tailored to the needs of adjudication systems managers and data users?*

Does Not Meet Advisory Ideal

The State has not established integration performance measures for the adjudication system.

Change Notes: Rating Unchanged.

232. *Are there accessibility performance measures tailored to the needs of adjudication systems managers and data users?*

Does Not Meet Advisory Ideal

The State does not have an accessibility performance measure for the adjudication system.

Change Notes: New Question.

233. *Has the State established numeric goals-performance metrics-for each adjudication system performance measure?*

Partially Meets Advisory Ideal

The State uses NCSC targets for timeliness and accuracy. The State has not established its own targets/metrics for any of the measures. The NCSC target for timeliness appears to be related to due process (time from issuance to disposition) and not specifically related to data timeliness.

Change Notes: New Question.

234. *Does the State have performance measures for its DUI Tracking system?*

Does Not Meet Advisory Ideal

The State does not have a DUI tracking system.

Change Notes: Rating Unchanged.





235. *Are sample-based audits conducted periodically for citations and related database content for that record?*

Does Not Meet Advisory Ideal

Although the State is audited, the example provided is a financial audit, not a data audit. It is not explained whether sample-based audits are periodically performed to review data quality.

Change Notes: New Question.

236. *Are data quality management reports provided to the TRCC for regular review?*

Does Not Meet Advisory Ideal

Data quality management reports are not provided to the TRCC on a regular basis. Occasionally the Highway Safety Office requests ad hoc reports. The example provided included seat belt violations.

Change Notes: New Question.

Injury Surveillance System

237. *Is there an entity in the State that quantifies the burden of motor vehicle injury using EMS, emergency department, hospital discharge, trauma registry and vital records data?*

Partially Meets Advisory Ideal

While there is not a single source using all of the data systems in the injury surveillance system to report on motor vehicle crashes, the Department of Public Health's Statistics and Surveillance Section uses vital records, emergency department visits, and hospital discharge records to quantify that burden of injury.

Change Notes: New Question.

238. *Are there any other statewide databases that are used to quantify the burden of motor vehicle injury?*

Does Not Meet Advisory Ideal

The Connecticut Crash Data Repository allows for the addition of person and behavioral factors obtained from the crash report. Beyond the crash report and five core components of the injury surveillance system, no other data systems are described as being used to study motor vehicle crashes.

Change Notes: Rating Unchanged.

239. *Do the State's privacy laws allow for the use of protected health information to support data analysis activities?*

Meets Advisory Ideal

The Connecticut General Statute 19a-25 protects the release of confidential data from the Department of Public Health; the department utilizes a data confidentiality pledge to ensure compliance.





Change Notes: New Question.

Emergency Medical Systems (EMS) Description and Contents

240. *Is there a statewide EMS database?*

Meets Advisory Ideal

Connecticut uses ImageTrend as its vendor for its statewide EMS system and database, the Connecticut EMS Tracking and Reporting System (CEMSTARS).

Change Notes: Rating Unchanged.

241. *Does the EMS data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?*

Does Not Meet Advisory Ideal

The ability to track the frequency and severity of injuries sustained in motor vehicle crashes is provided by the EMS database. Efforts are underway to develop a linkage of crash and injury surveillance data systems for analysis, but annual or ad hoc reports that use EMS data to track crash-related injuries are not being created nor has there been a request for this information.

Change Notes: Rating Unchanged.

242. *Is the EMS data available for analysis and used to identify problems, evaluate programs, and allocate resources?*

Partially Meets Advisory Ideal

EMS data is accessible to units in the Department of Public Health and others granted permission in compliance with federal and state laws. Data from traffic incidents has been pulled, but it is unclear if it has been used for problem identification, resource allocation, or program evaluation.

Change Notes: Rating Unchanged.

EMS – Guidelines

243. *Does the State have a NEMSIS-compliant statewide database?*

Meets Advisory Ideal

CEMSTARS is compliant with the NEMSIS 3.4 standard and will be updated to the 3.5 standard in the near future. The State submits data to the NEMSIS database and Connecticut General Statute 19a-177(8)(A) addresses the need to establish an EMS data collection system.

Change Notes: Rating Unchanged.

EMS – Data Dictionary





244. *Does the EMS system have a formal data dictionary?*

Does Not Meet Advisory Ideal

A partial data dictionary has been completed, but a lack of funding to support a complete and formal data dictionary has hampered this effort.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.

EMS – Procedures & Processes

245. *Is there a single entity that collects and compiles data from the local EMS agencies?*

Meets Advisory Ideal

EMS data is captured and submitted electronically through the ImageTrend platform.

Change Notes: Rating Unchanged.

246. *Is aggregate EMS data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?*

Meets Advisory Ideal

EMS data is available to outside parties for analysis upon approval by the Department of Public Health. The Department complies with federal and state standards of data protection and the Health Investigation Committee reviews all requests for access.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

247. *Are there procedures in place for the submission of all EMS patient care reports to the Statewide EMS database?*

Meets Advisory Ideal

Patient care reports are submitted to ImageTrend at least quarterly (State statute) after passing all validation checks. The report is also transmitted to the receiving hospital and maintained by the submitting agency's vendor. The reports are available to staff at the Department of Public Health in aggregate or record-level formats.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

248. *Are there procedures for returning data to the reporting EMS agencies for quality assurance and improvement (e.g., correction and resubmission)?*

Does Not Meet Advisory Ideal

Rules exist in the EMS system to prevent the submission of invalid or inconsistent data, but the rules are not active. There are plans to implement a process for returning records to EMS agencies beginning with the NEMSIS 3.5.0 implementation.





Change Notes: Rating Unchanged.

EMS – Quality Control

249. *Are there automated edit checks and validation rules to ensure that entered EMS data falls within a range of acceptable values and is logically consistent among data elements?*

Partially Meets Advisory Ideal

CEMSTARS includes field-based rules and it was reported that fields can be mandatory and values forced to fall within specific ranges. It is unclear what these rules are or if any are mandatory.

Change Notes: Rating Improved.

From ‘Does Not Meet Advisory Ideal’ to ‘Partially Meets Advisory Ideal’.

250. *Are there processes for returning rejected EMS patient care reports to the collecting entity and tracking resubmission to the statewide EMS database?*

Does Not Meet Advisory Ideal

The EMS data collection provides the ability to return rejected records, but this feature is not implemented.

Change Notes: Rating Unchanged.

251. *Are there timeliness performance measures tailored to the needs of EMS system managers and data users?*

Does Not Meet Advisory Ideal

Most agencies submit daily and the timeliness of submissions is reviewed quarterly. However, having submission requirements is not the same as having timeliness performance measures. A performance measure is a tool used to gauge the performance of a specific system.

Change Notes: Rating Changed.

From ‘Partially Meets Advisory Ideal’ to ‘Does Not Meet Advisory Ideal’.

252. *Are there accuracy performance measures tailored to the needs of EMS system managers and data users?*

Does Not Meet Advisory Ideal

There are no accuracy performance measures. Edit checks and validation rules are not performance measures.

Change Notes: Rating Unchanged.

253. *Are there completeness performance measures tailored to the needs of EMS system managers and data users?*

Does Not Meet Advisory Ideal

There are no completeness performance measures for the EMS data system. Please note that being





able to assess the completeness of a data field or individual record is not the same as having completeness performance measures. A performance measure is a tool used to gauge the performance of a specific system.

Change Notes: Rating Unchanged.

254. *Are there uniformity performance measures tailored to the needs of EMS system managers and data users?*

Does Not Meet Advisory Ideal

Picklists have been implemented in the EMS data collection tool to increase uniformity. While this is important, it is not the same as having uniformity performance measures.

Change Notes: Rating Unchanged.

255. *Are there integration performance measures tailored to the needs of EMS system managers and data users?*

Does Not Meet Advisory Ideal

There are no integration performance measures for the EMS data system.

Change Notes: Rating Unchanged.

256. *Are there accessibility performance measures tailored to the needs of EMS system managers and data users?*

Does Not Meet Advisory Ideal

There are no accessibility performance measures for the EMS data system.

Change Notes: Rating Unchanged.

257. *Has the State established numeric goals-performance metrics-for each EMS system performance measure?*

Does Not Meet Advisory Ideal

There are no performance measures, so no associated metrics.

Change Notes: Rating Unchanged.

258. *Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the EMS system?*

Does Not Meet Advisory Ideal

There are some ideas for building a quality control review process, but nothing is in place outside of agency audit reporting.

Change Notes: Rating Unchanged.





259. *Are periodic comparative and trend analyses used to identify unexplained differences in the EMS data across years and agencies?*

Does Not Meet Advisory Ideal

A report used to identify unexpected changes or trends in EMS runs has not been created. Planning for future analyses will allow for the tracking of emerging trends over time.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.

260. *Is data quality feedback from key users regularly communicated to EMS data collectors and data managers?*

Does Not Meet Advisory Ideal

There is no data quality review feedback loop, but a new data committee has been created from the EMS services.

Change Notes: Rating Unchanged.

261. *Are EMS data quality management reports produced regularly and made available to the State TRCC?*

Does Not Meet Advisory Ideal

A data summary report was shared with the TRCC, but it does not address the quality of the data. It does not include discussions of accuracy, completeness, or other measures.

Change Notes: Rating Unchanged.

Emergency Department - System Description

262. *Is there a statewide emergency department (ED) database?*

Meets Advisory Ideal

The Office of Health Care Access (OHCA) manages the statewide emergency department data system. That data is shared with the Department of Public Health and used for tracking injury trends over time.

Change Notes: Rating Unchanged.

263. *Does the emergency department data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?*

Does Not Meet Advisory Ideal

The emergency department data system provides data elements necessary for the tracking of the frequency, severity, and nature of injuries sustained in motor vehicle crashes. Examples of the data being used to do so were not available.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.





264. *Is the emergency department data available for analysis and used to identify problems, evaluate programs, and allocate resources?*

Meets Advisory Ideal

Emergency department data is available in aggregate form within the Department of Health's Fact Sheets and Performance Dashboard. It has been used for strategic planning and federal reporting.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Emergency Department – Data Dictionary

265. *Does the emergency department dataset have a formal data dictionary?*

Meets Advisory Ideal

The Connecticut Hospital Association collects emergency department data from each hospital and maintains it in the CHIME dataset. That data is sent to OHCA, which maintains a detailed data dictionary.

Change Notes: Rating Unchanged.

Emergency Department – Procedures & Processes

266. *Is there a single entity that collects and compiles data on emergency department visits from individual hospitals?*

Meets Advisory Ideal

The Connecticut Hospital Association collects emergency department data and sends it to OHCA, per Connecticut General Statute CGS §§ 19a-644 & 19a-681.

Change Notes: Rating Unchanged.

267. *Is aggregate emergency department data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?*

Meets Advisory Ideal

Emergency department summary reports may be requested through the DPH Injury and Violence Surveillance Unit (IVSU). Record-level data has been requested by the University of Connecticut's Transportation Institute for a traffic safety integration project.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Hospital Discharge – System Description





268. *Is there a statewide hospital discharge database?*

Meets Advisory Ideal

The Connecticut Hospital Association collects hospital discharge data in the CHIME data system and shares it with OHCA.

Change Notes: Rating Unchanged.

269. *Does the hospital discharge data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?*

Does Not Meet Advisory Ideal

The hospital discharge database contains the necessary information to track the frequency, nature, and severity of injuries related to motor vehicle crashes. However, no evidence of it being used to do so was available for review.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.

270. *Is the hospital discharge data available for analysis and used to identify problems, evaluate programs, and allocate resources?*

Meets Advisory Ideal

Hospital discharge data is available in aggregate form within the Department of Health's Fact Sheets and Performance Dashboard. It has been analyzed for hospitalization trends by demographics.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Hospital Discharge – Data Dictionary

271. *Does the hospital discharge dataset have a formal data dictionary?*

Meets Advisory Ideal

The OHCA maintains a data dictionary of the hospital discharge data collected in CHIME. The document was developed by the Connecticut Hospital Association which manages CHIME.

Change Notes: Rating Unchanged.

Hospital Discharge – Procedures & Processes

272. *Is there a single entity that collects and compiles data on hospital discharges from individual hospitals?*

Meets Advisory Ideal

The Connecticut Hospital Association collects and shares hospital discharge data with the OHCA,





per CGS §§ 19a-644 & 19a-681.

Change Notes: Rating Unchanged.

273. *Is aggregate hospital discharge data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?*

Meets Advisory Ideal

The DPH IVSU provides summary reports upon request and is negotiating a data-sharing agreement with the University of Connecticut Transportation Institute for a traffic safety project.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Emergency Department and Hospital Discharge – Guidelines

274. *Are Abbreviated Injury Scale (AIS) and Injury Severity Score (ISS) derived from the State emergency department and hospital discharge data for motor vehicle crash patients?*

Does Not Meet Advisory Ideal

AIS and ISS are not derived from the emergency department or hospital discharge data systems.

Change Notes: Rating Unchanged.

Emergency Department and Hospital Discharge – Procedures & Processes

275. *Are there procedures for collecting, editing, error-checking, and submitting emergency department and/or hospital discharge data to the statewide repository?*

Meets Advisory Ideal

Records are reviewed by data managers who run validity and consistency checks as well as make comparisons to previous years' submissions. If errors are found, hospitals are alerted and asked to resubmit.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

Emergency Department and Hospital Discharge – Quality Control

276. *Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?*

Does Not Meet Advisory Ideal

CHIME data are regularly reviewed and evaluated for compliance with Data Quality Measures for ICD-10-CM Hospitalizations and ED Visits published by the Council of State and Territorial Epidemiologists. It is unclear if that process includes automated edit checks and validation rules.





Change Notes: Rating Unchanged.

277. *Are there processes for returning rejected emergency department and/or hospital discharge records to the collecting entity and tracking resubmission to the statewide emergency department and hospital discharge databases?*

Partially Meets Advisory Ideal

Health care records may be submitted to the State in two ways and each includes a review of the file layout and structure. If records are identified as incorrect in either process, the Connecticut Hospital Association will work with the reporting facility to make the necessary corrections. It is unclear how or if those records are tracked to resubmission.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

278. *Are there timeliness performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users?*

Does Not Meet Advisory Ideal

There are no timeliness performance measures for the hospital data systems.

Change Notes: Rating Unchanged.

279. *Are there accuracy performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users?*

Does Not Meet Advisory Ideal

There are no accuracy performance measures.

Change Notes: Rating Unchanged.

280. *Are there completeness performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users?*

Does Not Meet Advisory Ideal

There are no completeness performance measures.

Change Notes: Rating Unchanged.

281. *Are there uniformity performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users?*

Does Not Meet Advisory Ideal

There are no uniformity performance measures.

Change Notes: Rating Unchanged.





282. *Are there integration performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users?*

Does Not Meet Advisory Ideal

There are no integration performance measures for either the emergency department or hospital discharge databases.

Change Notes: Rating Unchanged.

283. *Are there accessibility performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users?*

Does Not Meet Advisory Ideal

There are no accessibility performance measures.

Change Notes: Rating Unchanged.

284. *Has the State established numeric goals-performance metrics-for each emergency department and/or hospital discharge database performance measure?*

Does Not Meet Advisory Ideal

There are no performance measures, so no associated metrics.

Change Notes: Rating Unchanged.

285. *Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the emergency department and/or hospital discharge databases?*

Meets Advisory Ideal

To comply with federal requirements from the Centers for Disease Control and Prevention and in collaboration with the Council for State and Territorial Epidemiologists, the DPH IVSU conducts quality control reviews.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

286. *Is data quality feedback from key users regularly communicated to emergency department and/or hospital discharge data collectors and data managers?*

Does Not Meet Advisory Ideal

Data quality feedback is not collected at the Department of Public Health for the hospital data systems.

Change Notes: Rating Unchanged.

287. *Are emergency department and/or hospital discharge data quality management reports produced regularly and made available to the State TRCC?*

Does Not Meet Advisory Ideal

Data quality management reports are not shared with the TRCC.

Change Notes: Rating Unchanged.





Trauma Registry – System Description

288. *Is there a statewide trauma registry database?*

Meets Advisory Ideal

Per State statute Sec. 19a-177-7, a trauma registry is maintained in the Department of Public Health.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

289. *Does the trauma registry data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?*

Does Not Meet Advisory Ideal

The trauma registry has the capability to track the frequency, severity, and nature of injuries related to motor vehicle crashes, but is not being used to do so.

Change Notes: Rating Unchanged.

290. *Is the trauma registry data available for analysis and used to identify problems, evaluate programs, and allocate resources?*

Does Not Meet Advisory Ideal

Aggregate trauma registry data is available for analysis, but no examples of its use were available for review.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.

Trauma Registry – Guidelines

291. *Does the State's trauma registry database adhere to the National Trauma Data Standards?*

Meets Advisory Ideal

The State reportedly uses the National Trauma Data Standard and has the ability to import data through the ImageTrend Data Exchange.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

292. *Are AIS and ISS derived from the State trauma registry for motor vehicle crash patients?*

Meets Advisory Ideal

The Abbreviated Injury Scale and Injury Severity Scores are captured in the State trauma registry.

Change Notes: Rating Improved.





From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Trauma Registry – Data Dictionary

293. *Does the trauma registry have a formal data dictionary?*

Partially Meets Advisory Ideal

There is no State trauma registry data dictionary. It was stated that the national standard is utilized and the status of an update to the State document in 2017 is unclear.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

Trauma Registry – Procedures & Processes

294. *Is aggregate trauma registry data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?*

Meets Advisory Ideal

Trauma registry data is available to outside parties for analysis upon approval by the Department of Public Health. The process and rules for obtaining approval are outlined in the Department's Health Investigation Committee letter to applicants.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

295. *Are there procedures for returning trauma data to the reporting trauma center for quality assurance and improvement (e.g., correction and resubmission)?*

Does Not Meet Advisory Ideal

The trauma registry system provides the ability to return rejected records to the submitting facilities, it is unclear if this activity is implemented.

Change Notes: Rating Unchanged.

Trauma Registry – Quality Control

296. *Are there automated edit checks and validation rules to ensure that entered trauma registry data falls within a range of acceptable values and is logically consistent among data elements?*

Meets Advisory Ideal

Limited edit checks and data validation rules are implemented in the trauma registry software.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.





297. *Are there timeliness performance measures tailored to the needs of trauma registry managers and data users?*

Does Not Meet Advisory Ideal

There are no timeliness performance measures, submission regulations are not performance measures.

Change Notes: Rating Unchanged.

298. *Are there accuracy performance measures tailored to the needs of trauma registry managers and data users?*

Does Not Meet Advisory Ideal

There are no accuracy performance measures.

Change Notes: Rating Unchanged.

299. *Are there completeness performance measures tailored to the needs of trauma registry managers and data users?*

Does Not Meet Advisory Ideal

There are no completeness performance measures for the trauma registry.

Change Notes: Rating Unchanged.

300. *Are there uniformity performance measures tailored to the needs of trauma registry managers and data users?*

Does Not Meet Advisory Ideal

There are no uniformity performance measures for the trauma registry.

Change Notes: Rating Unchanged.

301. *Are there integration performance measures tailored to the needs of trauma registry managers and data users?*

Does Not Meet Advisory Ideal

There are no integration performance measures.

Change Notes: Rating Unchanged.

302. *Are there accessibility performance measures tailored to the needs of trauma registry managers and data users?*

Does Not Meet Advisory Ideal

There are no accessibility performance measures.

Change Notes: Rating Unchanged.





303. *Has the State established numeric goals-performance metrics-for each trauma registry performance measure?*

Does Not Meet Advisory Ideal

There are no performance measures, so no associated metrics.

Change Notes: Rating Unchanged.

304. *Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the trauma registry?*

Does Not Meet Advisory Ideal

Quality control reviews are not conducted on the trauma registry data.

Change Notes: Rating Unchanged.

305. *Is data quality feedback from key users regularly communicated to trauma registry data collectors and data managers?*

Does Not Meet Advisory Ideal

Historically there were several opportunities for data users to provide feedback to the trauma registry managers. It is unclear if those mechanisms are still in place.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet Advisory Ideal'.

306. *Are trauma registry data quality management reports produced regularly and made available to the State TRCC?*

Does Not Meet Advisory Ideal

Data quality reports are not shared with the TRCC.

Change Notes: Rating Unchanged.

Vital Records – System Description

307. *Is there a statewide vital records database?*

Meets Advisory Ideal

The Database Application for Vital Events (DAVE) is the statewide vital records system. All records since 1949 are maintained in DAVE.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

308. *Does the vital records data track the occurrence of motor vehicle fatalities in the State?*

Meets Advisory Ideal

Annual reports are generated from the vital records system that analyze mortality rates and years of potential life lost by cause of death, including traffic crashes.





Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

309. *Is the vital records data available for analysis and used to identify problems, evaluate programs, and allocate resources?*

Partially Meets Advisory Ideal

Vital records data is available for analysis and a data-sharing agreement is in place between the Departments of Transportation and Public Health to utilize crash and vital records data, respectively. It is unclear if vital records data have been used for a traffic safety analysis.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

Vital Records – Data Dictionary

310. *Does the vital records system have a formal data dictionary?*

Meets Advisory Ideal

The Department of Public Health maintains a comprehensive data dictionary for the vital records data system.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Vital Records – Procedures & Processes

311. *Is aggregate vital records data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?*

Meets Advisory Ideal

Aggregate vital records data is available in published annual reports and record-level data is available upon approval by the Department of Public Health.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

Vital Records – Quality Control

312. *Are there automated edit checks and validation rules to ensure that entered vital records data falls within a range of acceptable values and is logically consistent among data elements?*

Meets Advisory Ideal

DAVE contains numerous edit checks and validation rules that are shown during the data entry process; it exceeds the National Center for Health Statistics (NCHS) published standards.





Change Notes: Rating Unchanged.

313. *Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the vital records?*

Partially Meets Advisory Ideal

Quality control reviews are conducted on all fields and elements for completeness, there is no separate analysis of just injury data. The State also relies on the front-end edit checks and validation rules for quality control.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Partially Meets Advisory Ideal'.

314. *Are vital records data quality management reports produced regularly and made available to the State TRCC?*

Does Not Meet Advisory Ideal

Data quality management reports are not shared with the TRCC.

Change Notes: Rating Unchanged.

Injury Surveillance Data Interfaces

315. *Is there an interface among the EMS data and emergency department and hospital discharge data?*

Does Not Meet Advisory Ideal

There is no interface between EMS and hospital data systems.

Change Notes: Rating Unchanged.

316. *Is there an interface between the EMS data and the trauma registry data?*

Does Not Meet Advisory Ideal

There is no interface between the EMS data system and the trauma registry.

Change Notes: Rating Unchanged.

Data Use and Integration

317. *Do behavioral program managers have access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation?*

Meets Advisory Ideal

Behavioral programs managers have access to a variety of tools and data sources for problem identification and program evaluation. Analyses can be run using the Connecticut Crash Data Repository, in-house data, and NHTSA analytical tools.





Change Notes: Rating Unchanged.

318. *Does the State have a data governance process?*

Meets Advisory Ideal

Connecticut has a data governance process that includes the State Chief Information Officer and is included in the Strategic Plan.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to 'Meets Advisory Ideal'.

319. *Does the TRCC promote data integration by aiding in the development of data governance, access, and security policies for integrated data?*

Meets Advisory Ideal

The University of Connecticut Transportation Safety Research Center (CTSRC) leads integration efforts in the Traffic Records Coordinating Committee (TRCC) and regularly provides updates to the committee. Through the TRCC, several memoranda of understanding have been signed to allow access to and integration of crash, judiciary, driver, and roadway data.

Change Notes: Rating Unchanged.

320. *Is driver data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal

Driver and crash data are not integrated. The CTSRC and TRCC continue to work with the Department of Motor Vehicles to gain access to driver records for integration and analysis.

Change Notes: Rating Unchanged.

321. *Is vehicle data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal

Vehicle and crash data are not integrated. The CTSRC and TRCC continue to work with the Department of Motor Vehicles to gain access to vehicle records for integration and analysis.

Change Notes: Rating Unchanged.

322. *Is roadway data integrated with crash data for specific analytical purposes?*

Meets Advisory Ideal

The crash + roadway data integration project has expanded to 30 data elements from the roadway file. This linkage is complete back to 1995 crash data and an automated process has been implemented to integrate and import roadway information into crash reports upon acceptance.

Change Notes: Rating Unchanged.

323. *Is citation and adjudication data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal





The crash and citation databases are planned to be linked by UConn. Summary data is available at the town level for Highway Safety Office analyses. The linkage tool has been built but linkage has yet to be performed.

Change Notes: Rating Unchanged.

324. *Is injury surveillance data integrated with crash data for specific analytical purposes?*

Meets Advisory Ideal

Crash and EMS data have been linked to evaluate Connecticut's child passenger safety laws. Crash and trauma registry data have been linked to evaluate motorcycle crash trends and outcomes. An additional analysis combining crash and emergency department data to present hospital-based outcomes to the Commission of the Department of Public Health was described.

Change Notes: Rating Unchanged.

325. *Are there examples of data integration among crash and two or more of the other component systems?*

Meets Advisory Ideal

Linked crash data to several other data sources, including roadway and citation, are available in the Behavioral Safety Tool and Connecticut Roadway Safety Management System.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

326. *Is data from traffic records component systems-other than crash-integrated for specific analytical purposes?*

Meets Advisory Ideal

Crime, citation, and toxicology data have been integrated and analyzed in the Advancing the Behavioral Safety Analytic Tools Capabilities of the Connecticut Department of Transportation technical report.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to 'Meets Advisory Ideal'.

327. *For integrated datasets, do decision-makers have access to resources-skilled personnel and user-friendly access tools-for use and analysis?*

Meets Advisory Ideal

Decision makers have access to integrated data through publicly available analytical tools as well as full-time staff at the Connecticut Transportation Safety Research Center and UConn.

Change Notes: Rating Unchanged.

328. *For integrated datasets, does the public have access to resources-skilled personnel and user-friendly access tools-for use and analysis?*

Meets Advisory Ideal

The public has access to expertise at the CSTRC, with five staff members devoted to answering





data requests. The crash + roadway linkage is available for analysis and public reports, with the exception of personal identifiable information (PII).

Change Notes: Rating Unchanged.





Appendix B – Assessment Participants

State Assessment Coordinator(s)

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Transportation Planner 2

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State and Local Respondents

The following State and Local staff assisted in the Assessment by providing responses to the Advisory criteria and questions.

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Appendix C

National Acronyms and Abbreviations

| | |
|----------|--|
| AADT | Average Annual Daily Traffic |
| AAMVA | American Association of Motor Vehicle Administrators |
| AASHTO | American Association of State Highway and Transportation Officials |
| ACS | American College of Surgeons |
| AIS | Abbreviated Injury Score |
| ANSI | American National Standards Institute |
| ATSIP | Association of Transportation Safety Information Professionals |
| BAC | Blood Alcohol Concentration |
| CDC | Center for Disease Control |
| CDIP | NHTSA's Crash Data Improvement Program |
| CDLIS | Commercial Driver License Information System |
| CODES | Crash Outcome Data Evaluation System |
| DDACTS | Data Driven Approaches to Crime and Traffic Safety |
| DHS | Department of Homeland Security |
| DMV | Department of Motor Vehicles |
| DPPA | Drivers Privacy Protection Act |
| DOH | Department of Health |
| DOJ | Department of Justice |
| DOT | Department of Transportation |
| DOT-TRCC | The US DOT Traffic Records Coordinating Committee |
| DRA | Deputy Regional Administrator (NHTSA) |
| DUI | Driving Under the Influence |
| DUID | Driving Under the Influence of Drugs |
| DWI | Driving While Intoxicated |
| ED | Emergency Department |
| EMS | Emergency Medical Service |
| FARS | Fatality Analysis Reporting System |
| FDEs | Fundamental Data Elements |
| FHWA | Federal Highway Administration |
| FMCSA | Federal Motor Carrier Safety Administration |
| GCS | Glasgow Coma Scale |
| GDL | Graduated Driver Licensing |
| GES | General Estimates System |
| GHSA | Governors Highway Safety Association |
| GIS | Geographic Information System |
| GJXDM | Global Justice XML Data Model |
| GPS | Global Positioning System |
| GRA | Government Reference Architecture |
| HIPAA | Health Information Privacy and Accountability Act |
| HPMS | Highway Performance Monitoring System |
| HSIP | Highway Safety Improvement Plan |
| HSP | Highway Safety Plan |
| ICD-10 | International Classification of Diseases and Related Health Problems |
| IRB | Institutional Review Board |





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| ISS | Injury Severity Score |
| IT | Information Technology |
| JIEM | Justice Information Exchange Model |
| LEIN | Law Enforcement Information Network |
| MADD | Mothers Against Drunk Driving |
| MCMIS | Motor Carrier Management Information System |
| MIDRIS | Model Impaired Driving Records Information System |
| MIRE | Model Inventory of Roadway Elements |
| MMUCC | Model Minimum Uniform Crash Criteria |
| MOU | Memorandum of Understanding |
| MPO | Metropolitan Planning Organization |
| NAPHSIS | National Association for Public Health Statistics and Information Systems |
| NCHIP | National Criminal History Improvement Program |
| NCHS | National Center for Health Statistics |
| NCIC | National Crime Information Center |
| NCSC | National Center for State Courts |
| NDR | National Driver Register |
| NEMESIS | National Emergency Medical Service Information System |
| NGA | National Governor's Association |
| NHTSA | National Highway Traffic Safety Administration |
| NIBRS | National Incident-Based Reporting System |
| NIEM | National Information Exchange Model |
| NLETS | National Law Enforcement Telecommunication System |
| NMVTIS | National Motor Vehicle Title Information System |
| NTDS | National Trauma Data Standard |
| PAR | Police Accident Report |
| PDPS | Problem Driver Pointer System |
| PDO | Property Damage Only |
| PII | Personally Identifiable Information |
| RA | Regional Administrator (NHTSA) |
| RDIP | FHWA's Roadway Data Improvement Program |
| RPM | Regional Program Manager (NHTSA) |
| RTS | Revised Trauma Score |
| RMS | Records Management System |
| RPC | Regional Planning Commission |
| SaDIP | FMCSA's Safety Data Improvement Program |
| SAVE | Systematic Alien Verification for Entitlements |
| SHSP | Strategic Highway Safety Plan |
| SME | Subject Matter Expert |
| SSOLV | Social Security Online Verification |
| STRAP | State Traffic Records Assessment Program |
| SWISS | Statewide Injury Surveillance System |
| TCD | Traffic Control Devices |
| TRA | Traffic Records Assessment |
| TRIPRS | Traffic Records Improvement Program Reporting System |
| TRCC | Traffic Records Coordinating Committee |
| TRS | Traffic Records System |
| UCR | Uniform Crime Reports |





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| VIN | Vehicle Identification Number |
| VMT | Vehicle Miles Traveled |
| XML | Extensible Markup Language |

State-Specific Acronyms and Abbreviations

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|----------|---|
| AWLRS | AssetWise Linear Referencing Services |
| CEMSTARS | Connecticut EMS Tracking and Reporting System |
| CIB | Centralized Infractions Bureau |
| CIVLS | Connecticut Integrated Vehicle and Licensing System |
| COLLECT | Connecticut On-line Law Enforcement Communications Teleprocessing |
| CRSMS | Connecticut Roadway Safety Management System |
| CTDOT | Connecticut Department of Transportation |
| CTDPH | Connecticut Department of Public Health |
| CTSRC | Transportation Safety Research Center |
| DAVE | Database Application for Vital Events |
| EDRS | electronic death registration system |
| IVSU | Injury and Violence Surveillance Unit |
| NCHS | National Center for Health Statistics |
| OHCA | Office of Health Care Access |
| PRISM | Performance Registration Management System |
| RIS | Roadway Inventory System |
| SFTP | secure file transfer protocol |
| TED | Transportation Enterprise Data Mart |
| TIG | Transportation Intelligence Gateway |
| UConn | University of Connecticut |
| VIP | vendor in place program |

