



State of Michigan

Traffic Records Assessment

April 7, 2020

National Highway Traffic Safety Administration

Technical Assessment Team





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Introduction

This Traffic Records Program Assessment is the second of the online question-and-answer evaluations of Michigan's traffic records systems and is built upon the assessment of five years ago. Since the last assessment, Michigan has worked diligently in many areas of their traffic records systems and should be commended for the improvements they have made in many of their traffic data systems and the plans they have for future improvements.

The State Traffic Records Coordinating Committee (TRCC) includes a diverse membership from across the six core data traffic records systems. Michigan updates its Strategic Plan annually and addresses each data system along with system's deficiencies, accomplishments, and strategies for improvement. The TRCC is encourage to include strategies and performance measures that were recommended by NHTSA Go Team in the next update of the Strategic Plan as well as recommendations from this Traffic Records Assessment.

Michigan has deployed a new driver and vehicle system since the last traffic records assessment. Both systems have improved functionality and are also meeting many of the NHTSA Advisory ideals. There are plans to unify the driver and vehicle data in the Customer and Automotive Records System (CARS). This would be an opportune time to create a formal comprehensive data quality management program for the driver and vehicle data system.

Michigan stands out among other States for having one of the best performing crash systems in the nation. They have established a statewide requirement for electronic reporting which has them collecting crash data timelier, as well as more uniform and complete. Michigan has also established integration between its crash system and other State traffic records systems to improve the quality and accuracy of traffic safety information. Michigan has established crash system performance measures which could serve as a model for other States.

Michigan has a solid roadway system and they have done a good job at keeping up with enhancements to the roadway system and increasing MIRE data elements. They also have an enterprise level crash reporting tool and the crash data is available to the public.

Michigan faces the same challenge as many States in the citation and adjudication data systems due to its non-unified court system and multiple types of court case management systems. However, Michigan has a solid judicial data warehouse of adjudication data that could be used towards the creation of a citation tracking system as well as a DUI tracking system. These projects should be thoroughly explored through the TRCC.

Michigan has made some great strides in the injury surveillance systems since the last Assessment. They have all five major components of an ISS and the available data are accessible to traffic safety stakeholders. Emergency department data has recently become available. While the data have not yet been used to evaluate motor vehicle crashes, some data has been utilized to support CDC grant applications.

Finally, in the area of data integration Michigan has a data integration project that is currently on hold. Continued efforts in data integration of the six core data systems will continue to move Michigan forward in improving traffic safety programs that will ultimately have an impact on saving lives and reducing traffic fatalities.





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.

Congress has recognized 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. In order to encourage States to undertake such reviews regularly, Congress’ Fixing America’s Surface Transportation Act (FAST ACT) legislation requires States to conduct or update an assessment of its highway safety data and traffic records system every 5 years in order to qualify for §405(c) grant funding. The State’s Governor’s Representative must certify that an appropriate assessment has been completed within five years of the application deadline.

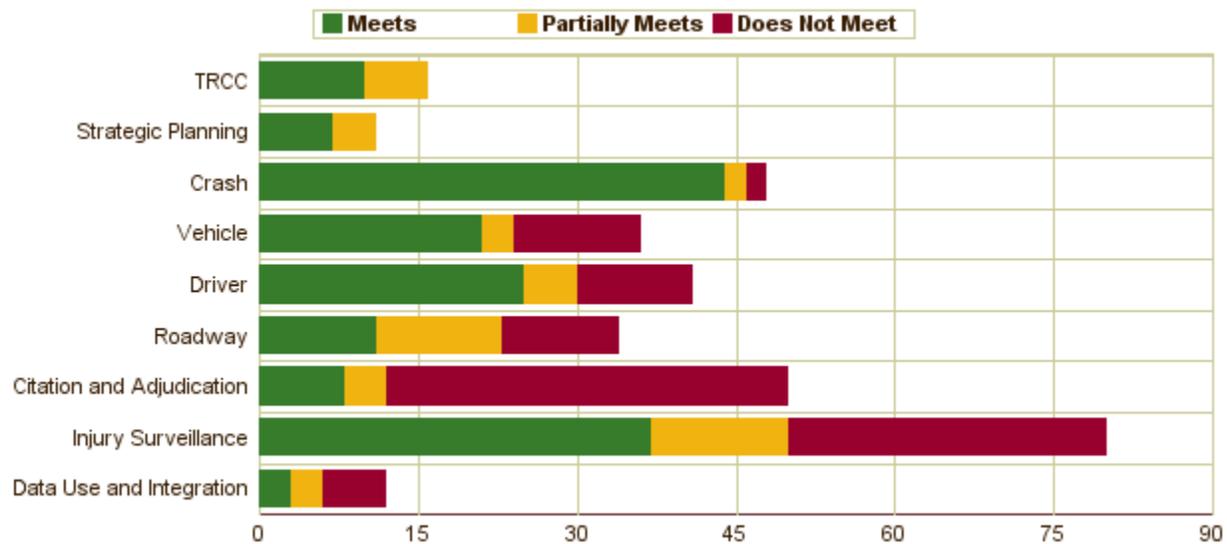
Out of 328 assessment questions, Michigan met the Advisory ideal for 166 questions (51%), partially met the Advisory ideal for 52 questions (16%), and did not meet the Advisory ideal for 110 questions (34%).

As Figure 1: Rating Distribution by Module illustrates, within each assessment module, Michigan met the criteria outlined in the Traffic Records Program Assessment Advisory 63% of the time for Traffic Records Coordinating Committee Management, 64% of the time for Strategic Planning, 92% of the time for Crash, 58% of the time for Vehicle, 61% of the time for Driver, 32% of the time for Roadway, 16% of the time for Citation and Adjudication, 46% of the time for EMS / Injury Surveillance, and 25% 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 1200, §1200.22, 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 Michigan with the traffic records assessment recommendations and associated considerations detailed by the assessors. The broad recommendations provide Michigan 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

- As is common, a great deal of emphasis is placed on crash data, but crash data only tells part of the story until analysis is able to determine the impacts of enforcement, adjudication, roadways and





injury surveillance on the incidence and severity of crashes. Performance measures should be developed that outline the health of the data systems at any given time. Being able to perform these measurements on the system provides a constant finger on the pulse of the system, highlighting not just improvements, but also subtle degradation of data integrity in any one of the attributes before it becomes a major issue. The whole purpose of measures is not to be able to say, "We've made crash reports more accessible," but to be able to say by what percentage the accessibility has improved. When projects are developed for traffic records improvement, measures of the amount of improvement in any or all of the six attributes should be developed and measures should be taken at regular intervals to assure that efforts to improve the system really do just that. Measures should be developed for every attribute of every system. These will shine a light on areas where more effort and more funding may be needed to improve data.

- Development of a list of common data elements among the various traffic records databases would help to find the most likely means of integrating or linking the various systems for even more effective analysis of traffic safety issues.
- One of the more valuable aspects of development of a traffic records inventory is the exchange of information about what data is contained in and available from each system. Conversations that result from the development of an inventory, as well as the ready availability of traffic records data, help the entire traffic records community to devise new and better ways to combine and analyze datasets for purposes of improving traffic safety. As long as data is being collected, the effort and expense should be put to effective use. Having a complete inventory helps to facilitate that use, as does the communication necessary to develop a complete statewide inventory.

Summary

The State has a Traffic Records Coordinating Committee, with diverse membership from across the various Departments and Bureaus that make up the Traffic Records community. The State's Department of Technology, Management and Budget is a member of the TRCC, and IT representatives from custodial agencies also participate.

The TRCC's charter, dated May 29, 2019, lists the responsibilities of the TRCC. The TRCC meetings are coordinated by the State's Traffic Records Program Coordinator, and the Chair rotates annually. The TRCC met five times in 2019.

The TRCC facilitates discussion about the State's traffic records systems, with custodial agencies reporting system upgrades, projects and progress to the Executive Committee or working groups. The TRCC solicits new projects annually, for discussion and approval of grant funding. The TRCC Executive Committee ranks projects for federal funding, and those projects must align with the Strategic Plan. Currently, most of the strategies in the Strategic Plan are designed to address prior Traffic Records Assessment findings.

One of the purposes of the TRCC is to find areas where data is not meeting the necessary attributes of timeliness, accuracy, completeness, uniformity, accessibility, or integrated, and to develop projects to make needed changes. This type of self-evaluation can help the State establish goals and objectives, with





SMART strategies, for the State's traffic records as a whole. Similarly, establishing performance measures and metrics for each of the data systems and the six system attributes could help the TRCC prioritize projects for funding.

For example, the State indicated that use of judicial and enforcement data is limited due to availability. The State would benefit from improving the use of these datasets, which could help determine the impact of enforcement on the incidence and severity of crashes. If the State had established a goal or objective to address this, with accompanying performance measures, it could encourage courts or law enforcement agencies to apply for grant funding for projects to improve data integration or access.

In addition, establishing performance measures and metrics allows the TRCC to assess how a project will support the overall goals and objectives of the traffic records program. Grantees should be reporting not only on progress of grant activities, but also on how those grant activities are affecting the performance measure.

The State has no consolidated traffic records inventory, but various component systems have partial inventories. The development of an inventory helps the entire traffic records community to devise new and better ways to combine and analyze datasets for purposes of improving traffic safety.

Another important role of the TRCC is to oversee quality improvement. The State has working committees that monitor data quality and availability, such as the crash data users group, and a standing committee that oversees the redesign of the crash process. It is not clear that this oversight extends beyond crash data.

The State of Michigan is proactive in providing technical assistance and outlining training availability to its TRCC members. The TRCC has used NHTSA GO-Teams to provide technical assistance, and some projects in the Strategic Plan are solely to meet training needs.

The State may benefit from evaluating the traffic records program as a whole, and discussing and planning projects that support overall goals, objectives, and performance measures, regardless of whether those projects are funded through federal grant funds, State funds, or other grant programs.

Strategic Planning Recommendations

None

Considerations for implementing your Strategic Planning recommendations

- The annual update to the Strategic Plan is documented as an addendum to the adopted plan. It may be helpful to review how other State's Strategic Plans are formatted to improve the ability to monitor progress. In some cases, milestones have passed without reference in the annual update. Perhaps extracting the project list to a table and providing quarterly status or progress toward a performance





metric would be useful for the TRCC and custodial owners.

- Consideration of life cycle costs may help the TRCC identify overall cost/benefit to certain projects - and help avoid investments that cannot be maintained. Assuming an agency can cover future costs is risky.

Summary

The State's Traffic Records Strategic Plan addresses each data system along with that system's deficiencies, accomplishments, and strategies for improvement. The Strategic Plan includes strategies for addressing each deficiency, and each strategy is indicated as addressing at least one of the six performance measure attributes. The strategies listed in the Strategic Plan include time frames and owners.

The strategies are generally broad, for example, "create an action plan" or "review a process." Specific, measurable, action-oriented, realistic, and time-bound (SMART) strategies could provide more focus and allow the State to invest in projects that lead to progress. Likewise, adopting performance measures for each system and for each the six attributes would provide feedback for decision-making that could lead to greater improvements.

Most of the Strategic Plan strategies are in response to prior Traffic Records Assessments. The annual Strategic Plan updates are a great mechanism to self-identifying system opportunities or improvements. While Traffic Records Assessments are useful, no one knows the systems like the users and owners. By creating a more strategic framework in strategies and performance measures, the State can monitor its own systems and data needs against its goals, objectives, and performance.

Although the Strategic Plan is reviewed and updated annually, the status of some projects are not current and it seems that some target dates have passed without an update.

Project funding discussed by the TRCC is for a limited duration, with the expectation that the requesting agency assumes all costs to operate. Sometimes, decisions of project funding may be altered if overall lifecycle costs are discussed and weighed out.

The State received recommendations from NHTSA GO Teams on both strategies and performance measures. The State will address these recommendations in the next update to the Traffic Records Strategic Plan.

Crash Recommendations

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





in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Crash recommendations

- Consideration should be given to ensuring the requirement of mandatory electronic data collection is achieved by all reporting law enforcement agencies statewide. There are only a handful remaining, and action plans could be created to help assist those remaining agencies with their transition.
- Consideration should be given to expanding already well-established system interfaces and data integration efforts to improve data quality across core component traffic records systems. Michigan has good integration with its Roadway system. While the integration with driver and vehicle meets the advisory standard, improvements could be made to include auto-population of driver and vehicle into the crash report form itself prior to its submission to the statewide crash repository, to help streamline processes for investigating officers and more accurately collect data on the front end.
- Consideration should be given to establishing processes to ensure maintaining, monitoring, and sustaining useful crash system performance metrics remain a priority for the TRCC and crash system stakeholders.

Summary

Since the last assessment, Michigan has made positive strides and improvements to its crash system. When compared against the guidelines in the Traffic Records Advisory, they have one of the best performing crash systems in the country. They are now collecting almost all crash data electronically and have established a statewide requirement for electronic reporting. Michigan has also established integration between its crash system and other State traffic records systems to improve the quality and accuracy of traffic safety information. Michigan has also met the advisory standards for crash system performance measures which can serve as a model for other States.

Michigan continues to make progress in recent years transitioning agencies to electronic crash reporting. They have established a requirement for all agencies to submit crash reports electronically as of January 2020 and have reduced the number of agencies still submitting paper to 13. This is excellent progress and it is anticipated that those remaining agencies will be converted soon. It may be beneficial for the State to establish a timeline with goals for each remaining agency-for full adoption of electronic crash reporting to help address and facilitate the transition. It would also be helpful to identify obstacles that may be hindering each respective agency's transition to full electronic reporting and explore avenues to help guide decision-makers at all levels.

The Michigan Crash System is consolidated into a single database housed within the Michigan State Police and all crash records are stored in the Michigan Traffic Crash Records System (TCRS). Michigan utilized MMUCC and ANSI D-16 as part of the establishment of their crash system and recently completed a MMUCC mapping review within the last year, which included consideration for addition of automated vehicle data elements. Measuring a crash system against MMUCC standards is beneficial to the State and can help determine if further improvements or revisions to the crash report form are needed or desired.





Given the rising importance of traffic safety data which often starts with the crash system, it is extremely helpful to establish and maintain useful performance measures and to ensure a more robust quality control program for improving and monitoring completeness, timeliness, and accuracy. More in-depth and detailed agency-level feedback for local law enforcement agencies is also useful. Strong performance measures and performance measure reporting is an important aspect of a successful crash system. Michigan has established an excellent system of performance measures for its Crash system since the previous assessment and they should be happy with the progress made in this area.

Michigan should continue to make use of NHTSA resources and the FHWA CDIP program, and ensure they have procedures in place for monitoring of the established performance metrics to ensure they remain relevant and useful to the data system managers. The “NHTSA Model Performance Measures for State Traffic Records Systems” document is a good resource for identifying and implementing measures for all the traffic records data-sets. It can be found at <http://www-nrd.nhtsa.dot.gov/Pubs/811441.pdf>. There will also be opportunities to utilize NHTSA Go-Teams to help improve traffic records systems processes following the completion of the assessment.

Population of data elements in the crash system from other traffic records systems such as Driver, Vehicle, EMS, Injury Surveillance, or Roadway can have great benefits. Michigan has taken positive steps in the area of data integration by linking its crash system to the driver, vehicle, and roadway systems. This allows data captured on the crash reports to be validated against driver, vehicle, and roadway systems, thus allowing for more complete and accurate collection of data for Michigan drivers and vehicles. This more streamlined process improves data quality in Michigan’s crash system. Additional integration with Health and EMS systems should also be explored, as well as continued monitoring and improvement to integration with the driver, vehicle, and roadway systems.

Dialogue regarding possible opportunities for improvement or expansion of data linkages, interfaces, and integration amongst the State traffic records systems should be ongoing among TRCC membership where all core traffic records systems managers and stakeholders are represented. As traffic records systems data becomes more widely used, system interfaces and data integration will be crucial. Improved data linkage will assist in streamlining processes, improve data quality, reduce duplication of effort, and allow data to be more fully utilized to make roadways safer.

Data accessibility is vital for crash data users. By focusing engineering and law enforcement efforts on locations with the greatest crash risk, traffic fatalities and injuries can be reduced resulting in safer roadways. There may be an opportunity to expand partnerships with transportation officials and law enforcement through the TRCC to help ensure crash data is easily accessible to data users. The survey that has been implemented by Michigan is a great way to help accomplish this. Continuing to survey data users and expanding those survey efforts to other data users will help to ensure that their feedback can be applied towards improvement of data collection and data quality, and will lead to improved resource allocation and traffic safety on Michigan roadways.





Overall, the Michigan crash system is functioning extremely well, with recent improvements to electronic data collection, data integration, and performance metrics. Opportunities for crash system growth in the coming years include: ensuring the requirement of mandatory electronic data collection is achieved by all reporting agencies; expanding already well-established system interfaces and data integration efforts to improve data quality across core component traffic records systems; and maintaining and sustaining useful crash system performance measures that can be frequently monitored by stakeholders.

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.

Considerations for implementing your Vehicle recommendations

- Michigan should consider developing and adopting a comprehensive data quality management program. The program would consist of, at a minimum, development of performance standards regarding data accuracy, completeness, uniformity, accessibility, and integration. Once performance standards are developed, metrics would be lined and monitored on a regular basis. The development and monitoring of data management performance measures will enable the State to continually improve vehicle system data and increase its availability and reliability.
- Michigan should consider creating a system of independent sample-based data audits performed periodically to ensure that vehicle records and related database contents for that record are correct. These audits do not have to be accomplished by a third party, but should be something outside the regular course of business. Data quality audits are a way to ensure that procedures are being followed or that procedures cover all existing processes.
- Michigan should consider implementing a vehicle system procedure for receiving and reviewing crash records where discrepancies have been identified during data entry in the crash data system. Adding this feature provides an opportunity to enhance the accuracy of the vehicle records.
- Michigan should consider providing vehicle system data quality management reports to the TRCC for regular review and should ensure that vehicle system management participate in TRCC meetings. Routinely providing this information to the TRCC not only benefits the overall status of the State's traffic record system but also helps generate support for improvements for the vehicle records system when needed.

Summary

The State of Michigan vehicle titling and registration program is administered by the Michigan Department of Technology, Management, and Budget (DTMB). All vehicle registration and title records are contained in a single database under the custodial authority of DTMB.





The legacy Michigan vehicle title and registration system was replaced with the Customer and Automotive Records System (CARS) since the last Traffic Records Assessment. CARS is a real time data entry and processing system that incorporates data entry validation through field and logical edits. Additionally, CARS queries outside databases to confirm Vehicle Identification Number (VIN) information and obtain vehicle title information through NMVTIS. CARS is supported by documented data elements and data structures in a comprehensive data dictionary while processing sequences are documented in training manuals for all vehicle title and registration transactions.

CARS is further supported by technical system workflow documentation, but no routine and alternative operational processing workflow documentation exists. Additional programs supporting CARS include: a program for making data corrections by internal quality assurance staff; a program for receiving user feedback to identify problems and receive ideas for system improvement; a program for detecting high frequency errors to identify issues; a program of audits; and an evaluation program for long term trend analyses.

Michigan vehicle registration and title documents contain barcoded information allowing for rapid data collection by law enforcement equipped with bar code reading technology. Additionally, vehicle records for vehicles reported stolen to law enforcement are flagged within the CARS.

The implementation of CARS since the previous assessment has added more functionality desired in the Advisory. However, there are no formal programs for data quality management and it was unclear whether the audits described meet the intent of the data quality audits described in the Advisory. Additionally, there is no interface with other traffic record systems such as the driver or crash databases and the data conventions for capturing personal identity information for these systems appears to be different. However, it was reported that a unified record system is in the process of development to combine vehicle and driver records.

Driver Recommendations

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

Considerations for implementing your Driver recommendations

- It appears that Michigan is currently in the process of updating the State's driver data system. The MDOS should consider developing a formal data quality management program as part of this update. Data quality management program would give the State greater ability to effectively assess all data quality attributes that are relevant to the driver data system. In addition to timeliness, the State should consider establishing other performance measures (i.e., accuracy, completeness,





uniformity, integration, and accessibility) for the driver data system. These performance measures would provide data managers and data users an ability to quickly and easily recognize areas within the driver system that need improvement. In addition, the State should consider performing periodic and independent sample-based audits for the driver data system, following the methodology suggested in the NHTSA Advisory.

- Michigan should consider conducting periodic comparative and trend analyses to examine and evaluate driver data quality characteristics (e.g., timeliness, accuracy, completeness, etc.) across years and jurisdictions.
- Driver data system quality management reports should be provided to the Michigan TRCC committee for regular review.
- Driving under the influence of alcohol or drugs continues to be a major traffic safety problem nationwide. To be able to fully identify the extent and the magnitude of this problem throughout the State, Michigan should consider establishing a separate DUI tracking system. Such system could track the processing of DUI offenders from initial event (DUI arrest/crash occurrence) through adjudication, to treatment and license control actions. Information from this system would help decision makers to identify the best possible countermeasures to prevent and control DUI. Alternatively, it appears that the State's driver system already captures data related to major DUI incidents (e.g., DUI convictions, alcohol-related crash involvement, etc.). The State could, therefore, examine the possibility of combining these data from the driver system with other critical DUI-related data may reside in other data systems. Further, the State should consider examining the possibility of using administrative license suspension based on a DUI arrest, which is generally administered by the licensing agency in the State.

Summary

The Michigan Department of State (MDOS) has custodial responsibility for the Michigan driver data system, which resides in a single location and includes records pertaining to all drivers in the State, including commercially licensed drivers.

The State has well-established 3-level Graduated Driver License (GDL) program for novice drivers and motorcycle safety program for motorcycle riders. Michigan tracks and maintains relevant information related to these two programs. Also, the State maintains the Basic Driver Improvement Course (BDIC) dataset that contains detailed information regarding BDIC course completions and associated traffic violations. At the present time, the State only captures and saves the last three issuance dates for all permits, licenses, and endorsements. However, Michigan is in the process of updating its driver data system, which will allow to retain all information pertaining to driver license issuance, including the dates of original issuance.

The driver data system interacts with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS). The contents of the driver system are documented in the MDOS Driver Database Field Description Guide with definitions for each data field and detailed information on valid data field values. The MDOS Driver Database Field Description Guide is





updated as needed and in accordance with federal and State legal requirements.

The State maintains appropriate documentation related to procedures for driver license, permits, and endorsements issuance. These procedures are specified in the Driver License Manual. In addition, the State has the Standard Actions Manual and the Court Procedures Manual, that document procedures regarding driver license actions, reporting and recording of conviction information, and other information relevant to the driver system. There are several data process flow diagrams comprising of information related to key data process flows and inputs from other data systems, as well as interactions with other data systems. Michigan has established process documentation with rules to purge data from the driver data system.

Michigan has established comprehensive procedures to detect false identity licensure fraud for both commercial and non-commercial drivers. The State provides the driver history record information to another State upon request. For commercial drivers, this is accomplished through CDLIS, and for non-commercial drivers, the driver history information is provided electronically or manually. The same methods are used to obtain the previous driver history information from other States. Michigan does not use facial recognition software prior to issuing driver license. However, the State may exchange driver photos with other State upon request and if such request meets Michigan's legal requirements. Michigan has established the Security Awareness Training Standard to ensure appropriate system and information security. This standard applies to all information systems in the State.

The State does not impose administrative license suspension based on a DUI arrest. Also, a separate DUI tracking system is not established. However, the State has established protocols for reporting different DUI-related data to MDOS, such as DUI conviction data from the courts or data on drivers in crashes involving alcohol. There is an interface link between the State's driver data system and the Problem Driver Pointer System (PDPS), the Commercial Driver License Information System (CDLIS), the Social Security Online Verification (SSOLV), and the Systematic Alien Verification for Entitlements (SAVE). Access to the Michigan driver data system cannot be granted to authorized law enforcement agencies, except for limited and approval-based access through the Michigan Law Enforcement Network (LEIN) system. Michigan court personnel can be granted access to the driver data system through different methods, including via the MDOS Direct Access.

Michigan has well established data monitoring procedures to detect and correct errors. For example, the State performs random audits, uses the error reports for the conviction data submitted by the courts, detects keying errors, etc. The State performs annual reviews of their conviction data, evaluates error rates, identifies trends, and detects potential anomalies in these data. Data quality feedback from key users is communicated to data managers. The State also has well established timeliness performance measure. Specifically, Michigan maintains a report that shows the number and the percentage of the conviction abstracts that are received by the MDOS within 10 days from the conviction date. This report is produced on monthly basis and shows this information for each court in the State. However, the State does not have established other performance measures and it does not have formal data quality management program for the driver data system. Michigan does not provide data quality management reports to the TRCC for regular review.





In general, the Michigan driver data system is well maintained and supported by procedures and protocols that for the most part meet the ideal of the Traffic Records Program Assessment Advisory. Like other U.S. States, Michigan does not have a formal, comprehensive data quality management program for the driver data system. Also, the State does not have established accuracy, completeness, uniformity, integration, and accessibility performance measures for the driver data system.

Roadway Recommendations

7. Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
8. Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Roadway recommendations

- The State has multiple data dictionaries where information on the MIRE data elements can be found. It is recommended that the State combine the information from these data dictionaries into one location.
- No real data performance measures have been established for the State. There are requirements that they strive to meet such as deadlines but these are not performance measures. They do have spreadsheets that could help with the development of performance measures such as those included in the integration question. It is recommend that the State use the white paper that was published by NHTSA document DOT HS 811 025 August 2008 "Traffic Safety Performance Measures for States and Federal Agencies" to help establish measures.

Summary

The State of Michigan has over 120,000 miles of paved roads. The State uses ESRI Roads and Highways as its linear referencing system for locating safety data. This includes the crash, roadway and traffic data. The program is a web-based program which allows multiple agencies easy access to the LRS so data can be uniformly located. Through the software program Roadsoft, Michigan has an enterprise level crash reporting tool. Crash data is available for the public to use on a public website.

Michigan has most of the MIRE FDE's in their data dictionary, currently 22 with an additional 12 planned to be included by May 2020. All roadways have a unique ID, classification, beginning and ending points. Intersection and ramps have unique ID's as well as length information for the ramps. Other data elements can also be found in this dictionary or in various other data dictionaries. Local entities use the software Roadsoft to collect their roadway data. Currently the State is working on changes to the software to incorporate more elements of the MIRE FDE's. Updates are done through excel files provided by the Roads and Highways vendor. These documents are modified when data elements are added or deleted form





the database.

Michigan Department of Transportation (MDOT) and the State of Michigan's Center for Shared Solutions (CSS) have a partnership where CSS maintains the Michigan Geographic Framework (MGF). RoadSoft users, Act 51 and community partnerships as well as crash location identification help identify roads that need to be added or removed from the MGF. CSS makes the changes within the Michigan Geographic Framework Editing Environment (MGFEE). These updates are audited to ensure accuracy. ESRI Workflow Manager is used to ensure the process is repeatable and to show the flow of information. Manuals such as the PASER manual are provided to guide locale entities on the collection and management of the data. The State also uses the HPMS Field Manual as a guideline for data collection.

Roads and Highways uses a physical reference value that connects the State's discrete roadway information systems. Location coding methodologies for all the State roadway information systems are compatible and can use Lat-Long to convert to the LRS. The MGF is available to anyone for download and allows for linkage of information to it, however locals do not interact with the State's enterprise roadway information systems.

No real data performance measures have been established for the State. There are requirements that they strive to meet such as deadlines, but these are not performance measures. They do have spreadsheets that could help with the development of performance measures such as those included in the integration question. It is recommended that the State use the white paper that was published by NHTSA document DOT HS 811 025 August 2008 "Traffic Safety Performance Measures for States and Federal Agencies" to help establish measures.

Quality checks are done through existing rules for managing the MFG revisions, but no reports are created. Error and edit checking are done through Roads and Highways Data Reviewer. Data collectors receive TAMC training for RoadSoft and are provided quality control information during this training.

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

- In the course of this traffic records assessment, the citation and adjudication section had many of its questions assigned to incorrect respondents. This indicates that the TRCC, as a group has not





worked on this assessment project. Citation and adjudication data are part of a process that starts with the development of paper citations or an electronic citation program and citation numbers. Law enforcement officers are assigned the paper citation or electronic numbers and issue citations to the public, then forward the citation to their own managers, and to the adjudicators within their jurisdictions. The prosecutors review the citations and determine whether to file the cases, or to dismiss or defer, judges determine a disposition, which is then sent to the driver history file. This involves several State agencies and these should work in concert on the collection and use of this data. The TRCC would be a good starting place for this collaboration in Michigan, including a full discussion and briefing of the duties of each party in this process.

- The core purpose of the Traffic Records Program Assessment is to determine the status of the data available for analysis of traffic safety programs within each State and to use the available data to develop dependable data-driven means of addressing safety issues. Where data are either not available or are of poor quality, this becomes more difficult. The Advisory suggests that each State develop measures of the various attributes of data quality for each of the component systems within its traffic records program. The State of Michigan had no measures for either its citation or adjudication systems. Development of these measures would provide a baseline picture of the status of data quality and provide information about where improvements are needed and where available funds could best be used to improve not only the data, but then the programs that depend on the data to develop safety improvements. These measures should be developed, measured regularly, shared with data partners, and used to evaluate grant requests and ultimately expenditures.
- It would benefit the State to develop a citation tracking system, most likely in concert with and using the infrastructure of electronic citations. Such a system allows the State to ascertain the effectiveness of its traffic enforcement in mitigating traffic crashes statewide. Such a system also allows the State to analyze the impact of various types of directed enforcement, determine if there are regional variations in courts' treatment of offenders and certain offenses, and ensure that alcohol-related offenses are addressed effectively and appropriately. A DUI tracking system as a subordinate to the citation tracking system helps to ensure that the impaired driving program is working efficiently and is addressing all aspects of impaired driving through evaluation, therapy, education, sanctions and eventual compliance.

Summary

Michigan has a judicial data warehouse of adjudication data that can be used by prosecutors and judges to ensure that the parties whom they adjudicating are not re-offenders who have multiple previous offenses that have been erased from the record due to deferrals and subsequent dismissals. This is an efficient process, though the warehouse data is not deemed to be an official record. It could, however, be used as the infrastructure for a citation tracking system to give a complete picture of the statewide traffic enforcement efforts, and when compared with the crash incidence, provide evidence of the impact of directed enforcement on numbers and severity of crashes. It might also be used as a DUI tracking system, which the State does not currently have.

The State has a real-time driver and criminal and driver history database, the Law Enforcement Information





Network, which provides data to appropriate individuals. The State law provides for numerous types of administrative driver license penalties, which are effectively tracked. These are but a few of the positive aspects of Michigan's citation and adjudication data files.

The State experiences difficulties in other aspects of data collection in terms of uniformity and consistency, not unlike other States, due to its non-unified court system, and multiple types of court case management systems. However, it seems to have overcome some of the difficulty of aggregating data from these various systems as evidenced by the judicial data warehouse.

The assessors were not provided with many data dictionaries for review, and there does not seem to be a great deal of integration, interface or linkage between the various component data systems of Michigan's traffic records system. These are areas where improvement could be made and benefits would be far-reaching. Good documentation for data systems is beneficial not just to the IT staff, but to data collectors and users alike, ensuring that data collected is consistent, well-formatted, and documents what the users expect, so analyses have integrity. Additionally, good documentation of systems helps to facilitate integration, making data collection and dataset linkages faster, more efficient and saving time for data collectors, who often have more pressing duties than collecting data.

There were numerous questions in this module that appeared to have been assigned to the incorrect respondent and it is possible that the ratings had the potential to be better than they were, but updates from round one to round two were limited. It would behoove the State to develop some measures of all aspects of data quality, prepare flow charts of processes, and develop data quality and continuous improvement processes in order that the data that is collected for traffic citation and adjudication can be best applied to improved traffic safety within the State of Michigan

Injury Surveillance Recommendations

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

Considerations for implementing your Injury Surveillance recommendations

- With the recent availability of emergency department data, the State would benefit from exploring that information for injuries that may not have been captured on crash reports.
- An annual (or bi-annual) report about the emergency department and hospital discharge data systems for the TRCC should be considered not only for data quality purposes but to help educate the committee on the availability of the data and its potential use.
- Incorporate the metrics from the State EMS progress report with reporting guidelines to develop performance measures.

Summary





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 data provides more detailed information on the nature and extent of injuries sustained in a motor vehicle crash than can be found in other components of the traffic records system. Consequently, this information is invaluable when determining the injury severity, costs, and clinical outcomes of the individuals involved.

Michigan 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 department approved data use agreements. The traffic safety community in Michigan has used EMS and crash data to identify problems and evaluate programs in the past. The Office of Highway Safety Planning (OHSP) is encouraged to work with the Michigan Department of Health and Human Services (MDHHS) to expand those analyses to include the (recently available) emergency department, hospital discharge, and vital records data.

The pre-hospital data collection system, known as the Michigan EMS Information System (MI_EMISIS), is managed by the MDHHS and is built on the ImageTrend Elite platform. Paper reports are not accepted, per State Statute, and the system is NEMESIS-compliant. All data collection systems use ImageTrend Elite, which incorporates appropriate edit checks and validations to ensure that the data falls within acceptable parameters. The State has established performance measures and metrics are tracked in a monthly progress report. Incorporating the metrics from the progress report will bring the measures up to standard. The monthly progress report is shared with the Traffic Records Coordinating Committee (TRCC). There is a sound feedback loop between users and data collectors as well as performance reporting to submitting Medical Control Authorities from the State and all of these processes are clearly documented.

The statewide emergency department and hospital discharge data systems are managed by The Michigan Health and Hospital Association Service Corporation (MHASC). The emergency department data system, known as the Michigan Outpatient Database (MODB) was initiated in 2016 and receives data from all but three hospitals as of 2018. The hospital discharge database contains data from 1995 through 2019. The MHASC maintains open communication with regards to data quality and error correction with the submitting hospitals to ensure that data is as accurate as possible. Trend analyses are conducted, but no performance measures have been developed. However, aggregate data is available through the MHA upon approval of a data use agreement and the MDHHS purchases record level data annually. Data quality reports are not currently provided to the TRCC, but the value of these data sets is significant. So the State is encouraged to work with TRCC members to better understand the importance and advantage of incorporating medical records in traffic safety efforts.

There is a statewide trauma registry that is also managed by the MDHHS and uses the ImageTrend Patient Registry software. The trauma registry data has been used to evaluate the trauma system, build a strategic plan, and research other forms of injury; the State is encouraged to use that information in traffic safety analyses. Routine quality control reviews are no longer conducted due to staff turnover, but are an important component to a healthy data collection system. The State has not developed performance





measures, but there is ongoing discussion surrounding measures and numeric goals. As the EMS and trauma systems utilize a common software vendor, ImageTrend, there is a strong interface and inter-connectivity between those systems.

The MDHHS is responsible for managing all vital statistics data including death certificates. As with most other States, Michigan collects death certificates from hospitals, funeral homes, and coroners and submits all data to the National Center for Health Statistics (NCHS) for quality review and assignment of cause-of-death ICD-10 codes. Due to strict requirements from the NCHS, the State relies on that quality review to ensure that all State data conforms to standards. That is the extent, however, of the quality control for death records in the State and there are no data performance measures or standard quality reports that are shared among stakeholders or with the TRCC.

The traffic records injury surveillance system in Michigan is complete with all five major components; however, the emergency department data (MODB) is new and most safety partners may be unaware of its qualities. The State is encouraged to incorporate emergency department and hospital discharge information into the traffic records model.

Ideally, the core components of the injury surveillance system would be integrated and then linked to the State's crash data. An integrated database that includes records spanning from the time of crash through hospital discharge provides a comprehensive look at the medical and financial outcomes of crashes occurring in Michigan. The resulting analyses can be used to implement data-driven traffic safety priorities and other highway safety applications at the State level; it can be used to quantify and report on the benefits of safety equipment and legislation; and it can support the government's highway safety office, public health departments and injury prevention programs, transportation departments, and other such agencies and traffic safety stakeholders.

Data Use and Integration Recommendations

None

Considerations for implementing your Data Use and Integration recommendations

- The State should consider prioritizing resources to tackle the obstacles that stalled the TRCC data integration project so that the core traffic data systems could be integrated.
- The State should consider working towards adopting more formal data governance principles that would span agencies and assist in future data integration projects.

Summary

Michigan recognizes the value of integrating traffic records datasets to support comprehensive in-depth behavioral safety analyses that often requires established connections between two or more of the six major traffic records system components – crash, vehicle, driver, roadway, citation and adjudication, and injury





surveillance.

Based on the wide range of responses, covering the various traffic records core component areas, it should be noted that Michigan's behavioral program managers have access to traffic records data and analytic resources across the different systems and platforms for problem identification, priority setting, and program evaluation.

It is also a credit to Michigan that the State's TRCC monitors access to the various traffic safety data systems through discussions among membership at quarterly TRCC meetings. This ensures that the needs of end users are being met and that useful and meaningful data is accessible to decision-makers across the various government agencies in the State. To that end, the TRCC approved a data integration project which looks to develop data governance, access, and security policies for integrated traffic records data between the various TRCC State agencies.

However, As Michigan has experienced, data integration can be challenging. High costs, multi-agency agreements, legislative restrictions, custodial resistance can all provide obstacles difficult to overcome. Currently the data integration project approved by the TRCC is on hold. As a result, vehicle, driver and citation and adjudication data are not integrated with crash data.

Injury surveillance data is also not currently integrated with crash data. However, some manual comparison of FARS and vital records has been done to provide greater clarity on the Health records side regarding the person type in the motor vehicle crash. This is a good example of how future data integration between these two systems (and others) can yield beneficial analysis and information to decision-makers and researchers.

As Michigan restarts its data integration project, the contribution of statewide Data Governance should not be overlooked. Governance includes documentation of processes, policies and procedures that apply to the various traffic records systems. Many States are moving towards adoption of a Chief Data Governance Officer that is sometimes employed in the centralized Information Technology agency for the State. This person could serve as an adviser to those responsible for traffic records systems in each respective agency regarding data governance principles.

As the State noted, decision-makers do have access to skilled personnel across several agencies who have expertise and are well-versed in traffic safety data. The public also has access to some skilled personnel and analytical tools when seeking access to statistical crash data. However, in both cases, for decision-makers and the public, integrated core component traffic records systems would greatly enhance comprehensive behavioral safety analyses and should be a part of the State's overall data integration project plan.

With that said, Michigan appears to have a good roadmap in place with the TRCC data Integration project, where some business requirements have already been documented. It is hopeful in the coming years that the project will move forward, so improvements can be made in this area.





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	-2	+2	0
Strategic Planning for the Traffic Records System			
Strategic Planning for Traffic Records Systems	-2	+2	0
Crash Data System			
Description and Contents of the Crash Data System	0	0	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	+1	-1	0
Crash Data Systems Interface with Other Components	0	0	0
Data Quality Control Programs for the Crash System	+5	-2	-3
Vehicle Data System			
Description and Contents of the Vehicle Data System	0	0	0
Applicable Guidelines for the Vehicle Data System	+1	-1	0
Vehicle System Data Dictionary	0	0	0
Procedures and Process Flows for the Vehicle Data System	0	0	0
Vehicle Data System Interface with Other Traffic Record System Components	-1	0	+1
Data Quality Control Programs for the Vehicle Data System	0	-2	+2
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	0	0	0
Procedures and Process Flows for the Driver Data System	0	0	0
Driver System Interface with Other Components	0	0	0
Data Quality Control Programs for the Driver System	0	+1	-1
Roadway Data System			





Description and Contents of the Roadway Data System	-1	+1	0
Applicable Guidelines for the Roadway Data System	0	0	0
Data Dictionary for the Roadway Data System	0	+1	-1
Procedures and Process Flows for the Roadway Data System	0	+1	-1
Intrastate Roadway System Interface	0	0	0
Data Quality Control Programs for the Roadway Data System	0	+1	-1
Citation and Adjudication Systems			
Description and Contents of the Citation and Adjudication Data Systems	+1	-1	0
Applicable Guidelines and Participation in National Data Exchange Systems for the Citation and Adjudication Systems	0	0	0
Data Dictionary for the Citation and Adjudication Data Systems	0	-1	+1
Procedures and Process Flows for the Citation and Adjudication Data Systems	0	0	0
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	-2	-2	-4
EMS – Guidelines	-2	0	-1
EMS – Data Dictionary	-4	+1	-1
EMS – Procedures & Processes	-4	-2	-2
Injury Surveillance Data Interfaces	+1	0	-1
EMS – Quality Control	+5	+3	-8
Emergency Department and Hospital Discharge – Quality Control	-2	-1	+3
Trauma Registry – Quality Control	0	0	0
Vital Records – Quality Control	0	0	0
Emergency Department - System Description	0	0	+2
Emergency Department – Data Dictionary	0	+1	0
Emergency Department – Procedures & Processes	+2	0	0
Hospital Discharge – System Description	+1	+1	+1
Hospital Discharge – Data Dictionary	0	+1	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	+1	+1	0
Trauma Registry – Guidelines	+2	0	0
Trauma Registry – Data Dictionary	+1	0	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	0	0	0
<i>Total Change</i>	+7	+5	-12





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	January 14, 2020
Begin first Q&A Cycle	January 14, 2020
End first Q&A Cycle	January 31, 2020
Begin Review Period	February 13, 2020
Onsite Meeting	February 25, 2020
Begin second Q&A Cycle	February 25, 2020
End second Q&A Cycle	March 13, 2020
Assessors' Final Results Complete	March 30, 2020
Final Report Due	April 10, 2020
Debrief	April 15, 2020





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 State has a Traffic Records Coordinating Committee, which is comprised of both a working group and an Executive Committee. These two groups have a diverse membership from across the various Departments and Bureaus that make up the Traffic Records community. It is not clear if the group includes adequate local representation.

Change Notes: Rating Unchanged.

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?*

Partially Meets Advisory Ideal

The State indicates that the membership of the Executive Committee for the Traffic Records Coordinating Committee is generally staffed by folks whose positions provide the authority to direct their staff's resources. The response does indicate that in some cases, the authority for expenditures rests at a higher level than the Executive representative and that the members have access to decision-makers and can bring answers in a timely manner.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially 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

If the TRCC identifies an issue, the custodial agency will report back to the TRCC the status and resolution. An example of drug data collection for crashes was provided. Custodial agencies seek feedback from the TRCC when major system changes or upgrades are planned.

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 Michigan Department of Technology, Management & Budget is represented on the Traffic





Records Coordinating Committee and provides assistance on various aspects of projects related to the technological aspects of projects. Each component of the traffic records system also has its own IT staff represented. Having input from the various data systems and the State's IT department ensures that a variety of perspectives are considered when developing new projects, as well as building and implementing new infrastructure.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State provided the TRCC charter with signatures from each Executive Committee member, dated May 29, 2019.

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

Projects are submitted to the TRCC for funding and must adhere to the Strategic Plan. A narrative on the process was provided in response to this question. It would be beneficial to develop a means by which to determine the effectiveness of each project that is undertaken in furtherance of the Strategic Plan. The means to measure success of the project should be established in the application for funding and should note which attributes of data quality will improve and by what amount. It is not enough to have milestones of work products for project completion. The measure should note not just when the project is complete, but how it will impact the overall quality of the dataset to which the project relates.

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 requests project proposals annually. These are discussed at TRCC Executive Committee meetings. If more projects are submitted than funding is available, then the TRCC Executive Committee ranks the projects for funding. The response mentions that use of judicial and enforcement data is limited due to availability. It would benefit the State to determine means to improve use of these datasets, to determine the impact of enforcement on the incidence and severity of crashes. This would help to develop the most effective countermeasures and directed enforcement activities for the State. One of the purposes of the TRCC is to find areas where data is not meeting the necessary attributes of timeliness, accuracy, completeness, uniformity, accessibility, or integrated, and to develop projects with traffic records improvement grant funds to make needed changes. The narrative itself pointed out one such situation.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal





The State provided performance measures for crash data, and explained how these measures are monitored. Performance measures for the remaining five core data systems were not specified. A NHTSA's GO-Team provided recommendations for performance measures and data improvements, but there is no explanation of what the TRCC has done to implement these recommendations. The considerations in the Strategic Plan indicate whether a particular item will affect the six types of performance measures, without actually establishing a measure.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially 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?*

Partially Meets Advisory Ideal

The State has working committees that consistently monitors data quality and availability, such as the crash data users group, and a standing committee that oversees the redesign of the crash process. These are important aspects to ensuring that the entire traffic records system is involved in data collection, management and use. The State provided an agenda from the TRCC meeting in January 2020 and a project update summary from November 2019. From these, it does appear various projects are discussed across systems, however, it is not clear the depth of that discussion and whether the TRCC discussed programs, challenges, and investments. Additional documentation would have been helpful.

Change Notes: Rating Changed.

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

10. *Does the TRCC have a traffic records inventory?*

Partially Meets Advisory Ideal

The State has no consolidated traffic records inventory, but various component systems have partial inventories. One of the most valuable aspects of development of a traffic records inventory is the exchange of information about what data is contained in and available from each system. It is assumed that this is widely known but conversations that result from the development of an inventory, as well as the ready availability of traffic records data, help the entire traffic records community to devise new and better ways to combine and analyze datasets for purposes of improving traffic safety. As long as data is being collected, the effort and expense should be put to effective use. Having a complete inventory helps to facilitate that use, as does the communication necessary to develop a complete statewide inventory.

Change Notes: Rating Improved.

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

11. *Does the TRCC have a designated chair?*

Meets Advisory Ideal

TRCC meetings are coordinated and facilitated by the State's Traffic Records Program Coordinator. The current chair of the TRCC's Executive Committee is a representative of the DOT. The chair is selected by the Executive Committee and rotates every other year.

Change Notes: Rating Unchanged.





12. *Is there a designated Traffic Records Coordinator?*

Meets Advisory Ideal

The Chair of the TRCC is the State's traffic records coordinator, and her duties include assisting with TRCC meeting agenda development, coordination of traffic records programming and funding, and participation/facilitation of traffic records sub-committee meetings.

Change Notes: Rating Unchanged.

13. *Does the TRCC meet at least quarterly?*

Meets Advisory Ideal

The TRCC and its Data Users Group each met five times in 2019. Evidence provided was a screen shot of the State's TRCC web site.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

Although the State provided an example of a solved problem, it did not document how the TRCC oversees quality improvement. The narrative generally describes discussions at meetings and email follow up. The State provided an email exchange between the University of Michigan and the crash team on annual crash statistical reporting, yet it is not clear how this relates to quality control oversight by the TRCC.

Change Notes: Rating Changed.

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

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

Meets Advisory Ideal

The State of Michigan is proactive in providing technical assistance and outlining training availability to its TRCC members. The TRCC has used NHTSA GO-Teams to provide technical assistance, and some projects in the Strategic Plan are solely to meet training needs. Having representatives from each data system make a presentation on available data and discussion of potential uses are the core responsibilities of the TRCC to ensure there is coordination amongst the various component systems and that data is used effectively.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The State notes the sources of its funding for traffic records improvement projects. It would benefit the State to access further federal funding opportunities, and to review availability of other grant funds or other state-level funding on a regular basis.





Change Notes: Rating Changed.

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

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?

Partially Meets Advisory Ideal

The Traffic Records Strategic Plan (2019-2022) addresses each data system along with that system's deficiencies, accomplishments, and strategies for improvement. However, recommended suggestions provided by NHTSA GO Teams are not reflected in the current plan, nor does it appear that the State identifies new opportunities or challenges to incorporate in the plan between Traffic Records Assessments. The State will address new recommendations in its revised TRSP.

Change Notes: Rating Changed.

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

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?

Partially Meets Advisory Ideal

The Strategic Plan includes strategies for addressing each deficiency, and each strategy is indicated as addressing at least one of the six performance measure attributes. Generally, though, the strategies are vague - create an action plan or review processes, for example. Strategies, and associated action steps, should be specific, measurable, action-oriented, realistic, and time-bound (SMART). Each should be monitored regularly and, as they are completed or accomplished should be marked as complete. While there are more detailed steps for some of these strategies, it's not easy to tell a direct relationship between the generalized strategy and expected outcomes.

Change Notes: Rating Changed.

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

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?

Partially Meets Advisory Ideal

Not all systems have current metrics associated with their performance measures. In addition, it is not clear if the metrics provided are actual measures or goals. Each metric should be included as part of the performance measure process. The State received recommendations from a NHTSA GO-Team in early 2019. These recommendations include examples of performance measures that would meet this requirement. The State has not adopted these performance measures, although it intends to update the Strategic Plan in 2020, after this Traffic Records Assessment, and will incorporate measures at that time.

Change Notes: Rating Changed.





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

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 Executive Committee reviews request for proposals annually and comments on them, as appropriate. If more requests are submitted than funding is available, the TRCC Executive Committee ranks the projects in priority order. It would be helpful to understand how the TRCC ranks projects and for this process to be documented as part of the Strategic Plan.

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 Strategic Plan includes training as part of specific projects. The TRCC has requested two NHTSA Go-Teams to provide technical assistance. The process of identifying training and technical assistance is through TRCC discussions or requests from partners.

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 strategies listed in the Strategic Plan include time frames and owners. The TRCC relies on the owners to estimate project time lines and monitor progress. These time frames are updated as needed. If grant applications are submitted, those include more concrete time lines.

Change Notes: Rating Unchanged.

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

The traffic records coordinator and partners at the University of Michigan attempt to integrate the State and local data needs through presentations and collaborations with the Traffic Safety Networks, local groups, safety committees and other partners.

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 TRCC considers technology to improve traffic record systems. One example provided involves using the cloud to store crash data to improve accessibility. Other examples are included in the Strategic Plan.





Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

Project funding discussed by the TRCC is for a limited duration, with the expectation that the requesting agency assumes all costs to operate. Sometimes, decisions of project funding may be altered if overall lifecycle costs are discussed and weighed out. The documentation provided for MIRE does not adequately demonstrate these types of considerations of lifecycle costs occur.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially 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

The strategic plan refers to projects that have been undertaken to improve the State's ability to coordinate with PRISM, NMVTIS, and others. A specific example was provided describing the State's compliance with the MIRE Fundamental Data Elements.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The strategic plan is reviewed and updated annually. Updates are included as an appendix to Michigan's Highway Safety 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

Michigan's statewide crash data is consolidated into one database called the Traffic Crash Reporting System (TCRS), which is the State's central repository. This includes both data submitted electronically and using paper crash report forms. Both the TCRS data model and physical dictionary were provided.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan Vehicle Code, Act 300, Section 257.622 establishes the Michigan State Police as the custodian of the crash records system.





Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan Vehicle Code, Act 300, Section 257.622 requires fatal crashes be submitted to the statewide crash reporting system. Snowmobile and ORV fatal crashes are also required to be submitted under MVC 324.81143 and 324.82132.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan Vehicle Code, Act 300, Section 257.622 requires injury crashes be submitted to the statewide crash reporting system. Snowmobile and ORV injury crashes are also required to be submitted under MVC 324.81143 and 324.82132.

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

Michigan Vehicle Code, Act 300, Section 257.622 requires property damage crashes totaling \$1,000 in damage or greater be submitted to the statewide crash reporting system. Snowmobile and ORV crashes exceeding \$100 in damage are also reportable.

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

Michigan Vehicle Code, Act 300, Section 257.622 specifies that crashes meeting the reporting criteria be submitted to the statewide crash reporting system "immediately" by the investigating officer and completed in full on forms prescribed by the director of the department of State police. Snowmobile and ORV crashes are to be reported within 14 days. We interpret the statute's reference of "immediately" as being a specified timeframe, thus meeting the criteria for this advisory ideal.

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

Non-trafficway crashes are recorded in the Michigan TCRS if they are submitted to the State by





the investigating officer. The MDOT Area code field in the crash database includes an attribute for "non-traffic". The crash manual specifically states that non-trafficway (parking lots, shopping malls) fatal crashes be reported to the statewide database. Additionally, the crash report form contains an "Trafficway Type" field. Under the Michigan Vehicle Code, Act 300, Sections 324.81143 and 324.82132, crashes involving ORV and snowmobiles must be reported to the statewide database, based on the vehicle type as opposed to the crash occurring on a trafficway.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Numerous examples were providing illustrating how Michigan uses data from the crash system to identify crash risk factors. Crash data is analyzed by UMTRI, MDOT, the Office of Highway Safety Planning and others regularly. Analysis is published in various statistical reports by UMTRI, used in the State's Highway Safety Plan in conjunction with behavior and activity measures, and is utilized by MDOT to identify high risk crash locations to focus its transportation resources.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

MDOT utilizes crash data from the crash system to guide its engineering and construction projects. Michigan uses various methods of analysis to identify high crash locations and areas of high risk for crashes. It then utilizes the Michigan Traffic and Safety Reference Manual, Highway Safety Manual, and Time of Return form to determine how best to improve safety at these locations. The purpose of the SHSP is to identify key safety needs in the State and guide investment decisions that achieve significant reductions in highway fatalities and serious injuries. All submitted and selected engineering projects require crash system information to determine predicted and expected outcomes.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Data from the crash system is regularly used to prioritize law enforcement activity in Michigan. The State Police analyze data all the way down to the post-level and provide tools to its officers to use to focus their resources are areas with the greatest crash risk. Some local law enforcement agencies utilize crash data in various DDACTS programs, and UMTRI analyzes data for the highway safety office to help identify priorities for its highway safety campaigns. The State provided examples of reports available to communities regarding crash hotspots as well as a high crash intersection report. The State's safety program emphasizes that high-visibility enforcement increases compliance with traffic laws.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

Data from the crash system is used in Michigan to evaluate various safety countermeasure programs. This is documented in several different reports, including the Strategic Highway Safety Plan, as well as the Annual Evaluation Plan, and HSP. This strategy of using crash data, before and after, is applied across multiple safety programs including distracted driving, impaired driving, occupant protection, CMV safety, motorcycle safety and others. MDOT also conducts reviews 3 years following the completion of a safety enhancement project, which helps to analyze the effectiveness of the countermeasure which was implemented.

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 is used to help identify what crash data elements and attributes Michigan collects in its traffic crash report form. The State's key stakeholders (OHSP, MDOT, MDOS, MDHHS, MSP) convene and use the MMUCC manual to guide the crash form revisions. Michigan conducted a MMUCC Mapping review in 2020 and also has undergone a review which has resulted in the recommendation of adding Automated Vehicle elements to the report form. This demonstrated a process and the degree to which the State uses MMUCC to identify data elements and attributes and to include them on the State's crash report.

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 was primarily used to help identify the definitions in the crash system data dictionary and the development of the crash report form. ANSI D.16 continues to be referenced by data analysts and users of the crash system.

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

Michigan has a System Data Dictionary and a User Data Dictionary as well as several detailed Code Table spreadsheets which combine to fully define each data element and that data element's





allowable values and attributes. The State's data dictionary extract provides column names, data length and type, allowable values, and definitions for each element.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

While the data dictionary itself does not identify crash system edit checks and validation rules, there are several additional documents which fully detail all edit checks and validation rules for the TCRS. This includes detailed documentation which must be adhered to by third parties for electronic submissions to the system. System edit checks and validation rules are documented in the Electronic Crash Certification Guide. The State also provided a data edit report showing column names, edits and validations.

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 State provided its UD-10 Manual, UD-10 Guide, User Data Dictionary, and Vendor Guide, which demonstrated consistency throughout. The Michigan data dictionary is kept up-to-date and consistent with the field data collection manual, coding manual, crash report, database schema and training materials. Michigan stakeholders work together to identify any revisions to the crash report form and ensure that all documentation is updated. The UD-10 Trainer is responsible for keeping the user manual current. The last major set of revisions to the crash report form occurred in 2016 and all documentation provided appears to have been updated accordingly. The last update to the documentation, according to the documents, was 2018.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The crash system data dictionary indicates the data elements populated through links to other traffic records system components, which includes interfaces with driver, vehicle, and roadway systems, both for validation and for retrieving missing or corrected data.

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

Identical data elements and attributes are collected from all reporting agencies and vendors





regardless of paper or electronic collection method. The State provided documentation of its standard list of data elements and attributes.

Change Notes: New Question.

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

Meets Advisory Ideal

The State reevaluates their crash form in step with updated federal guidelines. Discussions are held following each MMUCC revision to determine if updates should be made to the crash report form. The last review was held in 2016 and is the most recent update to the crash report form.

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

Several policies were provided outlining the procedures for transmission of crash data to federal systems. These policies and process flow charts have been recently updated to account for electronic crash reporting. Multiple key processes such as reporting FARS and CMV crashes were provided which outlined the data flow and documented the policies and procedures of the crash system. The CJIC TCRU unit establishes guidelines for the creation and revision of working procedures and ensures designated staff are committed to following the procedure for its proper development and maintenance.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Michigan has implemented numerous quality assurance and quality control processes for the crash system as a whole, as well as for managing errors and incomplete data. They have created substantial documentation library regarding the quality control in place for the crash system including flow charts which highlight the processes in place, quality control procedures, and data flow for both general and specific crash types (such as Amish, distracted driving). Many of the quality assurance and quality control procedures adopted by Michigan could serve as a model for other States.

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 Records and Retention schedule provided for the crash system requires crash data to be kept





for 10 years from the date of the crash and meets the needs of crash data users. The State approved a new TCRS retention policy in 2017 and it meets the needs of engineers and other data users.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

As of January 2020, the Michigan State Police has made reporting crashes electronically to the State mandatory and they should be commended for taking this step. Though 15 law enforcement agencies are still collecting and reporting their crashes on paper, Michigan has made good progress since the last assessment on progressively transitioning agencies to electronic reporting, and with the new policy on mandatory electronic reporting now in place, it is anticipated that paper reporting will be eliminated in the very near future.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

As of January 2020, the Michigan State Police has made submitting crashes electronically to the State mandatory. Only 15 law enforcement agencies are still submitting their crash reports to the State on paper. TCRU staff then enters those records into the TCRS manually. Once the paper process is phased out, and all agencies submit their crash records to the State electronically, then Michigan will meet this advisory ideal.

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

Michigan has an Electronic Crash Certification Guide for vendors and local law enforcement to utilize when creating a software application for electronic crash submission in Michigan. All vendors who wish to submit crash data to the State system must meet the requirements for certification, which requires all electronic submissions to adhere to and apply validation rules consistent with those in the statewide crash system.

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?*

Meets Advisory Ideal

The Michigan crash system has an interface with the driver system which verifies driver information collected by the investigating officer against the MDOS driver record via a driver inquiry web service. If the driver data does not match, then the crash will appear in a work list within the TCRS application for follow-up and/or correction. Once driver data has been validated





then it can be posted to the driver record.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Michigan crash system has an interface with the vehicle system which verifies vehicle information collected by the investigating officer against the MDOS vehicle registration system via a web service. If the vehicle data does not match, then the crash will appear in a work list within the TCRS application for follow-up and/or correction. Once vehicle data has been validated then it can be shared with 3rd parties.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Crash system interfaces with the Roadway system through the integration of the Michigan Geographic Framework LRS data with the location diagramming tool within their crash application called Crash Locating Improvement Process (CLIP). CLIP allows the officer to locate the crash utilizing a smart map, which utilizes web services to access the LRS data, and records both the location data and the LRS data at the time the officer investigates the crash and completes the crash report.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The crash system does not currently interface with the citation and adjudication systems.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The crash system does not currently interface with the EMS system.

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

The Michigan crash system has numerous 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. These edit checks and validation rules are thoroughly documented in the system





documentation provided.

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

Michigan has a Quality Control Analyst who ensures data quality across the crash system and has State-level correction authority to amend obvious errors and omissions for designated data elements and attributes without returning the report to the originating officer. Crash reports are flagged if they don't meet edit/validation rules, or discrepancies are found between the crash report data and driver or vehicle system data, and are worked by QC staff. This includes manually correcting location information. The system has internal auditing and all changes are noted and logged.

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

While Michigan does not return crash reports once submitted, there are formally documented processes for amending reports that contain errors. Additionally, there are processes in place for crash report submissions that fail to process into the crash system. Steps are followed to ensure that these errors are corrected and the reports are tracked until they have been successfully processed into the crash system.

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

Michigan has a robust audit tracking system in place that records any changes or modifications made to a crash report following its submission to the crash system. There is an audit log report that can be created and details the changes made to a given crash record.

Change Notes: New Question.

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

Meets Advisory Ideal

Michigan has several timeliness performance measures in place with baselines, goals, and targets which it monitors on a regular basis. A list of the performance measures and sample reports were provided.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

Michigan has several accuracy performance measures in place with baselines, goals, and targets which it monitors on a regular basis. A list of the performance measures and sample reports were provided.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan has several completeness performance measures in place with baselines, goals, and targets which it monitors on a regular basis. A list of the performance measures and sample reports were provided.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan has one uniformity performance measure in place which looks at its compliance with MMUCC following each update to the MMUCC guidelines, though a more formal goal needs to be established for this measure. A list of the performance measures and the NHTSA MMUCC Mapping review conducted in 2017 was provided. There may be an opportunity here to include additional uniformity performance measures which can be monitored more regularly, and more closely examine the data being submitted to the crash system to ensure uniformity across all of the submission methods, vendors, and agencies.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Michigan has several integration performance measures in place with baselines, goals, and targets which it monitors on a regular basis relating to its integration between the vehicle registration and driver systems. A list of the performance measures and their accompanying data was provided.

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

Surveys of crash data users have been conducted recently and documentation was provided which





meets the criteria outlined in the Traffic Records Advisory. The State identified the principal users of the crash database. Queried the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness or the response to their request. The State documented the method of data collection and the responses, providing a baseline percent for satisfactory accessibility.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

There are numeric goals and performance metrics in place for all performance measures, as outlined in the Traffic Records Advisory. Improvements to Michigan's performance metrics for the crash system has been made since the previous assessment and they should be commended for their focus and efforts in this area.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Review of the timeliness, accuracy, and completeness of crash data by agency is monitored monthly from on-demand reports from the TCRS website and agencies are contacted when concerns arise. Several examples were provided illustrating reports that are made available to local law enforcement detailing their performance in timeliness, accuracy, and completeness. The timeliness report is very professionally done, and several of these reports could be used as models for other States on how they can share this information with their local law enforcement partners.

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 State provided multiple examples of a mature, integrated quality control process whereby high frequency errors are used to revise the training, the online manual and the instruction guides for the collection of crash data. Michigan also issues training advisories, which highlight information pertinent to crash data collectors and distributes these in a newsletter format. This is a great alternate to a common email blast, and is more likely to be reviewed by the end users. Many States struggle with how to effectively communicate changes and revisions to the crash system from the State level to the local level. It is often challenging to ensure that the message is received to the ones that need it. Michigan's method of communication to its end users can serve as a good example which other States could follow.

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

There are several policies and procedures in place which illustrate how quality control can be done comparing narrative, diagram, and coded components of the crash report. Additionally, a supervisor review process is a requirement for all crashes submitted to the crash system. As part of the supervisor review process the supervisor is responsible for examining coded components, narrative, and diagram to ensure consistency and accuracy prior to the report being approved for acceptance into the database.

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

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

Meets Advisory Ideal

Michigan conducts several audits throughout the year on the crash system. Specifically, three audits were referenced which are conducted by UMTRI which conducts a QC analysis, FARS which compares FARS MDE fatality data with fatalities in the TCRS, and the MCMIS mismatch report is reviewed. An example was provided illustrating mid-year and end-of-year audit that is utilized for data reconciliation across multiple systems.

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

Several examples were provided illustrating how comparative and periodic analysis is conducted against the crash data across years and jurisdictions. It is clear from these examples, the various safety plans, quality control processes in place, and the robust capabilities of the UMTRI team that analysis of crash data in Michigan is routinely conducted and that mechanisms are in place to address discrepancies in reporting when they are identified.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Crash Data Users Group, a component of the TRCC is one path by which data quality feedback is communicated between key users, data collectors, and data managers. An example was provided illustrating how this communication led to the approval and establishment of the Crash Location Improvement Project. Feedback from multiple stakeholders was detailed and included feedback from the University of Michigan and the MSP Lansing post pilot project. Subsequently, an RFP for enhancements to the Crash Location Improvement Project (CLIP) 2.0 was prepared by the CDUG sub-group of the TRCC to address different data concerns and provide system enhancements.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

Data quality management reports are distributed monthly to the TRCC for their review. Other reports are also distributed on an ongoing basis. The reports to the TRCC are detailed and include summary information across multiple areas of data quality and overall reporting for the crash system.

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

The Michigan Department of State (MDOS) has the custodial responsibility for the Michigan driver data system, which resides in a single location and includes records for commercially licensed drivers.

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

Michigan maintains the Basic Driver Improvement Course (BDIC) data set that contains information on traffic violations and essential information on the BDIC completion such as completion date, details about the BDIC provider, etc. Associated with the State's motorcycle safety program, Michigan maintains information on motorcycle rider education classes. Finally, Michigan has well established 3-level Graduated Driver License (GDL) program and tracks relevant details on novice driver training history associated with the GDL program.

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

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)?*

Partially Meets Advisory Ideal

The State driver data system captures the issuance dates for driver licenses, permits, and endorsements. The issuance dates are stored as a Julian date, which helps the State to locate the original documents that were used to issue the original document. The State retains information only for the last three issuance dates. Michigan is currently in the process of updating the driver data system, which will allow the State to retain all information pertaining to driver license issuance.





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

The Michigan driver data system is maintained to accommodate interaction with the Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS).

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

The State maintains the MDOS Driver Database Field Descriptions guide that documents the content of the State driver data system and data definition for each data field.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

All valid field values are documented in the MDOS Driver Database Field Descriptions guide.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Edit checks and data collection guidelines for each data element are built into the driver system programming.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State updates the data dictionary when there are changes in the State driver-related laws or in federal regulations. Such changes typically require revisions of the current rules or creation of new business rules, which is determined and developed by the MDOS project teams. Subsequently, new/revised business specifications are given to the Department of Technology Management Budget (DTMB) to modify programming for the State driver data system.

Change Notes: Rating Unchanged.





Procedures and Process Flows for the Driver Data System

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

Michigan maintains appropriate documentation (i.e., the Driver Licensing Manual, the Standard Action Manual, and the Court Procedures Manual) related to procedures regarding licensing, permitting, and endorsement issuance, as well as reporting and recording of convictions and other information relevant to the driver data system.

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 maintains several process flow diagrams related to the driver data system's key data process flows, inputs, and interactions with other data systems.

Change Notes: Rating Unchanged.

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 State provided a comprehensive description related to error check and correction processes and documentation for reporting and recording of different types of information associated with driver licensing operations. While many of these error check and correction processes are automated and built into the driver data system programming (e.g, error checks during data entry and transactions for driver application, abstracts of convictions, etc.), some of them are a result of the manual review and correction process completed by Driver Record Activity unit or other MDOS personnel.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan has documented procedures and rules for purging data from the driver data system.





Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State does not appear to have a law to administratively suspend driver's license based on a DUI arrest. Michigan law requires drivers with multiple substance abuse convictions, within the specific number of years, to be subject to a hearing by the Office of Hearing and Administrative Oversight. Also, some drivers may be subject to a substance abuse evaluation and/or re-exam.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State has comprehensive procedures to detect false identity licensure fraud, such as the occurrence of duplicate driver records for one person or when a person does not have a driver license number, but he/she has a driver record. In addition, there is a special unit within MDOS that works on a detection of potentially fraudulent activities.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State has established policies and procedures to detect internal fraud by individual users or examiners. These procedures are described in a comprehensive narrative provided by the State.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

There are established procedures to detect CDL fraud, including observation of applicants' behavior during written exams and CDL skills testing by the MDOS personnel. Also, the State conducts a brief review of key information in every CDL skill test score sheet.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan provides the driver history record information to another State upon request via CDLIS for commercial drivers. In addition, the State provides the driver history information, electronically or manually, for non-commercial drivers who apply for a license in another State.

Change Notes: New Question.





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

Meets Advisory Ideal

Michigan obtains the previous State of Record electronically through CDLIS for commercial drivers. The State also obtains the previous State of Record for non-commercial drivers. If this information cannot be transferred electronically, the State processes requested information manually.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

Michigan does not use facial recognition prior to issuing driver license. The State only uses prior photos/signatures of individuals to detect potential identity fraud.

Change Notes: New Question.

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

Partially Meets Advisory Ideal

It appears that Michigan may exchange driver photos with licensing agencies in other States only upon request and when such request meets the policy requirements established by the State. A narrative with more specific details related to this process (and a stronger certainty about its existence) would have improved this rating.

Change Notes: New Question.

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

Meets Advisory Ideal

Michigan has established the Security Awareness Training Standard to maintain appropriate system and information security applicable to all information systems in the State. This standard specifies the State's security control policies and procedures and components of basic security awareness training for the MDOS employees.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State uses an "audit trail" process to track access and release of driver information. This trail contains specific details about transactions used for a release of driver information (e.g., what MDOS office completed the transaction, details about internal keying, etc.).

Change Notes: Rating Unchanged.

Driver System Interface with Other Components





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

Meets Advisory Ideal

Michigan updates at-fault crash information to the driver record.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

Michigan does not maintain separate DUI tracking system. Therefore, interface with the State driver data system cannot be established. The State has established reporting protocols for law enforcement to electronically report to MDOS specific DUI-related data, such as information on drivers in crashes involving alcohol or information on drivers who refuse to take the chemical test.

Change Notes: Rating Unchanged.

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

Michigan has an interface between the State's driver data system and the Problem Driver Pointer System (PDPS), the Commercial Driver License Information System (CDLIS), the Social Security Online Verification System (SSOLV), and the Systematic Alien Verification for Entitlement (SAVE) system.

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?*

Does Not Meet Advisory Ideal

Access to the State driver data system cannot be granted to authorized law enforcement personnel. Michigan allows law enforcement agencies to access to the Michigan Law Enforcement Network (LEIN) system. Access to the LEIN system is limited and based on the approval by the Criminal Justice Information System.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan court personnel can be granted access to the driver data system through different methods, including the MDOS Direct Access.

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 does not have established a formal, comprehensive data quality management program for the driver system. A narrative provided by the State does not indicate the existence of data quality management program as envisioned in the NHTSA Advisory.

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 State driver system is supported by automated edit checks and validation rules that are built into the driver data system programming to ensure entered data falls within a range of acceptable values and is logically consistent among data elements.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

For the timeliness performance measure, the State tracks the number and the percentage of the abstracts of conviction that are received by the MDOS within 10 days from the conviction date. This information is reported monthly for each court in the State.

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

There are not any accuracy performance measures tailored to the needs of data managers and data users, as envisioned in the Advisory. At present, the State only has error reports related to conviction data from courts and for driver application data from field office.

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

There are not any completeness performance measures tailored to the needs of data managers and data users.

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

There are not any uniformity performance measures tailored to the needs of data managers and data users.

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

There are not any integration performance measures tailored to the needs of data managers and data users. An example of such performance measure is presented in Table 5 on page 20 in the 2018 edition of the NHTSA Advisory. For more details, the State can find relevant information in the NHTSA report titled "Model Performance Measures for State Traffic Records Systems" (DOT HS 811 411).

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

There are not any accessibility performance measures tailored to the needs of data managers and data users.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The State has not established numeric goals - performance metrics - for each performance measure. Michigan has established only the timeliness performance measure, and maintains weekly backlog reports that contain data related to timeliness (e.g., target number of days for specific driver data procedures and transactions). However, the State does not have any similar information for other performance measures (i.e., accuracy, completeness, integration, uniformity, and accessibility).

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 well established procedures to detect and address/correct frequent errors that are handled by the appropriate unit responsible for specific data processing. Among these procedures are: random and frequent audits performed by the Driver Record Section, use of the court





conviction error reports, real-time detection of keying errors, etc.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

Michigan performs some internal quarterly audit review of the driver data system based on a sample of driving records accessed by the authorized MDOS personnel. However, it is not evident that these audits are performed in accordance to criteria and methodology that are specified in the Advisory.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The State performs annual review of conviction data and error rates to identify potential changes in trends and to detect possible anomalies. However, due to lack of specific details, it is unclear to what extent these annual reviews are comparable to trend analyses of the driver system data (across years and jurisdictions), with a purpose to identify unexplained differences in data and to detect potential data quality issues.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Data quality feedback from key users (i.e., law enforcement, courts, the Office of Highway Safety Planning - OHSP, etc.) is communicated to data managers to evaluate and potentially revise different driver license procedures. The State also has established protocol to communicate with departmental staff regarding the potential needs to make changes in these procedures.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Data quality management reports related to the driver data system are not provided to the TRCC for review. The State Police Criminal Justice Information Center provides a monthly report containing crash statistics. However, this information is not related to data quality aspects of the Michigan driver data system.

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 Michigan Department of Technology, Management, and Budget (DTMB) has the custodial responsibility of identification and ownership of vehicles registered in the State. The Department maintains the Michigan vehicle data system, which resides in a single location and contains all vehicle title and registration records.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Michigan utilizes VINtelligence software to validate the VINs upon application for an original Michigan Title and when a title transfer application is made from another State.

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?*

Meets Advisory Ideal

Michigan registration documents contain a 2D bar code and vehicle information may be decoded by law enforcement officers in the field to aid in completing citations and crash reports.

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 Michigan vehicle system provides title information data to the National Motor Vehicle Title Information System via a real-time interface.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Michigan vehicle system queries NMVTIS while processing vehicle title transactions. NMVTIS query is an integrated process in the vehicle title processing transaction in the vehicle system.





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

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

The State incorporates brand information on the vehicle record that is recommended by AAMVA. In addition, Michigan has several State-specific brands, such as municipal, police, taxi, etc. A list of the title brands used in Michigan was provided.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Michigan does not participate in the Performance and Registration Information Systems Management (PRISM) program.

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 Michigan vehicle system is supported by a documented definition for each data field. A list of codes and corresponding definitions 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

The Michigan vehicle system is supported by a data entry edits and data verification that correspond to the data elements identified in the data dictionary. Automated edit checks or validation rules occur at specific data entry points in the system processing flow, including but not limited to, drop-down menus, VINTelligence checks, validation against existing system records, and real-time NMVTIS updates.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

The Michigan vehicle system is supported by a formal title and registration manual(T&R Manual). Procedures for vehicle transaction data collection, reporting, and posting procedures, and title brand information are all contained in the T&R Manual. The Table of Contents for the T&R Manual was provided.

Change Notes: Rating Unchanged.

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?*

Meets Advisory Ideal

The Michigan vehicle system is supported by a process flow diagram indicating key data process functions including inputs from other data systems.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The vehicle data system flags vehicles reported as stolen by law enforcement. These reports are made via the law enforcement information network.

Change Notes: Rating Unchanged.

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?*

Meets Advisory Ideal

Michigan stolen vehicle flags are removed from the system when a report of a vehicle recovery is received from 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

Michigan title records retain title brand information from other States when a vehicle title transfer indicates the presence of a title brand.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

The Michigan vehicle system is not supported by documented process flow diagrams but a brief narrative was provided indicating the functions required to complete vehicle transactions.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Michigan vehicle system is not supported by documented process flow diagrams but a brief narrative was provided indicating the functions and time frames required to complete vehicle transactions.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Michigan vehicle system is not supported by documented process flow diagrams but a brief narrative was provided indicating the alternative functions and time frames that can be utilized to complete vehicle transactions.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Michigan vehicle system is not supported by documented process flow diagrams but a brief narrative was provided indicating the functions and time frames required to complete vehicle transactions. Included in this narrative error correction and quality assurance checks were described.

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

The State's vehicle data are maintained in the CARS system and the driver data is in the BOS system. Michigan is working toward maintaining both vehicle and driver data in the CARS system. However, vehicle and driver data systems are not currently unified in one system.

Change Notes: Rating Changed.

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





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

Does Not Meet Advisory Ideal

The updated response did not provide information necessary to rate this item. Screenshots of the data entry forms does not provide any information regarding the requirements for capturing personal information. No information was provided concerning whether full legal names are required in both systems or if abbreviations or common use names were allowed for legal names (i.e. Bob for Robert, Dick for Richard, etc.).

Change Notes: Rating Changed.

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

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

Michigan vehicle records are not flagged for updating 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 Michigan vehicle system data is processed in real-time.

Change Notes: Rating Improved.

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

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?*

Meets Advisory Ideal

The Michigan vehicle system is supported by automated edit checks or validation rules including, drop-down menus, VIntelligence checks, validation against existing system records, and NMVTIS checks.

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 Michigan vehicle system is supported by internal corrections staff to correct errors and omissions in the vehicle database.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

The Michigan vehicle system is not supported by established timeliness performance measures as a component of a formal data quality management program. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

The Michigan vehicle system is not supported by established accuracy performance measures as a component of a formal data quality management program. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures.

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 Michigan vehicle system is not supported by established completeness performance measures as a component of a formal data quality management program. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

The Michigan vehicle system is not supported by established uniformity performance measures as a component of a formal data quality management program. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures.

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 Michigan vehicle system is not supported by established integration performance measures as a component of a formal data quality management program. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures.





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

The Michigan vehicle system is not supported by established accessibility performance measures as a component of a formal data quality management program. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Michigan vehicle system is not supported a formal data quality management program and numeric performance goals have not been developed. Michigan has recently implemented a new vehicle system and anticipates creating new performance measures and performance goals. The State has established weekly backlog reports that capture and track workflow-related information.

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?*

Meets Advisory Ideal

The Michigan vehicle system is supported by a formal program utilizing the detection of high frequency errors to drive programmatic changes, to create department-wide notifications to alert staff, and to generate amendments to manuals and/or third party program standards. Programmatic changes follow a formal change management process to monitor updates ensure that training or notification is disseminated to critical staff in a timely manner and manuals are updated.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The responses provided do not contain enough information to give full credit that the Michigan vehicle system is supported by sample based data audits validating vehicle source document information and related database contents. What is intended are formal sample-based data quality audits of source information related to corresponding database contents for the individual record. Financial and policy/process audits of personnel and processes are good business practices for management and oversight but are not what is intended in this question. More detailed information relating to the audit methodology (i.e., sample size, selection criteria, etc.) could have improved this rating.

Change Notes: Rating Improved.

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





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

Partially Meets Advisory Ideal

The Michigan vehicle system is reportedly supported by a program utilizing periodic comparative and trend analyses to identify unexplained differences in the data across years, however, no specific information or process was provided. This rating could have been higher if information was provided indicating the types of analyses and their frequency.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Michigan vehicle system is reportedly supported by a program for receiving user feedback to identify problems or recommend system updates. Detailed examples of data quality feedback that are in place to obtain feedback from key users and what specifically may be communicated to data collectors and managers could have improved this rating.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Michigan vehicle data is provided to the Michigan State Police to support the monthly publication of statewide crash statistics. However, no information was provided indicating that vehicle system data is provided to the TRCC for regular review.

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 provided a link to their LRS system. They have also provided a snapshot of their system.

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

The State has indicated that the crash data and the roadway and traffic data use the same LRS.





They provided a screenshot of their system showing the crashes and traffic data using their LRS.

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 provided a description of the enterprise system and connectivity with other agencies.

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?*

Partially Meets Advisory Ideal

The State indicates that MSP uses MDOT's LRS. No documentation or narrative was provided that indicates if this was for all crashes or only those done by Michigan State Police.

Change Notes: Rating Changed.

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

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

Meets Advisory Ideal

The State has indicated that the crash data is connected with the MGF allowing for an enterprise level of use. The crash data is available to the public through their website. The State provided a screenshot of the website. There is example of a data analysis provided.

Change Notes: Rating Unchanged.

Applicable Guidelines for the Roadway Data System

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

Partially Meets Advisory Ideal

The State currently has MIRE FDE on the State owned roads, but not on most local roadways. All roadways have a unique ID, classification, beginning and ending points. Intersections and ramps have ID's while segments and ramps have length information.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State has stated that any additional collected data elements do not conform to MIRE.





Change Notes: Rating Unchanged.

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?*

Partially Meets Advisory Ideal

The State has indicated that not all of the MIRE FDE's are in the data dictionary. The State has provided the data dictionary showing the 22 FDE's that are in the data dictionary. They are hoping to add an additional 12 by May 2020

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The State has indicated that data elements are documented in various different data dictionaries. They are working on developing an enterprise level data dictionary.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The State has provided what software is used at the local level, but has not provided the extent of that use nor compatibility with any of the data dictionaries currently used by the State. The State has provided additional discussion on their efforts to update their data dictionary.

Change Notes: Rating Changed.

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

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

Partially Meets Advisory Ideal

The State provided 2 documents that outline the fields in the data dictionary and briefly described the update process. It is suggested that the State augment this with documentation on the controls and procedures for maintaining current 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

The State has provided a narrative description of the process for incorporating new elements into the roadway system.

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 indicated that updates are provided by CSS through a partnership with MDOT. The State has provided a document showing the workflow of how roadway data is updated.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The State is using Roads and Highways that has allows for viewing the data back in time. Data is available back through 2017. They have provided a screenshot of how to retrieve this data. They have not provided an indication on how many years they plan on utilizing.

Change Notes: Rating Improved.

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

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?*

Partially Meets Advisory Ideal

The State has indicated that the procedures were documented by Act 51, TAMC and the Pavement Condition Unit. They have provided the manual for the pavement condition data. This is only one of the elements that are collected. There should be manuals that provided information for all the elements collected.

Change Notes: Rating Changed.

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

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?*

Partially Meets Advisory Ideal

The State indicates that procedures for collecting roadway data is compatible for those agencies that use Roadsoft. However, there is no documentation included nor any indication of what percentage of agencies use Roadsoft.

Change Notes: Rating Changed.

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





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 indicated that there are guidelines for data element collection according to the data dictionary. They have attached the HPMS field manual which is what they use for their guidelines.

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 when using the State LRS system, methodologies are compatible. Supporting documentation from the previous assessment should be referenced.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State has indicated that a common link of physical reference values connects the State discrete roadway information systems. They have provided the results of a query showing roadway and traffic data on a segment of roadway.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State has indicated that all public roadways use PR and milepoints or are linear referenced to PRs and milepoints.

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?*

Does Not Meet Advisory Ideal

Local roadway systems do not interface with the State's enterprise roadway information system.

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's enterprise roadway information system data is accessible to local and MPO agencies as needed.

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?*

Does Not Meet Advisory Ideal

The State has indicated that there are no data quality reports produced.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The State has a formal process of error/edit checking that follows topology rules and linear referencing standards. They provided a link to the ESRI site showing the data reviewer. Since links may change over time, it is suggested that the State develop an in-house document of the process.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

There are no formal procedures documented for prioritizing errors in the system, but the State has methods in place through field and DOT staff that address this issue if it occurs. Since the State has a process for this it is suggested that they consider developing a formal process document.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

While the State does provide quality control information through software training. The State has provided a manual for evaluating pavement condition and states that there is a link, which was not included, for an overview of training.

Change Notes: Rating Improved.

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





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

Does Not Meet Advisory Ideal

The State does not have any established timeliness performance measures.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State has indicated that there are no accuracy performance measures.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

There are no established performance measures for completeness.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State has indicated that there are no performance measures for uniformity as there are no established rules.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State does not have any established performance measures for accessibility.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

There are no established integration performance measures. The State is working on developing measures.

Change Notes: Rating Changed.

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





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

Does Not Meet Advisory Ideal

The State has indicated that they have no performance measures so they do not have any numeric goals.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

It appears that TRA reports are provided to the TRCC, but that is only every 5 years. The answer does not include any other form of data quality reports on a regular basis.

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

Prosecutors in the State have access to the Judicial Data Warehouse (JDW) where citations filed with and adjudicated by the Michigan Courts can be discovered. The response did not indicate whether this practice is routine. There is no indication in the response concerning the other aspects of the question regarding the use of citation and adjudication information in traffic safety analysis or traffic safety program planning.

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?*

Does Not Meet Advisory Ideal

The assigned respondent declined to answer this question, thus the does not meet rating.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Within the State, there is no single case management system, although most dispositions are sent to the driver history file. Deferrals and dismissals are not sent to the driver history file. A single database of citations and dispositions statewide provides a wealth of information about the level and type of traffic enforcement in the State, as well as how various types of violations are dealt with within the various jurisdictions in the State. Information gleaned from such a database can identify processing that is not timely, or not efficient. It can also provide information useful for





law enforcement, prosecution and judicial training, as well as identify where some violations are not being filed or where data is not being sent to the driver history file. The Judicial Data Warehouse could serve as a citation tracking system for the State, as analysis would not require that the data within the warehouse be certified.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The assigned respondent declined to answer this question.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

The State of Michigan does not have a unified court system, nor does it have a single case management system; there are eight various CMSs. Although there is some data aggregation from these various systems into a data warehouse, the data therein is not considered an official court record. Depending on the information contained in this data warehouse, it might serve as a citation tracking system for the State, as noted in a previous question.

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 State of Michigan uses the Law Enforcement Information Network (LEIN), which allows users to obtain information regarding driver information, vehicle registry information, and criminal history information. LEIN serves as the statewide system providing real-time information on individuals' driving and criminal histories.

Change Notes: Rating Improved.

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

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

The State of Michigan uses the Law Enforcement Information Network (LEIN), which allows users to obtain information regarding driver information, vehicle registry information, and criminal history information. LEIN serves as the statewide system providing real-time information on individuals' driving and criminal histories. All law enforcement agencies, parole agencies, probation agencies, and courts within the State participate in and have access to a system. Users





conform to policies and standards established and monitored by the Michigan State Police and are subject to routine testing and auditing.

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 criminal Justice Information Center for the State of Michigan indicates that they report monthly appropriate UCR statistics.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The appropriate portions of the citation and adjudication systems do not adhere to the NIEM Justice domain guidelines.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Although it appears the State is using guidelines established by the National Center for State Courts, the response lacked a narrative detailing the system and adherence to NCSC guidelines.

Change Notes: Rating Unchanged.

Data Dictionary for the Citation and Adjudication Data Systems

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

Does Not Meet Advisory Ideal

Michigan does not have a statewide citation tracking system. A statewide system can help to pinpoint in which courts or jurisdictions, some types of enforcement is lacking or ineffective. It can also be used in concert with the crash system to denote how certain types of enforcement activity impact crash incidence and severity, when crash and citation location are overlaid and evaluated.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

It appears the State may maintain several data dictionaries for the various case management systems, however no data dictionary or excerpt thereof was provided.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

Michigan does not have a statewide citation tracking system. There are a number of opportunities to develop such a system, even with a non-unified court system. When officers send their original copy of the citation, either electronically or paper, it can be copied to a central location, such as the DMV, driver history file. When this occurs, it is easier for the State to ensure that all appropriate data is being forwarded from the courts and it provides insight into the percentage of violations that are dismissed, what type of violations are most often dismissed, or not filed by prosecutors, and the total number of all types of violations cited within the State. This data then provides a clear picture of where enforcement is ineffective or where law enforcement or court personnel need additional training.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The response defaulted to a data dictionary from a 2015 answer, because no documentation was provided to the respondent. It does not appear that data dictionaries are readily available for review or use within the traffic records system for this data component.

Change Notes: Rating Changed.

From 'Partially Meets Advisory Ideal' to 'Does Not Meet 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?*

Does Not Meet Advisory Ideal

Michigan currently does not have a citation tracking system. It might be beneficial to use the largest citation repository as a basis for a citation tracking system, then begin adding data from other systems as often as practical.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State provided a narrative regarding how the driver and vehicle data are collected by the





citation software through what are labeled Talon "hooks" and populate those fields in the citations.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to '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?*

Does Not Meet Advisory Ideal

The response came from the State Police, while the Case Management Systems are the purview of the courts. This question could probably be better addressed by the State Court Administrator.

Change Notes: Rating Unchanged.

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?*

Does Not Meet Advisory Ideal

The State of Michigan does not maintain a citation tracking system, and it does not appear that tracking from the point of issuance to the driver history file is done by any entity.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State does not distinguish between the administrative handling of court payments in lieu of court appearances (mail-ins) and court appearances at disposition and therefore presumably that distinction is not apparent on the driver history record. An explanation of the process prior to disposition was not provided.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The response indicates that the State does in fact have a number of types of violations or penalties that result in administrative sanctions including suspension, revocation, denial, and may require re-examination prior to relicensure or return of driving privilege. No process flows have been submitted. It would be beneficial to the staff of the driver control section as well as the adjudication sections to review processes to ensure that administrative penalties are as efficient as possible and do not involve more steps than necessary. Development of process flows acts as a continuous improvement process in many ways and as a training exercise for employees as well.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

The State tracks the number and types of traffic citations for juvenile offenders and maintains records of same in the Judicial Data Warehouse (JDW). It is not clear, though, how or if this information is used.

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?*

Partially Meets Advisory Ideal

Deferrals and dismissals are tracked by the court case management system and maintained in the Judicial Data Warehouse (JDW). The response indicates these dispositions could be used but does not reveal whether prosecutors routinely access the information for the purpose of insuring subsequent repeat offenses are not viewed as first offenses. There is no indication in the response whether deferrals and dismissals are included on the driver history record.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Actually, this is a question for the courts, not the police, in regards to how cases are disposed of, not whether tickets are voided prior to being adjudicated. It asks if there are guidelines for judges or prosecutors to use in terms of their decisions to dismiss or defer charges.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The State has a retention schedule for citations by the State Police of three years. A copy of the extensive retention schedule was produced which included citations.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The question was assigned to police rather than the courts. which would be responsible for court security protocols and no appropriate response was provided.

Change Notes: Rating Changed.

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





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 of Michigan does not have an Impaired Driver Tracking System. Such a system helps those who work with impaired drivers to address the issues of impaired driving, particularly when all those who work in the program have access to all aspects of the system, so that it is possible to determine what types of sanctions have been used and what types of therapy, education, evaluative techniques and ignition interlocks have resulted in the best results in terms of preventing recidivism. Having full access to the system ensures that probation officers can accurately monitor progress of those in programs, and that driver licenses cannot be restored until all court ordered sanctions have been successfully adhered to.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State Court Administrator's Office does not maintain a DUI tracking system. This would more likely be managed by probation or driver licensing authorities. A DUI tracking system should contain information on violators from the point of law enforcement contact through the court sanctions and compliance activities, then through the driver licensing reinstatement process to include police, alcohol evaluators, providers of alcohol/drug education and therapy, probation, interlock providers, the driver license hearing section, and the driver licensing authority. When information about a violator is managed centrally and is accessible by all who interact with the violator, it is possible to determine the best course of action in terms of sanctions, therapy, education that will result in lower rates of recidivism and ultimate return to compliance with the law and licensure.

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?*

Does Not Meet Advisory Ideal

The respondent is not aware of an interface between the citation system and the driver license system.

Change Notes: Rating Changed.

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





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)?*

Does Not Meet Advisory Ideal

The respondent is unaware of an interface between the citation and the vehicle systems.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Does Not Meet 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 respondent is unaware of an interface between the citation and crash systems. This question is best answered by law enforcement entities, or the custodian of the crash system.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Michigan court system is not unified therefore the methods of communicating adjudications to the Michigan Department of State vary. Some courts are interfaced with the driver system through electronic abstracting while others follow a manual paper process. The response indicates that approximately 95% of dispositions are sent by file transfer from the courts to the Department of State for posting to the driver files.

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)?*

Does Not Meet Advisory Ideal

The respondent from the Criminal Justice Information Center is unaware of an interface between the vehicle and court systems to carry out administrative actions.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Does Not Meet 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

The adjudication systems of the Michigan courts do not interface with the crash system to document violations and charges related to the crash.

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?*

Does Not Meet Advisory Ideal

No timeliness measures are provided for the citation system. A simple timeliness measure might be number of days from the date of issuance of a citation until it is available in the court case management system.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The respondent indicates that the citation system contains edits and validations to ensure accurate data is entered into the system, but no performance measures of that accuracy were listed.

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

No completeness measures for the citation system were provided. It should be noted that completeness can be measured as it relates to citations that are included in the system, or by completion of all critical data elements on each citation.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The State provided no uniformity measures related to the citation system, but could consider the fact that the State uses a single uniform citation as a measure of uniformity of the data that is input into the system.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

No integration performance measures were provided. In order to determine the potential for integration of citation data with other component systems of the Traffic Records System, it would be helpful to determine where common data elements and common formats exist in each dataset.





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

No accessibility measures were provided 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

No measures have been developed, and no metrics or goals have been developed for the citation system.

Change Notes: New Question.

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

Meets Advisory Ideal

A timeliness measure including measurements for 2018 was provided for the adjudication of civil cases, which includes traffic citations.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

No accuracy performance measures for the adjudication system were provided.

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

No completeness measures for the adjudication system were provided. Completeness would involve the number of citations issued, either paper or electronic that are included in the case management system of the courts. It would also denote the number of citations with no missing critical data elements.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

No uniformity performance measures were provided for the adjudication system. Such a measure could relate to the number of data elements collected by all Case Management Systems used in the various Michigan courts that adjudicate traffic offenses.

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

There are no integration performance measures for the adjudication system. The adjudication system apparently is integrated with the driver history file since dispositions are sent electronically for posting. That would be the basis for a performance measure of integration, interface, or linkage.

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

Information was provided related to access to court facilities by disabled persons. This question relates to the availability of adjudication data to authorized users.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

No goals or metrics for performance measures for the adjudication system were provided.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

There are no measures for the DUI tracking system because the State has none.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The response indicates that the citations written by the State Police are audited annually on a sample basis according to an official order of the Michigan State Police.





Change Notes: New Question.

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

Does Not Meet Advisory Ideal

No performance measures are sent to the TRCC for regular review. Development of measures for each aspect of data integrity for each data component system is imperative for being able to improve the data the State collects. Discussion of the level of data quality is the core function of the TRCC, so a quality control program should be a priority.

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?*

Meets Advisory Ideal

Michigan's Core Violence and Injury Prevention Program Burden Report (2018) developed by the Injury and Violence Prevention Section of the MDHHS includes information on motor vehicle fatalities and hospitalizations.

Change Notes: New Question.

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

Meets Advisory Ideal

Michigan uses FARS data as part of their Injury Mortality in Michigan report.

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

Protected Health Information (PHI) may be used with appropriate IRB approval and in accordance with relevant Department policies, State, and Federal laws.

Change Notes: New Question.

Emergency Medical Systems (EMS) Description and Contents

240. *Is there a statewide EMS database?*

Meets Advisory Ideal

The Michigan EMS Information System (MI-EMSIS) is the statewide repository for all EMS patient care reports. All agencies submit to this system and over 1.8 million records were captured





in 2019.

Change Notes: Rating Improved.

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

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

Michigan does not currently use MI-EMSIS data to track the nature and severity of injuries sustained by individuals as the result of motor vehicle crashes in the State.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

EMS data is available to traffic safety partners for problem identification and program evaluation. After receiving agency approval, data was provided to the University of Michigan to study traffic crash injuries.

Change Notes: Rating Improved.

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

EMS – Guidelines

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

Meets Advisory Ideal

MI-EMSIS is built on the ImageTrend Elite software package which is NEMSIS-compliant.

Change Notes: Rating Unchanged.

EMS – Data Dictionary

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

Partially Meets Advisory Ideal

Michigan reportedly utilizes the NEMSIS data dictionary.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially Meets 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 submitted to and collected by the Michigan Department of Health and Human Services (MDHHS) through the use of ImageTrend Elite. The data itself is hosted on ImageTrend servers.

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

The Michigan Department of Health and Human Services has developed data policies for the MDHHS and Division of EMS & Trauma. Under those policies, 17 data use agreements are in place with other agencies.

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 only through electronic means per Michigan Procedure Section 7-15 - EMS Protocol Patient Care Record, Electronic Documentation & EMS Information System. EMS agencies are required to upload the electronic patient care reports by the 15th of every month.

Change Notes: Rating Unchanged.

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

The MI-EMSIS automatically rejects records with business rule violations but there is no way to ensure or track re-submission by the EMS agency. Draft procedures for rejection and re-submission have been developed but are not yet implemented. That document is very comprehensive and would improve the quality of the dataset once implemented.

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

Imported patient care records must first pass through the system's XSD schema which conducts





checks of the data's validity. Business rules are in place that can be run by the individual agency prior to submission to allow for errors to be corrected at that time.

Change Notes: Rating Unchanged.

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

Processes for tracking rejected reports through to resubmission were developed in 2018, but have not been implemented.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The timeliness performance measure is 'The median number of hours that it takes for a patient care report to be received by the State data system (from the time the EMS unit was back in service after the call)'. However, a performance measure has both baseline and goal metrics against which the system may be evaluated. Those metrics from the progress report should be part of the measure itself.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The accuracy performance measure is 'The rate of errors and warnings in data submitted to the State EMS data system from other systems'. However, a performance measure has both baseline and goal metrics against which the system may be evaluated. The baseline should be incorporated into the measure itself and no goal was evident on the progress report.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

There are several completeness performance measures. However, a performance measure has both baseline and goal metrics against which the system may be evaluated. Those metrics from the progress report should be part of the measure itself.

Change Notes: Rating Improved.

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





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

Meets Advisory Ideal

The uniformity performance measure is 'The number of patient care reports received by the State data system.'. However, a performance measure has both baseline and goal metrics against which the system may be evaluated. Those metrics from the progress report should be part of the measure itself.

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

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.

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

No accessibility performance measures are currently being tracked although potential metrics have been discussed.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

Numeric goals have been set in those cases where performance measures are being tracked. Michigan does not have a complete set of performance measures for the EMS data system.

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

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

Partially Meets Advisory Ideal

Each Medical Control Authority (MCA) conducts quality control reviews and the statewide performance measures are updated each month. Each MCA approaches this task without State oversight. While the State provides overall performance measures to the MCAs monthly, they have no additional role in providing quality control support.

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





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

Partially Meets Advisory Ideal

As the performance measures are evaluated monthly, unexplained differences over time may be identified. Agency-specific trends are not reviewed on the State level, but the State system reports are available for each agency to use as a comparison.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Any data quality feedback is shared from Medical Control Authorities or researchers to the EMS Data Manager, who then relays that information to the appropriate agency or vendor. There is also a weekly communication for the State to share data quality concerns with stakeholders.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The performance measure reports are shared with TRCC representatives after each monthly update.

Change Notes: Rating Improved.

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

Emergency Department - System Description

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

Meets Advisory Ideal

Emergency department data has been captured by the Michigan Health and Hospital Association (MHA) since 2016, but not completely. As of 2018, all but three hospitals have submitted data and that information may be available to the MDHHS.

Change Notes: Rating Improved.

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

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

Emergency department data only recently became available in Michigan. While the data have not yet been used to evaluate motor vehicle crashes, some data has been utilized to support CDC grant





applications.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Emergency department data only recently became available in the State and has not yet been utilized for problem identification, program evaluation, or resource allocation efforts.

Change Notes: Rating Unchanged.

Emergency Department – Data Dictionary

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

Partially Meets Advisory Ideal

There is an overview document of the 2018 Michigan Outpatient Database (MODB) available from the MHA. It does not contain all components of a data dictionary, but is more of a process document.

Change Notes: Rating Improved.

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

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 Michigan Health and Hospital Association collects and compiles the data. The Michigan Department of Health and Human Services purchases the data annually from the MHA.

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

Aggregate datasets from the MODB may be purchased from the MHA with an approved data use agreement.

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

State epidemiologists have access to hospital discharge data from 1995 through 2019.

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?*

Partially Meets Advisory Ideal

Hospital discharge data has historically been used to track motor vehicle crash information. Staffing changes and the adoption of ICD-10 have prevented its current use for highway safety efforts.

Change Notes: Rating Changed.

From ‘Meets Advisory Ideal’ to ‘Partially Meets Advisory Ideal’.

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

Does Not Meet Advisory Ideal

Michigan hospital discharge data is available to use for traffic safety analyses, but that has not been done.

Change Notes: Rating Unchanged.

Hospital Discharge – Data Dictionary

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

Partially Meets Advisory Ideal

Data record layouts are available for inpatient and outpatient hospital data systems; however, those do not contain all characteristics of a data dictionary.

Change Notes: Rating Changed.

From ‘Meets Advisory Ideal’ to ‘Partially Meets Advisory Ideal’.

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 Michigan Health and Hospital Association is responsible for collecting and maintaining the





hospital discharge data system.

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

Hospital discharge data is available to outside parties upon request and through an approval process that restricts the availability and use of the data elements to only what is required for the specific request.

Change Notes: Rating Unchanged.

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 calculated from the hospital emergency department or 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

The Michigan Health and Hospital Association Service Corporation (MHASC) has documented procedures for hospitals to submit records and MHASC to conduct quality control processes before accepting records into the statewide database.

Change Notes: Rating Unchanged.

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?*

Meets Advisory Ideal

There has been no change since the previous assessment. There are front-end edit checks and validation rules for the hospital records systems.

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?*

Meets Advisory Ideal

The system is able to identify errors, return records, and track resubmissions throughout the open data collection period.

Change Notes: Rating Unchanged.

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

Submission deadlines have been documented, but there are no timeliness performance measures for the hospital records systems.

Change Notes: Rating Changed.

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

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

Trend analyses are conducted across facilities and years, but there are no accuracy performance measures for the hospital records systems. A performance measure includes baseline and goal metrics and a timeframe; it is to be tracked regularly to evaluate the health of the data system and identify any issues.

Change Notes: Rating Changed.

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

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 trend analyses conducted, but there are no completeness performance measures for the hospital records systems.

Change Notes: Rating Changed.

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

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 for the hospital data systems. An example would be the percentage of hospitals reporting using a standard set of data elements (i.e. UB-04).

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 performance measures relating to integration for the hospital data systems. One example could be the percentage of hospital records indicating a motor vehicle crash as the mechanism that are successfully linked to a crash report.

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 for the hospital records systems.

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 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?*

Partially Meets Advisory Ideal

The MHASC conducts quality control reviews before the data is released to the MDHHS, but the nature of those reviews is unclear.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The MHA maintains communication with individual hospitals with regards to data quality. Identified issues and discrepancies are investigated as applicable. Feedback is used to support decision-making and policy changes, but it is not clear if a formal process has been established.

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 reports from the hospital data systems 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

Michigan uses the ImageTrend Patient Registry software to collect trauma data from all verified and designated trauma centers.

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?*

Partially Meets Advisory Ideal

Data from the trauma registry has been used to quantify the top injury mechanisms and injury severity for the overall patient population. No specific information was available on the use of the trauma registry with respect to motor vehicle crashes; however, the capability to produce those reports does exist. The Michigan Trauma Quality Improvement Program provides reports for Levels I, II, and III trauma centers regularly.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Although fairly young, the trauma registry has been used to evaluate the trauma system, build the strategic plan, and identify injury patterns.

Change Notes: Rating Improved.

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

Trauma Registry – Guidelines

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

Meets Advisory Ideal

The Michigan Trauma Registry has been developed in accordance with National Trauma Data Bank standards as prescribed by Administrative Rule 325.133 Rule 9 (1)(a).

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

Trauma registry software assists users in assigning Abbreviated Injury Scale codes and calculating Injury Severity Scores.

Change Notes: Rating Unchanged.

Trauma Registry – Data Dictionary

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

Meets Advisory Ideal

The trauma registry uses the NTDB data dictionary as required by Administrative Rule.

Change Notes: Rating Unchanged.

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

The MDHHS has a data use policy that allows third party access to the trauma registry data.

Change Notes: Rating Improved.

From ‘Partially Meets 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 State relies on edit checks and validation rules built into the software programs (ImageTrend and Data Aggregator). It is unclear how comprehensive the existing edit checks are to identify all data quality errors prior to submission. Files with errors may be followed up by the State, but procedures to accomplish that are also unclear.

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

The trauma system has a system of edit checks for data submitted through the Image Trend system and third party software. The validation rules were provided for the previous question.





Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Data submission policies do not constitute performance measures. Measures include a timeframe and baseline and goal metrics against which a system may be evaluated. For example, 40 of State's 50 trauma centers submit data within 15 days of the end of the quarter. The goal is that all 50 trauma centers would have data submitted within that time.

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 for the trauma registry.

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, but some are being planned.

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 for the trauma registry.

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 for the trauma registry, but there is a user survey from which a measure may be developed.

Change Notes: Rating Unchanged.

303. *Has the State established numeric goals-performance metrics-for each trauma registry performance measure?*

Does Not Meet Advisory Ideal

Metrics are reported to be in discussion and performance measures should be developed as well.

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

Staff turnover in the State trauma registrar position has prevented the development of routine quality control reviews.

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

There is no feedback loop between users and data managers of the trauma registry.

Change Notes: Rating Unchanged.

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 for the trauma registry are not regularly created and shared with the TRCC.

Change Notes: Rating Unchanged.

Vital Records – System Description

307. *Is there a statewide vital records database?*

Meets Advisory Ideal

The injury surveillance system has access to death certificate data from 1990 to 2018.

Change Notes: Rating Unchanged.

308. *Does the vital records data track the occurrence of motor vehicle fatalities in the State?*

Meets Advisory Ideal





Vital records data is used to generate frequencies and rates for various demographic, temporal, and geographic characteristics.

Change Notes: Rating Unchanged.

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 has been used for trend analyses and problem identification, but not program evaluation.

Change Notes: Rating Changed.

From 'Meets 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

Michigan vital records data complies with guidance provided by the National Center for Health Statistics.

Change Notes: Rating Unchanged.

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 data is made available each year on the MDHHS website. Record level data may be obtained with an approved data use agreement.

Change Notes: Rating Unchanged.

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

In compliance with the National Center for Health Statistics, edit check are conducted on the State and national level. Michigan has developed a data users guide for the vital records data system.

Change Notes: Rating Unchanged.





313. *Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the vital records?*

Meets Advisory Ideal

Medical information on death records must be completed in accordance with State and Federal guidelines. Additional reviews are conducted for spelling, abbreviations, and legibility.

Change Notes: Rating Unchanged.

314. *Are vital records data quality management reports produced regularly and made available to the State TRCC?*

Does Not Meet Advisory Ideal

Quality control 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

No interface exists between the EMS and hospital discharge or emergency department data systems.

Change Notes: Rating Unchanged.

316. *Is there an interface between the EMS data and the trauma registry data?*

Meets Advisory Ideal

There is an interface between the EMS and trauma registry data systems. A user may initiate a trauma record directly from the EMS record or import the relevant information.

Change Notes: Rating Improved.

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

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

Based on the wide range of responses covering the various traffic records core component areas, it appears behavioral program managers have access to traffic records data and analytic resources across the different systems and platforms for problem identification, priority setting, and program evaluation. The TRCC should continue to monitor access to the various traffic safety data systems





through discussions among membership at quarterly TRCC meetings to ensure that the needs of end users are being met and that useful and meaningful data is accessible to decision-makers across the various government agencies in the State.

Change Notes: Rating Unchanged.

318. *Does the State have a data governance process?*

Partially Meets Advisory Ideal

It is unclear if Michigan has a statewide Data Governance process in place or how it might apply to the various traffic records systems across the core component areas. It appears that most data governance is done at the agency level at this time and the enterprise level data governance process continues to evolve.

Change Notes: Rating Unchanged.

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 TRCC approved a Data Integration project which looks to develop data governance, access, and security policies for integrated traffic records data between the various TRCC State agencies. The Data Integration Business Requirements were provided by the State. Though it is unclear as to the status of this project, it clearly indicates that the TRCC promotes and aids in data integration efforts.

Change Notes: Rating Unchanged.

320. *Is driver data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal

No crash data and driver data linkage currently exists, although it appears it is a desired objective of the long-term data linkage plans for the State.

Change Notes: Rating Unchanged.

321. *Is vehicle data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal

No crash data to vehicle data linkage currently exists. The State does recognize the value of this type of linkage for specific analytical purposes.

Change Notes: Rating Unchanged.

322. *Is roadway data integrated with crash data for specific analytical purposes?*

Meets Advisory Ideal

Documentation for an integrative crash-roadway link, the variables used, example analysis, and the frequency with which the integrations were performed, was not provided here. However, in the crash module responses example analysis of crash-roadway linkage included the identification of high crash locations and locations with similar roadway attributes. The use of crash and integrated





roadway data was also shown for assessing engineering countermeasures' effectiveness.

Change Notes: Rating Unchanged.

323. *Is citation and adjudication data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal

Citation and adjudication data is not currently integrated with crash data for specific analytical purposes. The State did indicate that a data integration project that could integrate citation and adjudication data with crash data is currently at a standstill.

Change Notes: Rating Unchanged.

324. *Is injury surveillance data integrated with crash data for specific analytical purposes?*

Does Not Meet Advisory Ideal

Injury surveillance data is not currently integrated with crash data for specific analytical purposes in Michigan. However, some manual comparison of FARS and vital records has been done to provide greater clarity on the Health records side regarding the person type in the motor vehicle accident. This is a good example of how future data integration between these two systems can yield beneficial analysis and information to decision makers and researchers.

Change Notes: Rating Unchanged.

325. *Are there examples of data integration among crash and two or more of the other component systems?*

Does Not Meet Advisory Ideal

The State did not provide an example of data integration among crash and two or more of the other traffic record component systems.

Change Notes: Rating Unchanged.

326. *Is data from traffic records component systems-other than crash-integrated for specific analytical purposes?*

Does Not Meet Advisory Ideal

It does not appear that there is integration between other traffic records component systems, other than crash, for analytic purposes. The example provided illustrates linkage between data from roadway and crash systems, which does not meet the criteria for this advisory ideal.

Change Notes: Rating Unchanged.

327. *For integrated datasets, do decision-makers have access to resources-skilled personnel and user-friendly access tools-for use and analysis?*

Partially Meets Advisory Ideal

It appears for integrated data sets, decision-makers have access to skilled personnel across several agencies who have expertise and are well-versed in traffic safety data. It is less clear from the responses whether decision-makers have access to user friendly data accessibility tools for use and





analysis, and whether the available tools utilize integrated traffic safety data sets.

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?*

Partially Meets Advisory Ideal

The public has access to some skilled personnel and some analytical tools when seeking access to statistical crash data, but the degree to which the public can access data from the other core component traffic records systems is unclear. Additionally, the amount of access the public has to integrated data from other systems alongside the crash data is limited. With that said, Michigan appears to have a good roadmap in place with the business requirements documented for the TRCC Data Integration project and it is hopeful in the coming years that this project will move forward, and improvements can be made in this area.

Change Notes: Rating Unchanged.





Appendix B – Assessment Participants

State Highway Safety Office Representative(s)

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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





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





VIN	Vehicle Identification Number
VMT	Vehicle Miles Traveled
XML	Extensible Markup Language

State-Specific Acronyms and Abbreviations

CARS	Customer and Automotive Records System
CLIP	Crash Locating Improvement Process
CSS	State of Michigan's Center for Shared Solutions
DTMB	Michigan Department of Technology, Management, and Budget
JDW	Judicial Data Warehouse
MDHHS	Michigan Department of Health and Human Services
MDOS	Michigan Department of State
MDOT	Michigan Department of Transportation
MGF	Michigan Geographic Framework
MHA	Michigan Health and Hospital Association
MHASC	Michigan Health and Hospital Association Service Corporation
MODB	Michigan Outpatient Database
TCRS	Michigan Traffic Crash Records System
UMTRI	University of Michigan Transportation Research

