



Commonwealth of Kentucky

Traffic Records Assessment

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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 Kentucky's Traffic Records component systems. This review is built upon the assessment of five years ago. Since the last assessment, Kentucky has worked diligently in all areas and should be commended for the strides made toward improving the traffic data systems. Where there are opportunities to move the component systems closer to the Advisory Ideal, the Commonwealth acknowledges those opportunities and appears to have the necessary foundation to accomplish several goals before the next Traffic Records Assessment.

The strength of a strategic plan can often predict how successful the Traffic Records Coordinating Committee is in implementing key strategies necessary to make needed improvements in their records systems. The Kentucky Traffic Records Advisory Committee (KTRAC) is established by charter, establishing the authority to review all highway safety data systems and projects both in implementation and modification. This group is responsible for providing administrative and technical guidance to partner traffic safety agencies. Kentucky should be commended for assembling a TRCC with representatives from all six traffic records systems. The challenge for Kentucky is leveraging the partnerships forged through this committee to enhance quality control and project management of ongoing and proposed traffic records projects, particularly with regard to the citation/adjudication system. Workgroups used to establish performance measures often contribute to identifying areas for improvement in system integration and future traffic safety initiatives. The effort of the dedicated traffic safety professionals throughout this assessment would indicate these enhancements are well within reach.

The traffic records systems in Kentucky boast several excellent attributes in addition to a global environment of continuous improvement. The Commonwealth maintains good procedures and automated system programs for deterring and detecting fraudulent non-commercial and commercial driver license activity. At present, Kentucky is in the process of implementing the new Kentucky Vehicle Identification System (KAVIS), which is expected to be operational in 2022, and will have enhanced data validation procedures and will improve data quality. Additionally, the Commonwealth is currently involved in a project to review the narrative portion of 20,000 crash reports and compare those with coding to determine levels of consistency.

Module leaders for the assessment created thoughtful considerations to assist Kentucky in the implementation of improvements during the next assessment cycle. The Commonwealth is encouraged to review these considerations and access the many tools available through the National Highway Traffic Safety Administration including using the Advisory as a resource for developing, prioritizing, and executing new projects and programs or applying for a GO Team, CDIP, or MMUCC mapping to help with assessment recommendations or other traffic records initiatives identified by the KTRAC.

The Commonwealth of Kentucky should be commended for the progress and accomplishments since the last assessment and is poised to meet the challenges ahead. Most important to the future success of any endeavor undertaken is the group of dedicated professionals across all systems in Kentucky evidenced in the assessment process and results.





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 are 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.

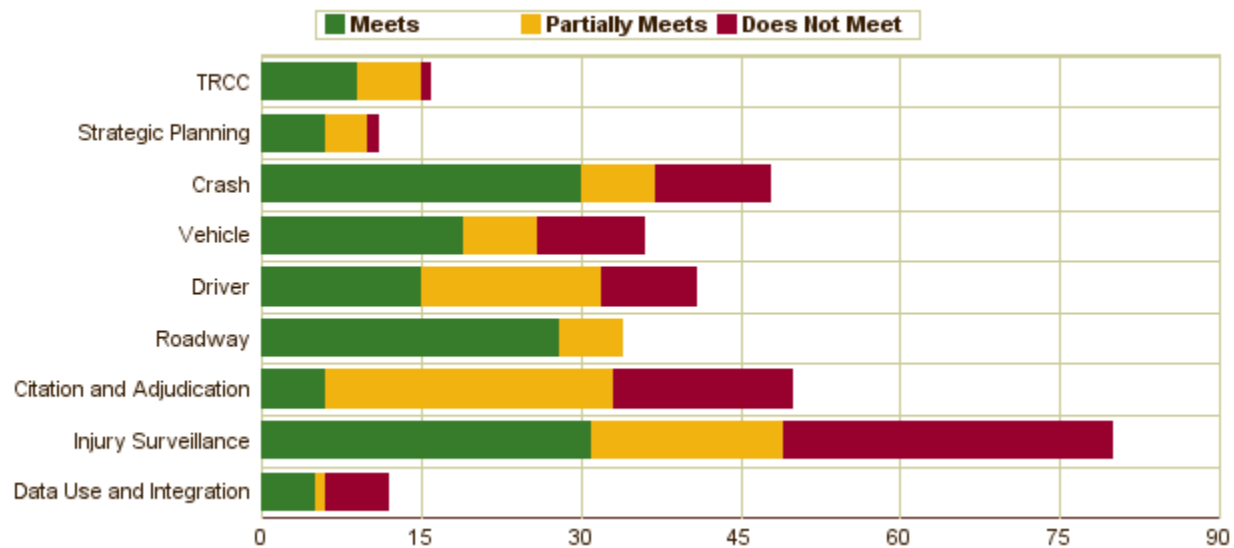
Out of 328 assessment questions, Kentucky met the Advisory ideal for 149 questions (45%), partially met the Advisory ideal for 93 questions (28%), and did not meet the Advisory ideal for 86 questions (26%).

As Figure 1: Rating Distribution by Module illustrates, within each assessment module, Kentucky met the criteria outlined in the Traffic Records Program Assessment Advisory 56% of the time for Traffic Records Coordinating Committee Management, 55% of the time for Strategic Planning, 63% of the time for Crash, 53% of the time for Vehicle, 37% of the time for Driver, 82% of the time for Roadway, 12% of the time for Citation and Adjudication, 39% of the time for EMS / Injury Surveillance, and 42% 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 Kentucky with the traffic records assessment recommendations and associated considerations detailed by the assessors. The broad recommendations provide Kentucky 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

- Address quality control and quality improvement processes for each of the core data system, in relation to the performance measures identified by the Commonwealth in the strategic plan.





- Explore the possibility of developing a comprehensive Traffic Records Inventory with the purpose of providing a single source document containing the specifications for the data source, programming language, owner/manager of the data, data elements and attributes, software platforms, linkages, and access policies for each system.

Summary

Kentucky has a Charter in place, establishing the Kentucky Traffic Records Advisory Committee (KTRAC). The Charter establishes the authority, roster, and responsibilities of the KTRAC. The committee has the authority to review any of the highway safety data and systems projects that are changed and implemented. KTRAC is responsible for providing administrative and technical guidance, establishing goals for improvement of the traffic records systems, recommending upgrades to reporting forms, formats, and procedures in gathering and disseminating data, recommending requirements for file linkage, providing evaluation for the traffic records systems, and maintaining/updating the Strategic Highway Safety Plan.

The KTRAC has co-chairs, one of which is the Traffic Records Coordinator and the other from the Kentucky Office of Highway Safety (KOHS) within the Kentucky Transportation Cabinet (KYTC). The Kentucky TRCC includes both technical and executive representation from all six core data systems. In some cases, one person has the role of both technical and executive membership. Executive members do have the authority to direct resources to fulfill their respective areas of responsibility.

KTRAC provides a forum for coordination between the custodians and stakeholders. Discussions and coordination between KTRAC members take place at the meetings. In Kentucky, the custodial agencies seek feedback from the TRCC members when major projects or redesigns are being planned. The Kentucky Transportation Center (KTC) and the KYTC both have members and attend subsequent meetings regarding projects. The TRCC involves the Commonwealth Office of Technology (COT) which coordinates with state agencies to provide the appropriate level of services as required for implementing new projects or updates.

Strategic Planning Recommendations

None

Considerations for implementing your Strategic Planning recommendations

- Work closely with federal partners, local agencies, and organizations in developing and implementing a strong traffic records strategic plan. There is strong documentation showing that KTRAC works with state agencies and is aware of their needs and opportunities. Taking this same effort with your federal partners, local agencies, and organizations will benefit the committee and Kentucky's data systems.
- Show progress made, milestones met, any budget adjustments, and challenges for each project in the plan. Looking at longer-term processes and conducting reviews through the reoccurring analysis project would be helpful for lifecycle tracking.





Summary

Kentucky is to be commended for the overall content of its Traffic Records Strategic Plan. The needs and opportunities of each data system are addressed and clearly defined. The performance measure and goal section have a subsection for each of the five data systems. Each of the subsections provides a concise but thorough summary of the specific data system performance measures and goals, along with a table that identifies the six attributes (timeliness, accuracy, completeness, uniformity, integration, and accessibility) and the corresponding goal, baseline metric, and proposed project if there is one.

The strategic plan identifies the projects supported by the Kentucky Traffic Records Committee. A process is in place to prioritize the proposed projects. Funding is based on the fiscal year; therefore, timelines are based on the Highway Safety planning process. The plan is revised every five years, with an annual review of projects conducted by a third party. Moving forward, a suggestion would be to formalize the process of review.

Crash Recommendations

1. Improve the applicable guidelines for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
2. Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
3. Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
4. Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Crash recommendations

- Provide feedback on accuracy in crash reports to each law enforcement agency to highlight specific errors and provide additional or remedial training if needed.
- Formalize a policy to keep all training materials and the data dictionary up to date and in sync by choosing a date or event which triggers a review and update.
- Review performance metrics, ensuring goals are numeric and measurable.

Summary

Kentucky has a mature electronic crash reporting system with the Kentucky State Police as the custodial agency. All agencies submit all reports electronically to a single repository, the Kentucky Open Portal Solution (KyOPS). The crash repository includes all reported crashes with over five hundred dollars in damage and non-trafficway crashes if reported. Kentucky's crash report was fashioned using the MMUCC guidelines as well as the ANSI D16.1 classification and is reviewed annually for potential changes. The crash system is supported by a comprehensive data dictionary which includes edits and validation rules. Data from the system are used to determine crash risk and to guide engineering projects. Crash reports are archived for ten years for engineering purposes.





The Commonwealth is currently involved in a project to review the narrative portion of 20,000 crash reports and compare those with coding to determine levels of consistency. However, it was not disclosed what the outcome of the project will be in terms of changes or updates to the system or training.

The crash system has sound performance measures and most numeric goals are in place. Performance reporting to the TRCC takes place on a quarterly basis. Even an excellent system has potential for improvement. One of the most obvious areas of potential is interface and integration. While the Commonwealth uses the barcodes from the driver licenses and vehicle registrations, those do not afford interaction with the live systems. Additionally, the crash report contains a data element for the EMS run number which provides a potential for integration with EMS data, which could be expanded upon to ensure that ISS data is captured for each person injured in a crash, from the ambulance to the ED, to the hospital admission, trauma registry, and vital records, if applicable.

There was no indication that the Commonwealth has a standard process in place to ensure that all training materials, data dictionaries, coding documents, etc. are kept in sync. Such a policy would help to standardize the review of documentation upon a given trigger, such as the end of a legislative session each year, each time the KyOPS system is updated, or with each new version of MMUCC.

Finally, there is no indication that feedback on accuracy is provided to each law enforcement agency. When such feedback is given, it is helpful to the agency to determine when and if additional training is needed and in what areas it might be helpful. This is particularly useful for agencies that provide their own training on crash investigation.

In all, the Kentucky crash system is successful and appears to continue to seek additional ways to improve, to keep the Commonwealth's roadways as safe as possible for the citizens of Kentucky.

Vehicle Recommendations

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

- Link vehicle and driver data systems. Also, it would be beneficial to use vehicle discrepancy information during data entry in the crash data system for possible updating of the vehicle data system.
- Process Commonwealth vehicle system data in real-time with the implementation of the new KAVIS system.
- Add the time required to complete each step into the already detailed and comprehensive process





flow diagram for the vehicle data system. The information on timeliness is useful to identify potential inefficiencies that need to be improved.

- Create a process to detect and track high-frequency errors, which could generate updates to training or system validation rules.
- Develop and implement six performance measures for the new KAVIS system as planned. These measures would give the Commonwealth greater ability to quickly obtain feedback on the data quality of the vehicle system and to easily recognize areas for further improvement within the vehicle system, which prove as an essential tool for data managers and users of vehicle system data. Also, the Commonwealth is commended for having established regular reporting of vehicle system data quality to the TRCC. The Commonwealth is encouraged to pursue its intent to improve information on performance measures in these reports to the TRCC after the implementation of the new KAVIS system.

Summary

The Department of Vehicle Regulation within the Kentucky Transportation Cabinet has custodial responsibility for the Automated Vehicle Information System (AVIS), which resides in a single location and contains all information related to the identification and ownership of vehicles registered in the Commonwealth.

The Commonwealth validates every vehicle identification number (VIN) with VINtelligence software upon vehicle ownership change. Vehicle registration documents include 2D barcodes to provide law enforcement with all relevant information, such as vehicle plate number, VIN, make, vehicle year, body style, etc. The AVIS system provides title data to the National Motor Vehicle Title Information System (NMVTIS) with every title transaction. The vehicle system queries the NMVTIS as part of new title and registration transactions. The Commonwealth participates in the Performance and Registration Information Systems Management (PRISM) program.

The Commonwealth's vehicle registration and titling procedures are authorized under the Kentucky Statutes, which specify vehicle collection, reporting, and posting procedures, as well as title brand information. Currently, the Commonwealth has a legislative proposal to update some of the vehicle system data procedures. Based on Kentucky Statutes, the Commonwealth maintains documentation for its vehicle data system. The content and data definitions for the AVIS system data fields are documented in a data dictionary. In addition, the AVIS is supported by a comprehensive process flow diagram that includes detailed information pertaining to all key vehicle data process flows and inputs from other data systems, and includes procedures related to error corrections. Specific edit check and data validation procedures are an integral part of the AVIS system. At present, Kentucky is in the process of implementing the new Kentucky Vehicle Identification System (KAVIS), which is expected to be operational in 2022, and will have enhanced data validation procedures and improved data quality.

The AVIS system maintains the title brand history previously applied to vehicles by other states. The Commonwealth title brands include Rebuilt, Odometer Not Actual Mileage, Exceeds Mechanical Limits,





Water Damage, Hail Damage, and Salvage. The AVIS system checks the National Crime Information Center (NCIC) for stolen vehicles with every title transaction. If information about a stolen vehicle is obtained from the NCIC, the title will not print until the Kentucky State Police completes the investigation and provides a clearance. The Commonwealth removes information about a stolen vehicle from the AVIS system when the vehicle is recovered, and the application is approved or canceled.

Kentucky vehicle system data are not processed in real-time, but in a nightly batch process. The Commonwealth's vehicle and driver records are not unified into one system. The Kentucky vehicle data system is supported by error correction procedures that are performed only by staff authorized to do so. The Commonwealth also has a well-established communications process to obtain data quality feedback from key users to make improvements to the system, which may involve changes in training content.

Some aspects of the formal data quality management program for the Kentucky vehicle data system have been defined and conceptualized, and the Commonwealth deserves to be praised for such progress. The Kentucky Traffic Records Coordinating Committee (TRCC) maintains the Kentucky Traffic Records Strategic Plan, which is very impressive and specifies information on timeliness, accuracy, completeness, uniformity, and integration performance metrics for all Kentucky traffic records system components, including the vehicle data system. Five of the six performance measures for the vehicle data system are well defined. As mentioned above, the Commonwealth of Kentucky is in the process of implementing the new KAVIS system, which will include and monitor baseline and performance values, and it will have defined goals for each performance measure. Another admirable aspect of the Commonwealth's TRCC functioning, and the Commonwealth's monitoring of the traffic records quality control, is that the Commonwealth has established regular reporting to the TRCC on data quality management for all six components of the Commonwealth's traffic records data, including reporting on the vehicle data system. Information reported to the TRCC is also expected to be improved after the implementation of the new KAVIS system and a full establishment of the six performance measures for the system.

In summary, the Kentucky vehicle data system is well-maintained, and many aspects of the system meet the ideals of the Traffic Records Program Advisory. The Commonwealth is on the right path to further enhance its vehicle data system qualities by continuing to adopt the best possible procedures and practices that are envisioned in the Advisory.

Driver Recommendations

7. Improve the data dictionary for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
8. Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
9. Improve the description and contents of the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.





Considerations for implementing your Driver recommendations

- Create a data dictionary that includes definitions and system edit checks and document a formal process for updating the data dictionary.
- Create documented procedures for license issuance and reporting and recording of convictions that includes error corrections guidelines. These documented procedures could assist when training new staff in these program areas.
- Explore the feasibility to electronically link the crash and adjudication data systems to the driver system. This would allow for timelier updating of data that could adversely affect a driver; thereby, improving highway safety.
- Improve performance measures by adding and documenting baseline and actual measures for each and establishing performance metrics for each attribute.

Summary

The Division of Driver Licensing of the Department of Vehicle Regulation within the Kentucky Transportation Cabinet has custodial responsibility for the Kentucky driver data system. The driver system maintains all critical information including driver's personal information, license type, endorsements, status, conviction history, crash involvement, and driver training for both commercial and non-commercial licensed drivers.

The Commonwealth's 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 driver data system does not have a documented data dictionary. The driver system does have a COBOL copybook program that depicts the driver system's edit checks and data collection guidelines.

Some processes and procedures for the Kentucky driver data system are documented (e.g., a process flow diagram and a data purging process). However, the Commonwealth is lacking in procedure documentation for licensing issuance and reporting and recording of convictions and other relevant data to the driver data system. The Commonwealth does not provide authority for the Division of Driver Licensing to administratively suspend a driver license independent of a DUI adjudication. Having this authority provides an immediate action and impact to drivers arrested for DUI; thereby, affecting traffic safety.

Kentucky has established some good procedures and automated system programs for deterring and detecting fraudulent non-commercial and commercial driver license activity. The use of facial recognition with a one-to-four match is an excellent process, as well as the disallowance of duplicate records in the driver data system. Fraudulent document recognition training is provided to all front-line staff and all driver license issuance activity is monitored and reviewed by management. The Commonwealth also has a Fraud Unit investigating suspicious activity for further appropriate action if necessary.

Kentucky's crash and citation/adjudication systems are not electronically linked to the driver data system; however, crash data and adjudicated/citation data are updated to the driver system. Driver history records are electronically received and transferred to other states only for CDL drivers. Efforts should be made to





participate in the AAMVA State to State Program (S2S) for non-commercial drivers. The Commonwealth does not have a separate DUI tracking system. One of the benefits of a DUI tracking system allows all agencies to access pertinent information from the point of DUI arrest to the completion of sentencing or probation. A DUI tracking system further provides necessary data to monitor DUI incidents in the State over time. This information can then be used to make informed decisions on how to better reduce DUIs.

Kentucky's driver data system utilizes 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 Entitlement (SAVE) system. However, it is not known if these systems are electronically or manually accessed. Access to the driver data is provided to law enforcement and court personnel. Kentucky provides driver license photos to other states through a digital exchange service.

The Commonwealth did not provide any policies or procedures for system and information security, besides a Memorandum of Understanding that is used for outside agencies to access the Commonwealth's driver data. If the Commonwealth does not have system security protocols and policies in place to deter and detect system breaches or misuse, efforts should be made to implement necessary procedures for system security.

The Commonwealth has the beginning of a formal data quality management program with some quality control processes in place, such as edit checks and data validations, as well as some meaningful attribute performance measures. The Division of Driver Licensing should also be commended for the data quality management reports that are provided to the TRCC. Improvements in this program could be made by establishing numeric goals for each performance measure, creating a standardized process for tracking high-frequency errors, quality control reviews, independent sample-based audits, and data quality feedback. Improvements in these areas would create a data quality control program that would be a great tool for data managers and data users to quickly and easily recognize areas that need further improvement.

Kentucky should be commended for the improvements they have made since the last traffic records assessment. They have established a good foundation on which to build and enhance their driver data system. These continued efforts will provide accurate driver data to stakeholders and decision makers, which will ultimately assist in improving traffic safety in the Commonwealth.

Roadway Recommendations

10. Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
11. Improve the data dictionary for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
12. 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

- Include all elements collected in the data dictionary. This includes MIRE FDEs, MIRE non-FDEs, and state collected elements. Ensure that definitions are included with each element.
- Continue to develop additional performance measures for each attribute. Include goals, benchmarks, and metrics for each performance measure.

Summary

Kentucky has over 80,000 miles of roadway which includes around 27,700 (34.6%) miles owned by the Commonwealth. The Highway Information System (HIS) stores the GIS- linear referencing system used for all roadway inventories and includes all roads within the Commonwealth. The system is maintained by the Data Management Branch (DMB) within the Division of Planning within the Department of Highways within the Kentucky Transportation Cabinet (KYTC).

The roadway and traffic data elements are located using LRS and stored in the HIS. The information from the HIS is exported weekly into the Transportation Enterprise Database (TED) warehouse where it is available for linkage to other systems. The information is also distributed to other agencies such as the Kentucky State Police (KSP) who uses this information inside the crash data system.

Kentucky has collected a majority of the MIRE FDEs and the FDEs are included in the data dictionary. Other MIRE elements are collected but not all are currently included in the data dictionary. The Commonwealth also collects additional information related to bicycle and pedestrian facilities and includes sidewalks, multi-use paths, crosswalks, and other information.

When new elements are proposed by roadway data owners or when changes are requested by data customers, the change is announced in the IT office's change control meetings. It is the responsibility of the IT staff to determine how to incorporate the new element or changes into the enterprise data systems. Once approved, the IT staff and the staff responsible for maintaining the database collaborate to modify the database structure. A new data dictionary is then generated from the HIS and posted to the public website.

The KYTC Division of Planning contracts with the Area Development Districts (ADD) to collect the local roadway data. There are fifteen districts, and they follow the standards set in the Local Roads Update Standards manual. The DMB reviews data submitted from the ADDs, merges the data into the HIS if correct, and returns any data needing corrections back to the ADD.

Quality control reports are run on the HIS multiple times a week before the reporting dataset is extracted or published. These reports identify errors and check the edits made during the week. These reports are mailed to the data collectors. When issues are identified they are brought up in recurring meetings between the ADDs and the DMB. The DMB provides training on the new methods or issues.

The DMB annually archives the HIS contents, then provides it to the KYTC Office of Information Technology (OIT). The OIT imports the archived data into a report database which is then made available to customers.





Crash data is exported to TED daily. This allows safety analysis and project prioritization to be done. Examples include the Critical Rates for Evaluation Sections (CREV) which includes crash counts and rates for fatal crashes and injury crashes, potential project prioritization through the Strategic Highway Investment Formula for Tomorrow (SHIFT), and the Guardrail Rating Program (GRP).

Kentucky has developed performance measures for each of the six attributes which include goals and benchmarks. They provide updated information to the TRCC on an annual basis so that the strategic plan includes the new values.

Overall Kentucky has a great roadway information system that is accessible to all partners.

Citation and Adjudication Recommendations

13. Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
14. Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
15. Improve the procedures/ process flows for 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

- Target quality control performance measures for the Citation and Adjudication Systems with a coordinated effort with the Administrative Office of the Courts and the Highway Safety Office, with technical assistance from NHTSA. This group could identify, develop, and maintain measurable performance elements for each system.

Summary

The Department of Kentucky State Police is the responsible authority for assigning unique citation numbers. All traffic citations are submitted to the Administrative Office of the Courts (AOC). The AOC operates the statewide case system for Kentucky traffic cases. The AOC system maintains the disposition information for all cases.

The AOC System does comply with the National Center for State Courts (NCSC) guidelines for all traffic cases. Kentucky maintains context-specific data dictionaries for each report or data set distributed.

Records are maintained in systems able to track a citation from issuance to the case management system, and subsequently to the driver record. Demographic information captured from the driver license is recorded within that system and allows ad hoc queries of traffic citations for adult and juvenile offenders. Modifications to adjudication data may only be made by users with Circuit Court credentials.





There is an opportunity for improvement in the subcategory of Quality Control. The Commonwealth has not established performance measures (timeliness, accuracy, completeness, uniformity, integration, and accessibility) for the citation and adjudication systems.

The Kentucky Office of Highway Safety should be complimented on the improvements within the citation and adjudication traffic records systems accomplished during the past five years. Hopefully, these assessments provide the incentives to continue this work.

Injury Surveillance Recommendations

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

Considerations for implementing your Injury Surveillance recommendations

- Conduct a review of each system's performance measures to ensure the existing measures are useful and meaningful for the manager of the data system. Develop new performance measures for data systems and data quality areas not currently addressed. NHTSA's Model Performance Measures for State Traffic Records Systems may provide helpful information for updating existing and crafting new measures.
- Undertake a formal quality review of each data system. Share the results with the Traffic Records Coordinating Committee.
- Investigate the use of the Abbreviated Injury Scale and Injury Severity Score to quantify the severity of injuries using the Inpatient Outpatient and Kentucky Trauma Registry Data.

Summary

There are several key components of a statewide injury surveillance system including emergency medical services (EMS), acute care (emergency department and hospital discharge), trauma centers, and vital records. These databases provide a valuable resource to evaluate and understand clinical outcomes and consequences of traffic crashes, both near- and long-term. The information contained in the injury surveillance system can be helpful in the definition, analysis, and reporting of serious injuries.

Kentucky collects and maintains information from all five main components of the injury surveillance system addressed in the Advisory. The Kentucky State Ambulance Reporting System (K-STARS) is managed by the Kentucky Board of Emergency Medical Services. The Kentucky Inpatient Outpatient (IPOP) data system is maintained by the Cabinet for Health and Family Services (CHFS). The Kentucky Trauma Registry (KTR) is overseen by the Kentucky Injury Prevention Research Center (KIPRC) and vital records are maintained in the Office of Vital Statistics in the Vital Statistics Branch of CHFS. The KIPRC utilizes many of the data systems to track the burden of motor vehicle crashes across the Commonwealth.





All data systems adhere to the appropriate national guidelines and have appropriate data dictionaries. Each data system has built-in procedures for edit checking and validating submitted data. Many of the data systems are available to researchers and have been used to track the frequency of motor vehicle crashes and have been used in reports and presentations.

While most systems have timeliness standards, performance measures as defined by the Advisory have not been established. Additionally, information and reports regarding data quality are not regularly shared with the TRCC. While Level I and II trauma centers are reporting to the Trauma Registry, not all lower designated trauma centers are submitting, potentially lessening the impact of this important data source. While data has been made available to external researchers, data quality feedback from those users has not been sought. Additionally, comparative and trend analyses are not conducted nor are data quality management reports shared with the Traffic Records Coordinating Committee (TRCC).

Despite containing the necessary information, IPOP and KTR data are not being used to estimate the severity of injuries resulting from motor vehicle crashes. This represents a missed opportunity to understand the accuracy of injury coding on the crash report.

Data Use and Integration Recommendations

None

Considerations for implementing your Data Use and Integration recommendations

- Task the TRCC with coordinating and facilitating the development of data governance, data access, and security policies and procedures across the diverse agencies that collect and manage traffic- and patient-focused data systems.
- Bring researchers together to review and develop efficient and sustainable data integration methodologies and processes.

Summary

Kentucky has a vigorous array of traffic safety research programs providing and expanding access to and use of traffic records data in general and Crash-focused integrated traffic data in particular.

The University of Kentucky's Kentucky Transportation Center (KTC) uses Crash data to identify locations in need of behavioral programs and/or engineering initiatives through the Combined Behavioral/Engineering Approach to Preventing Highway Fatalities program. The KTC has developed an online Crash Data Analysis Tool (CDAT 2.0) for research using integrated Crash-Roadway datasets. Its Kentucky Traffic Safety Data Service (KTSWDS) provides datasets and custom analyses. KTC has also integrated Crash-Roadway-Hospital Patient data and used it to investigate the effects of cable vs. concrete median barriers on injury severity.





A project by the Universities of Louisville and Kentucky has developed record linkage methodologies and processes that integrate crash, trauma registry, and EMS data. At the University of Kentucky's Kentucky Injury Prevention and Research Center (KIPRC), the ambitious OMVIS project (Occupational Motor Vehicle Injury Surveillance) is integrating crash data with injury surveillance data (emergency department and inpatient hospitalization records, trauma registry data, and emergency medical services patient care reports) for the specific - and relatively limited - purpose of describing and investigating occupational motor vehicle crash-related injuries.

While these projects are impressive, some data integration opportunities have not yet been developed. Crash data has not been linked to Driver, Vehicle, or Citation/Adjudication datasets. Data systems have not been integrated with sets that do not involve Crash data. Public access to integrated datasets through user-friendly tools and skilled professionals may be available to some degree through the KTSWDS, but that was not clear.

Research efforts and data integration programs could benefit from more-developed data governance, access, and security policies and infrastructure across these rich traffic- and patient-focused data systems. Kentucky's Traffic Records Coordinating Committee has a very constructive leadership and facilitating role to play in this area.








Assessment Rating Changes

For each question, a rating was assigned based on the answers and supporting documentation provided by the Commonwealth. 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	0	+1	-1
Strategic Planning for the Traffic Records System			
Strategic Planning for Traffic Records Systems	+3	+2	-5
Crash Data System			
Description and Contents of the Crash Data System	+3	-2	-1
Applicable Guidelines for the Crash Data System	0	0	0
Data Dictionary for the Crash Data System	+1	-1	0
Procedures and Process Flows for Crash Data Systems	0	+1	-1
Crash Data Systems Interface with Other Components	0	0	0
Data Quality Control Programs for the Crash System	+4	0	-4
Vehicle Data System			
Description and Contents of the Vehicle Data System	0	0	0
Applicable Guidelines for the Vehicle Data System	+3	-1	-2
Vehicle System Data Dictionary	+3	-3	0
Procedures and Process Flows for the Vehicle Data System	+3	-2	-1
Vehicle Data System Interface with Other Traffic Record System Components	0	0	0
Data Quality Control Programs for the Vehicle Data System	+2	+6	-8
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	+4	-2	-2
Driver System Interface with Other Components	+1	-1	0
Data Quality Control Programs for the Driver System	+2	+6	-8
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	+1	0	-1
Procedures and Process Flows for the Roadway Data System	0	0	0
Intrastate Roadway System Interface	+1	-1	0
Data Quality Control Programs for the Roadway Data System	+1	-1	0
Citation and Adjudication Systems			
Description and Contents of the Citation and Adjudication Data Systems	0	0	0
Applicable Guidelines and Participation in National Data Exchange Systems for the Citation and Adjudication Systems	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	+3	-3
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	-5	-3	0
EMS – Guidelines	-2	0	-1
EMS – Data Dictionary	-4	0	0
EMS – Procedures & Processes	-8	0	0
Injury Surveillance Data Interfaces	0	0	0
EMS – Quality Control	+1	+3	-4
Emergency Department and Hospital Discharge – Quality Control	0	-1	+1
Trauma Registry – Quality Control	-2	+3	-1
Vital Records – Quality Control	0	0	0
Emergency Department - System Description	0	+1	+1
Emergency Department – Data Dictionary	+1	0	0
Emergency Department – Procedures & Processes	+2	0	0
Hospital Discharge – System Description	+1	0	+2
Hospital Discharge – Data Dictionary	+1	0	0
Hospital Discharge – Procedures & Processes	+1	0	+1
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	+1	0





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	+1	-1
<i>Total Change</i>	+27	+12	-39





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 Timetable

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: Kentucky’s Schedule for the Traffic Records Assessment

Kickoff	February 14, 2022
Begin first Q&A Cycle	February 14, 2022
End first Q&A Cycle	March 04, 2022
Begin Review Period	March 17, 2022
Onsite Meeting	March 29, 2022
Begin second Q&A Cycle	March 29, 2022
End second Q&A Cycle	April 15, 2022
Assessors’ Final Results Complete	May 02, 2022
Final Report Due	May 13, 2022
Debrief	May 16, 2022





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 Kentucky TRCC does include technical and executive representation from all six core data systems. Each of the six core data systems are represented on the Kentucky TRCC-KTRAC. In some cases, one person has the role of both technical and executive member. A representative list was provided reflecting these components: Citation and Adjudication, Crash, Driver, Vehicle, Injury Surveillance, and Roadway.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The Kentucky TRCC is one committee and includes both executive and technical representation. The Commonwealth indicates the executive members have the authority to direct resources to fulfill their respective areas of responsibility. It is noted that there is both technical and executive representation at the meetings.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

In Kentucky, the custodial agencies do seek feedback from the TRCC members when major projects or redesigns are being planned. The Kentucky Transportation Center (KTC) and the Kentucky Transportation Cabinet (KYTC) both have members on KTRAC. The Kentucky State Police (KSP) announced that they were working on their project during a KTRAC meeting. KTC and KYTC both expressed interest in providing input. KSP had subsequent meetings regarding their project (not KTRAC meetings) where they invited KTC and KYTC.

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 Commonwealth Office of Technology (COT) provides services to the executive branch of government. This group coordinates with state agencies to provide the appropriate level of services required for implementing new projects or updates. Agency system custodians are members of the TRCC and set up communication between COT, Agency system custodians, and vendors to ensure hardware and software needs are met, installed and deployed.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

There is a charter establishing and authorizing the Kentucky Traffic Records Advisory Committee (KTRAC). The charter establishes the authority, roster, and responsibilities of the Kentucky Traffic Records Advisory Committee (KTRAC).

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The TRCC-KTRAC's primary role is the development of the Traffic Records Strategic Plan, as reflected in the 2017-2021 and 2022-2026 Traffic Records Strategic Plans. The committee's continued involvement is reflected in Section 3.1, Governance and Structure of the Draft 2022-2026 Strategic Plan. The roles and responsibilities are stated in the first sections of the Traffic Records Strategic Plan. The committee has the authority to review any of the Commonwealth's highway safety data and systems before planned changes are implemented. Some of the tasks assigned to the group are administrative and technical guidance, establishing goals for improvement of the traffic records system, recommending upgrades to reporting forms, formats and procedures in gathering and disseminating data, and also recommending requirements for file linkage. They are also tasked with providing evaluation for the traffic records systems, maintaining and updating the Strategic Highway Safety Plan.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Traffic Records Strategic Plan provides the roles and responsibilities of the Kentucky TRCC. The roles indicate there is a process in place to advise the State Highway Safety Office by assisting in maintaining current project and performance information, however, does not show any role in the allocation of funds. The plan identifies the role of the full-time coordinator. This person, in coordination with the Kentucky Office of Highway Safety and sponsoring agencies, identifies and approves projects for funding. There is no mention of how funds are allocated. In recent years, there have been more funds than projects, so there has not been a need to prioritize projects. This process is not indicated in the strategic plan.

Change Notes: Rating Unchanged.





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

Partially Meets Advisory Ideal

Kentucky identified at least one performance measure for each of the six core systems. There were two processes in which these performance measures were identified. Some of the systems chose to utilize the NHTSA advisory document to create a survey of their respective systems. This determined the capacity and qualities of each system and helped officials identify needed improvements for performance measures. A couple of the systems opted to identify needs and improvement opportunities through email and numerous discussions. In the strategic plan, each system has a table with the identified performance measures, attributes, baseline, goal, and deliverable date. The table provides a tool for tracking and monitoring by the TRCC. A project was funded to track the performance measures. It was noted in the narrative that the report was shared annually with the data system custodian and discussed in TRCC meetings. Meeting minutes or an annual report were not provided, so it is unclear what this monitoring report looked like.

Change Notes: Rating Improved.

From 'Does Not Meet 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?*

Meets Advisory Ideal

KTRAC does provide a forum for coordination between the custodians and stakeholders. Meeting minutes were provided for two meetings, however, were not the most recent meetings held by the committee. From the minutes, it was apparent that discussion and coordination between KTRAC members takes place. It is advised to gather minutes for all meetings to document discussions. This is a helpful tool for reference if/when there is a change in leadership with any members of the group.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

Kentucky has provided an assessment of the current Traffic Records databases which is a strong start to creating a comprehensive traffic records inventory. Kentucky does a great job of inventorying and assessing the traffic records systems and has incorporated these into the Strategic Plan. The Commonwealth specifies traffic records data sources and system custodians but does not include software platforms, programming languages, data elements and attributes, linkage variables, linkages useful to the Commonwealth, and data access policies. Note: The purpose of the traffic records inventory is to provide a single source document containing the specifications for the data source, programming language, owner/manager of the data, data elements and attributes, software platforms, linkages, and access policies for each system.

Change Notes: Rating Unchanged.





11. Does the TRCC have a designated chair?

Meets Advisory Ideal

The Kentucky TRCC-KTRAC has co-chairs, one of which is the Traffic Records Coordinator and the other from the Kentucky Office of Highway Safety (KOHS) within the Kentucky Transportation Cabinet (KYTC). This position recently transferred to Ed Harding, Systems Consultant IT. The other chair rotates.

Change Notes: Rating Unchanged.

12. Is there a designated Traffic Records Coordinator?

Meets Advisory Ideal

The Kentucky TRCC-KTRAC has co-chairs, one of which is the Traffic Records Coordinator and the other from the Kentucky Office of Highway Safety (KOHS) within the Kentucky Transportation Cabinet (KYTC). This position recently transferred to Ed Harding, Systems Consultant IT. The other chair rotates.

Change Notes: Rating Unchanged.

13. Does the TRCC meet at least quarterly?

Partially Meets Advisory Ideal

It appears the TRCC schedules quarterly meetings as a normal practice. The Commonwealth indicates that in recent years, due to the impact of the COVID-19 pandemic, some meeting dates were missed. The meeting schedule provided indicates every effort to have the TRCC meet.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

The Kentucky TRCC's multi-year assessment project reviews each of the six core data systems to review the progress made in meeting the goals of the performance metrics. The 2020 report provides some information regarding the quality of the data in terms of the percentage of accurate crash records that are locatable, percentage of EMS records with no errors in critical data elements, and percentage of roadway data elements whose values are within reasonable ranges, etc. The report still seems to focus on the performance measures and not on quality control and quality improvement processes for each of the core data systems.

Change Notes: Rating Changed.

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





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

Partially Meets Advisory Ideal

It appears that Kentucky has a process in place to assess and coordinate technical assistance and training needs. The multi-year assessment documents some aspects to address technical assistance and training needs. It would be beneficial for the Commonwealth to formalize these processes of tracking assistance and training needs specific to each traffic records project.

Change Notes: Rating Changed.

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

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

Partially Meets Advisory Ideal

It appears the TRCC's program planning and coordination efforts do reflect traffic records improvement funding sources beyond § 405(c) funds. KTRAC identifies that FHWA funds were used in the development of the Traffic Records Strategic Plan and inventory of systems. At this time, the focus of KTRAC has been on the investment of NHTSA 405(c) funding. However, the members of KTRAC do receive funding from other sources. KTRAC attempts to coordinate the disbursement of the 405(c) funding with known external funding. It is suggested the Commonwealth explore all funding sources associated with a Traffic Records project and make note of other funding sources being used by other members.

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?

Meets Advisory Ideal

The TRCC's strategic plan does an excellent job in addressing the needs or opportunities for each data system. The overall recommendations for each data system are a good summary of the needs to improve. Setting this section of the strategic plan in this format provides for an easy guideline to prioritize and plan for data system improvements. It would be beneficial to the Commonwealth to create a tracking system to assess updates, project progress, implementation, and/or completion, of the identified deficiencies and opportunities.

Change Notes: Rating Improved.

From 'Does Not Meet Advisory Ideal' to '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?

Meets Advisory Ideal





The strategic plan for Kentucky TRCC has done an excellent job in setting up the countermeasures for each of the six core data systems. Each system has at least one performance measure, if not several, identified. There is a table set up identifying the performance measure by attribute (timeliness, accuracy, completeness, etc.). In some cases, there are possible performance measures identified as the data system progresses or is brought online. Well done. It would be beneficial for Kentucky to develop a tracking system in which they could capture these attribute measures and define how these measures are being adhered to.

Change Notes: Rating Improved.

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

Meets Advisory Ideal

Kentucky's TRCC has a process for identifying at least one performance measure and the corresponding metrics for the six core data systems in the Traffic Records Strategic Plan. It would benefit them to develop a tracking system to validate adherence to measure and corresponding metrics.

Change Notes: Rating Improved.

From 'Partially Meets Advisory Ideal' to '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

Kentucky's process for prioritizing traffic record improvement projects is comprehensive with a calendar-based planning cycle. Proposals are received from the agencies responsible for data collecting as well as from university and government researchers involved in the analysis of safety-related data. These are submitted to the TRCC for review and funding considerations.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Several of the goals and projects within the Kentucky TRCC strategic plan identified the need for training and local technical assistance. Some included training local law enforcement agencies and others provided agencies with assistance to move to electronic systems. Other projects provided identified funding or goals for state-level agency training on new or updated systems. The Strategic Plan references consideration, review, and evaluation by a TRCC Technical Committee as part of the overall process for considering projects for the Traffic Records program.

Change Notes: Rating Improved.

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





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

Partially Meets Advisory Ideal

Timelines for specific project-level activities are not identified because the projects are funded for a single fiscal year. There is not a formal process to outline a timeline for projects. A planning cycle calendar in the strategic plan identifies deadlines for monthly progress reports and a final report, which is due with their final reimbursement claim at the conclusion of the grant year on September 30th.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

In the opening statements of the Kentucky TRCC strategic plan, it identifies the alignment with the Toward Zero Deaths (TZD) strategy that Kentucky has adopted. The TZD strategy serves as an umbrella for all highway safety improvements. The mission/vision statement for the strategic plan also identifies the plan to work with stakeholders and partners. This lays a great foundation for including all users of traffic safety data. Kentucky appears to have a process for integrating and addressing State data needs and goals within the Traffic Records Strategic Plan. However, it is unclear (per the references provided) if local, county, and federally recognized Indian Tribes, if applicable, data needs and goals are addressed. The new TR strategic plan, currently in development, does address integration with other state plans.

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 roles and responsibilities of the Kentucky TRCC, as listed in the TRCC strategic plan, include fostering the development of new technologies for reporting, processing, storing, and using data at both the local and state levels. It appears the TRCC has administrative, executive, and technical sub-committees to address the use of technology when considering, reviewing, developing, and managing traffic records projects. It is evident within the strategic plan that most projects have a technology component that is being addressed by the technology group or technology groups within the project agency.

Change Notes: Rating Improved.

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





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

Partially Meets Advisory Ideal

The Traffic Records Strategic Plan identifies fiscal year timeline projects, but it was unclear if projects were being tracked for progress, updating, or completion within a specific timeline. Kentucky may consider developing a comprehensive lifecycle cost tracking system to assist with addressing milestones met, budget adjustments, expenditures, etc. It is noted that KTRAC will be looking into developing a lifecycle cost tracking system in the future. The recurring analysis project for updating Traffic Records Strategic Plan performance measures is looking at longer-term processes and some of the information uncovered in their work would apply to lifecycle analysis. An example would be the upgrading of existing traffic count devices.

Change Notes: Rating Improved.

From 'Does Not Meet 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?*

Does Not Meet Advisory Ideal

It does not appear the Traffic Records Strategic Plan makes provisions for coordination with key Federal traffic records data systems. Kentucky should be commended for encouraging efforts by member agencies to work with their Federal traffic records partners. KTRAC has encouraged improvement towards national standards, for instance, compliance with MMUCC and MIRE and the FDEs.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Strategic Plan is reviewed, updated, and approved every 5 years. It appears the multi-year assessment project assists by conducting an annual review of the plan. However, it may be beneficial to formalize processes to specifically address the frequency and depth of reviews and updates to the Plan and identify stakeholder agencies in the review processes.

Change Notes: Rating Improved.

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

Description and Contents of the Crash Data System

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

Meets Advisory Ideal

The statewide crash data is maintained by the Department of Kentucky State Police (KSP) in the Kentucky Open Portal Solution (KyOPS).

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

Kentucky Revised Statutes 189.635 outlines reporting and collection, processing, storing, and dissemination responsibilities for crashes in the Commonwealth involving injury or damage in excess of \$500. Custodial responsibility rests with the Department of Kentucky State Police.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

All fatal crashes must be submitted to the statewide crash system, pursuant to State Statutes. The fatal crash determination is based on the Fatality Analysis Reporting System (FARS) and NHTSA guidelines.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Pursuant to Kentucky Revised Statutes, any crash resulting in an injury must be reported. Injury coding documentation was provided as evidence.

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

The State Statute states: "Any person operating a motor vehicle upon the public traffic way who is involved in a collision resulting in any property damage exceeding five-hundred dollars (\$500) shall file a written report of the collision with the Kentucky State Police within ten days from the date of occurrence of the collision when an investigation is not conducted by a law enforcement officer."

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

The reporting timeframe is noted in the State Statute and is 10 days from the occurrence of the crash, pursuant to Kentucky Revised Statutes 189.635 (4).

Change Notes: New Question.





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

Partially Meets Advisory Ideal

Law enforcement agency policies vary regarding the reporting of private property/ parking lot crashes which are not required to be submitted, but Kentucky State Police report those crashes if they include injury or damage in excess of \$500, and all crashes reported by officers are included in the statewide crash repository.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Besides providing query tools for law enforcement agencies using the crash database for determination of countermeasure design or directed enforcement, Kentucky uses data from the crash system to identify emphasis areas for the Strategic Highway Safety Plan, which was provided as evidence.

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

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

Meets Advisory Ideal

The Commonwealth uses the crash database along with its Highway Information System (HIS) database to develop a Data Driven Safety Analysis to guide project engineering, planning, design, maintenance & operation, and Construction.

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

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

Meets Advisory Ideal

Law enforcement agencies use the crash portal to determine how to best utilize resources, particularly for DUI checkpoints and high crash locations, in order to direct enforcement activities. Maps of crashes are also developed for law enforcement agencies for this same purpose.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky provided examples of before and after studies using HSM methods to show the result of safety countermeasure effectiveness evaluations on three types of systemic improvements.

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





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?*

Partially Meets Advisory Ideal

Kentucky reports being 88 percent MMUCC compliant and is considering the newer version 5 MMUCC, but has not updated its crash report at this time to the Version 5 MMUCC.

Change Notes: Rating Changed.

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

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 classification definitions are used to ensure that Kentucky's crash form is consistent with national standards.

Change Notes: Rating Unchanged.

Data Dictionary for the Crash Data System

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

Meets Advisory Ideal

The crash system has a data dictionary that provides a definition for each data element and defines the allowable values and attributes for them.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The data dictionary documents edit checks and validation rules.

Change Notes: Rating Improved.

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

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?*

Does Not Meet Advisory Ideal

The data dictionary indicates that the training materials are available in the online portal. The question, however, asks if the training materials are up to date and for a description of the process used to ensure that the materials are kept in sync. The Commonwealth had the collision data dictionary published in September 2019. It is unclear what process Kentucky uses to keep the data dictionary consistent with the field data collection manual, coding manual, crash report, database





schema, and any training materials. The response does not indicate how they identify when the system requires changes, such as a periodic review, updates to MMUCC or ANSI D.16, or changes to Kentucky statutes. There should be some definitive determination of the nature and frequency of review undertaken to determine the need for updates of the crash system data dictionary, data collection manual, coding manual, and other documentation and training materials.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Commonwealth provided an example of the Location Screen portion of the data dictionary that makes specific reference to the data coming from the Department of Transportation, but this example didn't provide a clear indication about what specific system the location data is derived from. The response indicates that the crash system does not natively link to other systems.

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

Kentucky collects the same attributes from all reporting agencies. The data dictionary documents the standard list of data elements and attributes and notes any deviations from the standard list such as FARS data elements.

Change Notes: New Question.

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

Meets Advisory Ideal

Kentucky re-evaluates its crash form regularly. Over the past several years, it has been re-evaluated annually.

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?*

Partially Meets Advisory Ideal

Kentucky requires that all fatal crashes must be submitted to the statewide crash system. It is unclear if it requires all commercial vehicle crashes be submitted to SafetyNet.

Change Notes: Rating Improved.

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





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

Meets Advisory Ideal

Kentucky has the validation rules and edit checks documented in the data dictionary for crash data quality assurance and quality control.

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 crashes reported by police and submitted to the statewide crash database are retained for ten years.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

All crashes are submitted by police electronically to the statewide crash database.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

All agencies submit crashes electronically.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

All officers submit crash reports using the same software with consistent edits and validation rules.

Change Notes: Rating Unchanged.

Crash Data Systems Interface with Other Components

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

Does Not Meet Advisory Ideal

The response indicates that there is an interface through the barcode with the driver and vehicle data via the barcode on those documents; however, barcodes would only contain the information that is on the documents, rather than the information that is in the current and live system.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

Officers use barcode scanners to capture accurate information from the vehicle file. This is not a real-time interface with the vehicle file in that the barcode is limited to information that was current on the date that the registration was printed. The other reference in the response is to the VIN file. If this is in reference to the use of the VIN decoder by the vehicle database, that would not be related to a real-time interface with the vehicle system.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The enterprise roadway system provides elements such as speed limit, surface type, number of lanes, and roadway type for the crash report.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

There is no real-time linkage or interface of the systems, although the systems can be integrated for statistical purposes.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

There is no interface, although the inclusion of the EMS run number on the crash report provides an opportunity for integration.

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

There are edits and validation rules that must be met by all those who submit crash reports prior to their acceptance into the crash repository.

Change Notes: Rating Improved.

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





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

Meets Advisory Ideal

The state-level correction authority is limited to one person to correct obvious errors and omissions without returning reports to the originating officer.

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

Kentucky has an automated process to reject the crash reports that don't meet validation and edit check rules. The rejected report is automatically sent back to the officer for revision and must go through the steps of review until the report is accepted in the system.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Commonwealth doesn't track crash report changes after the original report is submitted by the law enforcement agency.

Change Notes: New Question.

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

Meets Advisory Ideal

Crash timeliness performance measures are included in the Traffic Records Strategic Plan with baselines and goals.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Strategic Plan was provided which indicated an accuracy performance measure to increase data specificity by adding a data category related to drug or alcohol use by vehicle occupants.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

A Crash completeness performance measure is included in the 2022 Traffic Records Strategic Plan with a goal but no baseline measure is included.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

A Crash uniformity performance measures is included in the Traffic Records Strategic Plan with baseline and goal.

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?*

Does Not Meet Advisory Ideal

There is no integration measure. The strategic plan includes a goal to increase appropriate real-time links.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Strategic Plan lists an Accessibility measure as the number of inquiries on the public-facing website daily.

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?*

Partially Meets Advisory Ideal

The performance goals are generally numeric for the crash system, with the exception of the integration goals which are milestones only.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The response points to performance reporting on page 25 of the strategic plan which is broad for the entire crash system. This question is about individual law enforcement agencies' performance. No information was provided that indicates that any data is provided to each agency about their specific performance levels. Determining performance data at the agency level assists in determining if any agency needs additional training and to potentially create some friendly competition toward excellence in crash reporting.

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?

Partially Meets Advisory Ideal

Kentucky is in the process of reviewing the narratives on 20,000 crashes in an effort to cross-check the coding on the crash reports for accuracy. They did not outline a plan to use the results of this study to improve data accuracy, either through additional edits, updated training, or improved manuals.

Change Notes: Rating Improved.

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

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?

Partially Meets Advisory Ideal

Kentucky is conducting a crash accuracy project that requires reading narratives from about 20,000 crashes from 2020 and comparing the crash codes to what is written in the narratives. It is unclear if this is a one-time project and how the quality control reviews are considered part of the statewide crash database's data acceptance process.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

No periodic sample-based audits are conducted of Kentucky's crash reports. Such audits might determine if any agency or type of crash results in more errors than average.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

No trend analysis was described or provided in terms of review of crashes in Kentucky, such as classification of crash types, severity of injury, or location of crashes within the Commonwealth.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

An annual TRCC meeting provides data quality feedback to data collectors and data managers. The TRSP team reaches out to each data liaison quarterly.

Change Notes: Rating Improved.

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





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

Meets Advisory Ideal

Data quality reports are provided to the TRCC quarterly. As evidence, the performance measures from the strategic plan are provided.

Change Notes: Rating Improved.

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

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 Division of Driver Licensing of the Department of Vehicle Regulation within the Kentucky Transportation Cabinet has the custodial responsibility for the Kentucky driver data system. The driver license system includes commercially licensed drivers and resides in a single location.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The driver data system captures novice driver training, driver improvement, and drug and alcohol classes as reported by the courts. The different types of school completion certificates were provided as examples. However, motorcycle training does not appear to be captured.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The original permit, licensing, and endorsement issuance dates are kept on the Kentucky driver data system only for five years. The driver data system maintains a 'history activity file' that can be accessed for the duration of the driver record. It was not clear if the original issuance dates are available in this file and how is this file associated with the driver data system.

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 Kentucky driver data system interacts with National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS). Kentucky provided the 2021 FMCSA Audit Report related to interaction with the 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?*

Does Not Meet Advisory Ideal

Kentucky does not have a data dictionary with data definitions documented for each data field. The Commonwealth provided a sample of the COBOL copybook program that shows some details related to some driver system data fields and their characteristics. However, this is not sufficient evidence of the data dictionary for the Kentucky driver system.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Kentucky does not have a data dictionary or similar relevant documentation regarding valid data field values for the driver system.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The driver data system has edit checks and data collection guidelines, as evident from the sample page from the COBOL program that was provided.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Kentucky driver system is not supported by a data dictionary and, therefore, potential updates or guidance about the data dictionary updates do not exist. Any legislative changes that require updates to the driver data system are documented in the COBOL data segment copybook.

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?*

Does Not Meet Advisory Ideal

Kentucky does not maintain documentation on procedures regarding licensing, permitting, and endorsement issuance, as well as reporting and recording of convictions and other information relevant to the driver system. The Commonwealth maintains a “guidance for standard issuance”, which shows insufficient and limited information on the issuance procedures. Kentucky does not maintain any documentation regarding reporting and recording of convictions and other information relevant to the driver 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

A process flow diagram of the driver data system that includes inputs/interfaces from other data systems was provided.

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?*

Does Not Meet Advisory Ideal

The Commonwealth has procedures in place to amend court abstract convictions. However, Kentucky does not have documentation that describes this and other error correction procedures for all driver data system processes. The Commonwealth provided the court abstract correction report, which does not provide details about the update of the amended conviction abstract on a driver records.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky has processes for purging data from the driver data system, which is required by statute. The main record automatically purges at 10 years. Consideration should be given to maintaining license issuance data for a longer period on active records.

Change Notes: Rating Improved.

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





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

Does Not Meet Advisory Ideal

Kentucky does not have the authority to impose administrative license suspensions based on a DUI arrest.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The driver system is supported by processes to detect false identity licensure fraud. Specifically, the Division of Driver Licensing has a fraud section that is responsible for such procedures and utilizes facial recognition software. In addition, training is provided to identify and document fraudulent attempts. Further, some fraudulent attempts are prevented through automated programs that disallow duplicate records in the driver data system.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Kentucky has established thorough procedures for detecting attempts of internal fraud by individual users or examiners, such as continuous monitoring and tracking activities of all driver system users through an activity log that is also reviewed by management. Any suspicious activity is further investigated. The Commonwealth also has the Fraud section that is focused on more thorough review and investigation.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Kentucky has established policies and procedures to detect CDL fraud that include maintaining an activity log for all commercial drivers' entries; approval for HAZMAT only directly by law enforcement; and auditing of CDL driver testing. In addition, the Commonwealth provides information and works with the Transportation Security Administration (TSA) for processing fingerprints and hazmat applications.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Commonwealth does not have established electronic transfer of the driver history record to other States. Kentucky mails the printed copy of the driver history record when a driver moves to a





new State upon the driver's request. Electronic transfers only apply to CDL drivers whose records are transferred through CDLIS.

Change Notes: New Question.

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

Partially Meets Advisory Ideal

Kentucky obtains the previous State of Record for only CDL through the use of the CDLIS.

Change Notes: New Question.

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

Meets Advisory Ideal

Kentucky uses Idemia facial recognition prior to issuing a credential using a one-to-one match. The photo is also compared to the last 4 photos.

Change Notes: New Question.

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

Meets Advisory Ideal

Kentucky provides driver photos to other States electronically upon request and participates in a digital image exchange to share the State drivers' photos with the national repository.

Change Notes: New Question.

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

Partially Meets Advisory Ideal

Kentucky did not provide any policies or procedures for maintaining appropriate system and information security. Federal background checks are performed on new hires and appropriate system and information security is documented for outside agencies needing access to driver data through the use of an MOU, which was provided.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

There are established procedures to ensure that only authorized users have access to the driver data system. All access to the driver system is tracked via built-in interfaces. Kentucky requires a Memorandum of Understanding (MOU) to allow access to the statewide driver data system.

Change Notes: Rating Improved.

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





Driver System Interface with Other Components

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

Meets Advisory Ideal

The Commonwealth updates information on crash involvement on a driver's record.

Change Notes: Rating Improved.

From 'Partially Meets 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

Kentucky has established procedures to obtain DUI conviction data from the courts that are maintained in the driver data system. A DUI Tracking System maintains all DUI-related information from court, probation, and DUI treatment requirements, that are tied to a DUI arrest. All parties (prosecutors, public defenders, probation officers, DUI school administrators, etc.) that touch the case would have access to the DUI Tracking System. The purpose of the DUI Tracking System is to track DUI offenders from the point of arrest through the process to monitor changes in DUI incidents in the Commonwealth over time. This information can then be used to make informed decisions on how to better control DUIs.

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?*

Partially Meets Advisory Ideal

Kentucky utilizes the Problem Driver Pointer System (PDPS), the Commercial Driver Licensing System (CDLIS), the Social Security Online Verification (SSOLV) system, and the Systematic Alien Verification for Entitlement (SAVE) system. However, it is not known how the driver data system interfaces with the PDPS, CDLIS, SSOLV, and SAVE for licensing commercial and non-commercial drivers on both original issuances and renewals.

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?*

Partially Meets Advisory Ideal

Access to the driver data system can be granted to authorized law enforcement personnel. Kentucky did not provide a sample of a relevant document or a more detailed description related to the protocol to grant access to authorized law enforcement.

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

Authorized court personnel have access to the driver system, since historically the Circuit Clerks were the issuing authority for the driver license. The Commonwealth is in the process of transitioning the issuing authority to the Kentucky Transportation Cabinet, which is expected to be completed in 2022. The Administrative Office of the Courts and Circuit Clerks will continue to have the same access to the driver system. Kentucky should create a documented process for court personnel to obtain access to the driver data system, once they are no longer the issuing authority.

Change Notes: Rating Improved.

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

Data Quality Control Programs for the Driver System

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

Partially Meets Advisory Ideal

The driver data system has some data rules, as well as physical and virtual protection of the mainframe. However, a formal comprehensive driver data quality management program includes performance measures, numeric goals, tracking of high-frequency errors, quality control reviews, independent sample-based audits, periodic comparative and trend analyses, as well as data quality management reports. While some of these aspects are being met, many of them could be improved upon to meet this ideal.

Change Notes: Rating Improved.

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

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?*

Partially Meets Advisory Ideal

The driver data system has edit checks and validation rules to ensure entered data falls within a range of acceptable values and is logically consistent among data elements. A limited example of such edit checks or validation rules was provided.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The two recent versions of the Kentucky Traffic Records Strategic Plan include a well-defined timeliness performance measure for the driver data system: Average # of days from driver's adverse action to the date the adverse action enters driver database. Each version of the plan has a specified baseline value and goals for the timeliness performance measure. According to this information, Kentucky monitors the timeliness performance measure and finds that the current baseline value (24-48 hours), which is lower than what is required by the law, meets the





Commonwealth's goal. Kentucky intends to maintain this level of timeliness. Therefore, the Commonwealth is encouraged to continue monitoring and measuring this timeliness measure to ensure that the current level is maintained.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

Kentucky provided the 2017-2021 TRSP which contains an accuracy performance measure for the percent of drivers' files with SSN verified using the social security online verification system (SSOLV) with a goal of 100 percent over 5 years. The Commonwealth did not provide any actual measure during this time frame. If Kentucky can provide the actual measures for this performance measure it would improve this rating. The current 2022-2026 TRSP has an accuracy performance measure to correct data entry keying mistakes. The accuracy measure has a goal to reduce the percentage not corrected and a baseline metric of 5 percent on in-state on initial entry of record. Kentucky needs to track the actual measurements to ensure the goal is being reached.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The two recent versions of the Kentucky Traffic Records Strategic Plan include the following completeness performance measures for the driver data system: 1) Percentage of driver records with no missing critical data elements; and 2) Install Real ID. The second performance measure is from the 2022-2026 plan, and it includes a goal and the current baseline metric. However, actual values for these measures were not included. Also, the second accuracy performance measure ("Install Real ID") does not appear to be an adequate direct measure of the completeness of the driver data system as defined in the Advisory.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The two recent versions of the Kentucky Traffic Records Strategic Plan include the following uniformity performance measures for the driver data system: 1) Percent of ICD Version 6.0 compliant data elements in driver system; and 2) current and comprehensive data dictionary (part of Real ID). However, actual values for these measures were not included. Also, the second measure does not appear to be an adequate measure of the uniformity of the driver data system as defined in the Advisory.

Change Notes: Rating Improved.

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





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

Partially Meets Advisory Ideal

Kentucky established an integration performance measure in the 2017-2021 TRSP for "Percent of conviction records submitted to DMV electronically" to establish a baseline in the second year and improving in subsequent years. However, there were not any actual measures provided for this time frame. The 2022-2026 TRSP has an integration performance measure for "Percent of conviction records from out-of-state submitted to the DMV electronically" with a goal of submission of out-of-state conviction records submitted electronically and baseline of number of States that can submit conviction records electronically. This is a great integration performance measure and can provide some useful data for the driver system. However, these performance measures do not completely align with what is defined as integration quality of the driver data system. An example of such a measure is: the percentage of the driver records in the driver database that are linked to another system or file (i.e., crash data system).

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The two recent versions of the Kentucky Traffic Records Strategic Plan include the following accessibility performance measures for the driver data system: 1) Number of users accessing traffic records data; and 2) Appropriate users accessing traffic records data. The second performance measure is from the 2022-2026 plan, and it includes a goal and the current baseline metric. However, this measure and its goal, and the current baseline metric are not well defined to show measurable progress in accessibility over time. Also, actual values for these measures were not included.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

Kentucky has established goals for the performance measures, which are shown in the Traffic Records Strategic Plan 2022-2026. However, some of the goals are not numeric and are not measurable. They have acknowledged there are not any established numeric goals-performance metrics-for each performance measure and they hope to have them in the future.

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?*

Partially Meets Advisory Ideal

The detection of high-frequency errors that are reported by staff and legislative changes are used to update training and validation rules as necessary. Kentucky does not have any standardized processes for tracking errors and updating training manuals, validation rules, or prompt rule revisions.

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

Kentucky provided recent FMCSA audits as sample audits that are conducted. Sample-based audits should also be conducted for driver reports and related database contents for that record that are non-CDL records. Audits should be independent of the normal day-to-day review and not necessarily conducted by parties outside the department or division of government that normally review the data.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

Kentucky performs some analyses of the driver system data to identify anomalies over time. However, these analyses do not seem to be periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions, as defined in the Advisory.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Commonwealth obtains some feedback from the driver system key users that is communicated to managers. Also, Kentucky has a process in place to track the root cause of a potential problem when it occurs and to find potential ways to resolve it. Additional details about these processes (i.e., how is the feedback obtained specifically and what are typically the next steps, etc.) were not provided.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

The Commonwealth provides the data quality management reports to the TRCC committee. This is reflected in the Kentucky Traffic Records Strategic Plan that was provided in this assessment related to earlier questions on performance measures. Kentucky should be commended for establishing this reporting process. Further improvements in the data quality management program, such as those that are part of the performance measures, may also improve the data quality management reports to the TRCC committee.

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

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 Department of Vehicle Regulation within the Kentucky Transportation Cabinet has custodial responsibility for the vehicle data system. The vehicle system maintains identification and ownership of vehicles registered in Kentucky, including vehicle make, model, year of manufacture, body type, and vehicle history and resides in a single location.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky validates every VIN with VINTelligence software application upon vehicle ownership change.

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

The vehicle registration documents contain a 2D barcode that includes all relevant information, such as date of issue, plate number, VIN, make, vehicle year, body style, etc. A sample of the Commonwealth of Kentucky Certificate of Registration with a 2D barcode was included.

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 vehicle system, known as AVIS (Automated Vehicle Information System), provides title information data to the National Motor Vehicle Title Information System (NMVTIS) in real-time with every title transaction.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky utilizes a web interface to query NMVTIS before issuing new titles and during registration transactions.

Change Notes: Rating Improved.

From 'Does Not Meet 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

Kentucky incorporates brand information recommended by AAMVA and/or received via NMVTIS on the vehicle record. Kentucky Revised Statutes (KRS) were provided for the titling of salvage, rebuilt, water-damaged, junk, and hail-damaged vehicles.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The Division of Motor Carriers of the Commonwealth of Kentucky participates in the Performance and Registration Information Systems Management (PRISM) program.

Change Notes: Rating Improved.

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





Vehicle System Data Dictionary

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

Meets Advisory Ideal

Kentucky provided a data dictionary for the current vehicle system that includes each data field. The Commonwealth also provided a detailed vehicle system flow diagram that includes many of the vehicle data elements with definitions. Kentucky is in the process of implementing KAVIS (Kentucky Vehicle Identification System) a new vehicle system, which will improve all six vehicle database attributes. A data dictionary for this new system should be created and kept current.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The vehicle system includes data edit checks and collection guidelines, such as numerics in numeric fields and alphas in alpha fields. Kentucky is in the process of implementing the new Kentucky Vehicle Identification System (KAVIS), which will have enhanced edit checks and data validation procedures to ensure improved data collection and quality of the vehicle system data.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The authority for vehicle collection, reporting, and posting for registration, title, and title brand information is documented in Kentucky Revised Statutes Chapters 186, 186A, and 190.290-.320. Chapters 186 were provided, as well as the data dictionary for the current vehicle system. Brands include Rebuilt, Odometer Not Actual Mileage, Exceeds Mechanical Limits, Water Damage, Hail Damage, and Salvage.

Change Notes: Rating Improved.

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

Procedures and Process Flows for the Vehicle Data System

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

Meets Advisory Ideal

The Kentucky vehicle system is supported by a detailed process diagram outlining the vehicle system's key data process flows and 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 system automatically checks the National Crime Information Center (NCIC) for stolen vehicles with every title transaction. If information about a stolen vehicle is obtained from the National Crime Information Center (NCIC) upon data entry into the NCIC (i.e., a presence of a Code "1"), the title will not print until the Kentucky State Police completes the investigation and provides a clearance.

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

Kentucky removes information about a stolen vehicle from the Automated Vehicle Information System when the vehicle is recovered and the application is approved or canceled (i.e., the AVIS Code "1" is manually changed to Code "0").

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

Title brand history is carried forward through the use of NMVTIS and Kentucky's vehicle system maintains the previously issued brand.

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

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

Meets Advisory Ideal

The Commonwealth has a process flow diagram that shows the steps from initial event (titling, registration) to final entry into the Kentucky vehicle data system. The Commonwealth of Kentucky currently has a legislative proposal to update certain vehicle data system procedures.

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

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

Does Not Meet Advisory Ideal

The Commonwealth does not have a documented process flow annotated to show the time required to complete each step. The information on timeliness is useful to identify potential inefficiencies that need to be improved.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

The process flow diagram does not indicate alternative data flows and timeliness for the vehicle data system. The process flow diagram that was provided in Q131 does not include alternative data flows and timelines for the initial titling and registration event to final entry into the vehicle system. The KY House Bill 2022-280 that was attached to this question did not provide any relevant information for this question.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Kentucky vehicle system is supported by a detailed process flowchart that includes processes for error correction and error handling.

Change Notes: Rating Improved.

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

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 vehicle and driver databases are not unified in one system.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Driver data is entered by the circuit court clerk and vehicle data is entered by the county court clerk. The Commonwealth did not provide any relevant information detailing the data entry for personal information entered into the vehicle and driver systems to determine if the same conventions are used.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Vehicle data discrepancies identified during data entry in the crash data system are not flagged for possible updating in the vehicle system. Even though the crash system and vehicle system are not linked, discrepancies between the vehicle information in crash reports and the vehicle system data could be used to check a need for potential corrections or updates of data in the vehicle system.

Change Notes: Rating Unchanged.





Data Quality Control Programs for the Vehicle Data System

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

Does Not Meet Advisory Ideal

The vehicle system data is not processed in real-time. Nightly batches are sent to NCIC and NMVTIS for verification before a title is issued. It does appear from the process flow diagram that was provided in previous questions that registration renewals are processed in real-time.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky performs edit checks and data validation procedures to ensure entered data falls within the range of acceptable values. To support these procedures, they maintain documentation that includes data elements and edit/validation rules for each.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Kentucky has a manual notification process for assigned staff to amend errors and omissions to vehicle records.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes a specified timeliness performance measure for the vehicle data system: Average time to post by county clerks. Kentucky is in the process of modernizing its vehicle system, which is scheduled to be operational in 2022, and will include this timeliness performance measure, baseline value, and the timeliness performance measure goal. However, at present, there are not any measures or baselines established.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes an accuracy performance measure for the vehicle data system: Percent of vehicle records with no errors in





critical data elements. Kentucky is in the process of modernizing its vehicle system, which is scheduled to be operational in 2022, and will include this accuracy performance measure, its baseline value, and the performance measure goal. However, at present, there are not any actual measures or baselines established.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes a completeness performance measure for the vehicle data system: Percent of unknowns or blanks in critical data elements. Kentucky is in the process of modernizing its vehicle system, which is scheduled to be operational in 2022, and will include this completeness performance measure, its baseline value, and the performance measure goal. However, at present, there are not any actual measures or baselines established.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes an uniformity performance measure for the vehicle data system: Percent of NMVTIS standards-compliant elements in the system. Kentucky is in the process of modernizing its vehicle system, which is scheduled to be operational in 2022, and will include this uniformity performance measure, its baseline value, and the performance measure goal. However, at present, there are not any actual measures or baselines established.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes an integration performance measure for the vehicle data system: KAVIS will check against NMVTIS and VIN Assist. However, this integration performance measure does not represent a measure of integration of the vehicle data system with other Kentucky traffic records system components (i.e., driver, crash, roadway, etc.), which is envisioned by the Advisory. Kentucky could re-define its integration performance measure for the vehicle data system. An example of such a measure is: The percentage of vehicle records that are linked to driver records or crash records or other data system records.

Change Notes: Rating Improved.

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





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

Partially Meets Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes an accessibility performance measure for the vehicle data system: Number of users able to perform inquiries. Kentucky is in the process of modernizing its vehicle system, which is scheduled to be operational in 2022, and will include this accessibility performance measure, its baseline value, and the performance measure goal. However, at present, there are not any actual measures or baselines established.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

The 2022-2026 version of the Kentucky Traffic Records Strategic Plan includes performance goals for each of the six performance measures for the vehicle data system. However, these goals and performance measures are specified for the new modernized vehicle system, which is scheduled to be implemented this year (2022). Therefore, the goals and performance measures for the vehicle data system are not used yet. Also, the goals that are specified are not numeric.

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?*

Does Not Meet Advisory Ideal

The Commonwealth of Kentucky is in the process of implementing the new Kentucky Vehicle Identification System (KAVIS). At this point, they do not use high-frequency errors to update the data validation procedures, vehicle data system documentation, or training material. While having a new vehicle system (KAVIS) will improve the vehicle database attributes, Kentucky should create a process to detect and track errors, which could generate updates to training or system validation rules.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Independent sample-based audits related to the quality of the vehicle data system, as specified in the Advisory, are not conducted. Sample-based audits of the vehicle database would be beneficial in the new vehicle system to ensure the system is working as it should be.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

The Commonwealth does not perform periodic comparative and trend analyses to identify unexplained differences in the data across years and jurisdictions within Kentucky.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Data quality feedback is communicated amongst key users and vehicle system custodians through the monthly meetings that are held between the Division of Motor Vehicle Licensing, representatives from their division, and the county level users of the system - county clerks and deputy clerks. These meetings are used to identify and discuss potential issues and find solutions, which may involve changes in training and further communication of relevant information with key data users.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

Progress on the performance measures is reported to the TRCC. At present, Kentucky is working on the implementation of the new KAVIS vehicle system and the performance measures are not fully established for the system (i.e., baseline and actual values for each). However, it appears that the Commonwealth has established a routine to report to the TRCC committee on data quality management for all six components of the traffic records data, which includes the vehicle data system. Information that is reported to the TRCC is expected to be improved after the implementation of the new KAVIS system and a full establishment of the six performance measures for the system.

Change Notes: Rating Improved.

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

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

All public roads use the same linear referencing system which is within the Highway Information System (HIS). The HIS is maintained by the Data Management Branch which is part of the Department of Highways within the Kentucky Transportation Cabinet (KYT).

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 Commonwealth has provided evidence of the roadway features and traffic volume information in their roadway system.

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

Roadway and traffic data elements are located and stored within the Highway Information System (HIS). HIS is exported into the Transportation Enterprise Database (TED) warehouse weekly. Within TED, data from HIS and other systems are linked using the LRS.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Information from the TED database, housed by the Kentucky Transportation Cabinet, which includes the roadway and traffic elements is distributed to other agencies. Kentucky State Police (KSP) receives this information and uses a derivative of the HIS route network to map the crashes.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Commonwealth has indicated that safety analysis and management is done with TED where all databases are linked. Examples were provided in the narrative.

Change Notes: Rating Improved.

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

Applicable Guidelines for the Roadway Data System

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

Partially Meets Advisory Ideal

Kentucky has listed the elements that they currently collect. They have also indicated that they have almost all elements and are just lacking the number of lanes for local roads.

Change Notes: Rating Unchanged.





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

Partially Meets Advisory Ideal

Kentucky provided evidence of the elements currently collected, but not all of the MIRE elements are stored in the data system, nor are elements collected that do not apply to the Commonwealth's roadway system.

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 Commonwealth provided evidence of the MIRE FDEs in their data dictionary, but they do not collect all the FDEs.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

Kentucky provided a list of the elements and where they are stored. They have also indicated that not all the MIRE elements are stored.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Division of Planning within the Kentucky Transportation Cabinet (KYTC) contracts with Area Development Districts (ADD) to collect data on local roadways. The Districts follow the procedures provided to them. The Data Management Branch (DMB) within the KYTC reviews the data before it is submitted to the Highway Information System.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky described how the data dictionary is updated.

Change Notes: Rating Improved.

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





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

Kentucky briefly described their workflow for updating new elements within the roadway enterprise system.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky outlined the steps taken to update roadway data information in their system.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky provided a narrative of their process for archiving information and providing it to customers.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Kentucky Transportation Cabinet (KYTC) contracts with the Area Development Districts (ADD) to collect local roadway data. The Commonwealth provided a manual, Local Roadway Update Standards, that documents procedures.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky indicated that the procedures are compatible and provided documentation on the collection of local roadway data.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

The Commonwealth's primary source for roadway data collection guidance is the Highway Performance Monitoring System field manual.

Change Notes: Rating Unchanged.

Intrastate Roadway System Interface

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

Meets Advisory Ideal

All roadway systems reference the LRS maintained by the Kentucky Transportation Cabinet (KYTC).

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Transportation Enterprise Database houses the roadway data systems where views connect the discrete systems.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The Kentucky Transportation Cabinet (KYTC) maintains the statewide Linear Referencing System (LRS) within the Highway Information System (HIS). It includes all roads in the state and is updated with input from the local agencies via the Area Development Districts (ADD). This complete LRS is exported weekly and consumed by all agencies for locating information.

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?*

Meets Advisory Ideal

Kentucky maintains the statewide LRS and is updated by input from the local agencies via the Area Development Districts (ADD). The complete updated LRS is provided weekly to agencies including the Area Development Districts (ADD) which collect the local data.

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 HIS network and data is exported to the Transportation Enterprise Database (TED) warehouse weekly. Metropolitan Planning Organizations (MPOs) and local transportation agencies can access data through multiple means over the internet.

Change Notes: Rating Unchanged.

Data Quality Control Programs for the Roadway Data System

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

Meets Advisory Ideal

The Commonwealth provides many reports that are auto-generated and are provided to data managers weekly. They attached an example report.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Kentucky Transportation Cabinet (KYTC) runs quality control reports against the Highway Information System (HIS) multiple times each week before the extraction/publication of the reporting data set. These reports are used to identify errors and check edits made during that week. KYTC provided an example report.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky runs weekly quality control reports which identify errors and data that failed edit checks.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

Kentucky described their process for error and edit checks as well as provided information on training.

Change Notes: Rating Improved.

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





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

Meets Advisory Ideal

Kentucky provided a performance measure for timeliness with baseline and values.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Kentucky provided a performance measure for accuracy with baseline and values.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Kentucky provided a performance measure of the number of interstate traffic counting loops. The Commonwealth provided baseline and actual measures for 2019, 2020, and 2021.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

Kentucky provided uniformity performance measures with values.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

Kentucky provided a performance measure for accessibility but has not provided any value. The Commonwealth has provided what appears to be baseline measures for 2019, 2020, and 2021, but actual measures were not included.

Change Notes: Rating Improved.

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





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

Meets Advisory Ideal

Kentucky provided a performance measure for integration and has included values.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

Kentucky provided some numeric goals for their performance measures, but some values were missing.

Change Notes: New Question.

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

Meets Advisory Ideal

Kentucky documents its performance annually through their Improvement Plan which is shared with the TRCC.

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

The Office of Highway Safety reported only one example. The Kentucky State Police often uses citation data for traffic safety analysis. For example, citation information for DUI arrests is used to determine where problematic areas are located for instances of drunk drivers. However, it is also likely that traffic-related citation and adjudication data is used by most of the Kentucky traffic records data users. Without mentioning many other examples, a higher rating is not possible.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The Department of Kentucky State Police is the responsible authority for assigning unique citation numbers. This authority is assigned under KRS 435.450 and an attachment provided the information.

Change Notes: Rating Unchanged.





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

Partially Meets Advisory Ideal

According to the Kentucky Office of Highway Safety, traffic citations are submitted to the Administrative Office of the Courts (AOC). The AOC operates the statewide case system for Kentucky - used by all courts handling traffic cases. These traffic citations are assigned to cases. The AOC system maintains the disposition information for all cases. The disposition information is shared with other agencies including the Kentucky State Police and the Kentucky Transportation Cabinet through the AOC. However, it is still not clear whether a citation could be issued and not submitted to the AOC system. There is no mention of citations that don't make it to the judiciary.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety says their drivers licensing system receives disposition information from the Administrative Office of the Courts and applies it to the driver's record. No information is provided if 100 percent are sent electronically or manually. Also, there is no indication regarding appeals or whether local or municipal courts data are sent electronically.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The Kentucky Office of Highway Safety stated that all courts in Kentucky use the Administrative Office of the Courts (AOC) case management system. This is an improvement from the 2017 assessment. The Courts' system is interoperable because all of the courts within the Commonwealth use the same system.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

Real-time driver and criminal records are available in Courtnet. It is unclear who has access to Courtnet and what specific data is available.

Change Notes: Rating Unchanged.





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

Partially Meets Advisory Ideal

All the agencies mentioned in the question have access to real-time driver and criminal records through CourtNet. The Commonwealth provided a user manual for CourtNet. However, they did not provide specific details on what information each agency receives.

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?*

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that DUI convictions and traffic-related felonies are charged according to the UCR guidelines. They also reported that the Kentucky State Police reports this information to the Federal Bureau of Investigation which requires the UCR guidelines for DUI convictions. Providing specific details could have resulted in a higher rating.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Commonwealth's Office of Highway Safety stated that the Kentucky State Police has the ability to share information using the NIEM standard. The Office of Highway Safety did not provide the specific details that the Kentucky State Police reported in the 2017 assessment. If they had, it could have resulted in a higher rating.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

All courts in Kentucky use the Administrative Office of the Courts (AOC) case management system. The AOC System does comply with the National Center for State Courts (NCSC) guidelines for all traffic cases. However, no specific information was provided on which NCSC guidelines are used and what data meets those 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?*

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety indicated that, while there is no single document covering everything, Kentucky is generally able to provide context-specific data dictionaries for each report or data set distributed. Without an example, it was not possible to provide a higher rating.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

According to the Kentucky Office of Highway Safety, the Administrative Office of the Courts (AOC) maintains data dictionary values for the case management system. Values are stored within their internal network within a Microsoft SharePoint website. When reports are on the case management system, the appropriate portions of the data dictionary are attached to and provided along with the report results. No documentary example of a data dictionary was provided which could have resulted in a higher rating.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety says that they don't have a document that defines all the data fields. They indicated that they are able to provide context-specific data dictionaries. AOC Research and Statistics has typically published context-specific methodologies, including data dictionaries for each publication.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The AOC maintains data dictionary values for their case management system, but no proof of a data dictionary was provided. While not exactly the advisory ideal, the outcome does result in having data dictionary values when reporting on the case management system is generated.

Change Notes: Rating Improved.

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





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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety reported that yes, what definitions are published in conjunction with AOC data are updated and in compliance with these materials as of the time they are published. However, no relevant document was provided in support of this response.

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?*

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety reported that there is no single document data dictionary for the citation system to make the indications.

Change Notes: Rating Unchanged.

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 Kentucky Office of Highway Safety reported that there is no documentation where the data dictionary indicates which fields are populated through interface linkages with other traffic records system components.

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?*

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that there is no single standalone system. Needed data is stored in the systems to track a citation from the point of issuance, into the case management system, and then into the driver record. The Commonwealth's ability to track citations from the point of issuance to posting on the driver file does exist but they did not provide the necessary evidence to receive a higher rating.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that the Administrative Office of the Courts (AOC) statewide case management system tracks all of the charges, including the "prepayable" charge resolutions. Evidence to distinguish between the administrative handling of court payments





in lieu of court appearances (mail-ins) and court appearances by describing the types of handling, the appropriate statutory cites, if applicable and noting whether the two are distinguishable on the DHR once adjudicated would have resulted in a higher rating.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety reported that results of the adjudication are recorded on the driver file but no documentation of the system for tracking administrative driver penalties and sanctions, demonstrating how administrative actions are filed and how the required penalties or sanctions are processed and tracked by the court was provided.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that all the traffic citations are stored in the statewide repository. Information is not stored in a separate system. Demographic information captured from the driver license when the citation was issued is recorded within that system and allows for querying traffic citations for juvenile offenders. Sufficient evidence was not provided.

Change Notes: Rating Unchanged.

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

The Commonwealth reported that the Administrative Office of the Courts (AOC) case management system, tracks all dismissals, and the AOC provides all this information. If the number of deferrals and dismissals had been provided by the AOC, this question would have received a higher rating.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported one provision that Kentucky allows violators to attend traffic school in lieu of penalties. A copy of the statute allowing this option was provided as an example.

Change Notes: Rating Improved.

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





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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety did indicate that there are processes for retaining, archiving, or purging citation records and they are defined and documented. However, they indicated that documentation is not available at this time.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that modifications to adjudication data may only be made by users with Circuit Court credentials. Official documentation from the AOC of the adjudication system's security protocols governing data access, modification, and release was not provided as evidence.

Change Notes: Rating Improved.
From 'Does Not Meet Advisory Ideal' to 'Partially Meets 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 Commonwealth reported that there is tracking of impaired driving data by the AOC but provided no information or documentation that it uses some or all the data elements or guidelines of NHTSA's Model Impaired Driving Records Information System (MIDRIS). This 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.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that the uniform citation in Kentucky was modified to include spaces for recording the blood alcohol content (BAC) or drug test results. While the Administrative Office of the Courts (AOC) case management system records the BAC associated with the citations, there was no mention of whether the drug test results are also recorded. The copy of the statute that was provided makes no mention of the drug test results.

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





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?*

Partially Meets Advisory Ideal

The Office of Highway Safety's response stated that the citation system does interface with the driver system. However, no further evidence or narrative documentation was provided to successfully assess if the interfaced information is used to help determine the applicable charges. Providing the identification of the portal and the data elements used could have resulted in a more favorable rating.

Change Notes: Rating Improved.

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported only that the citation system interfaces with the vehicle system. Without further documentation describing how the interfaced information is used to collect vehicle information and carry out administrative actions as well as the identification of the portal and the data elements used, it is not possible to make a more favorable rating.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that citation information is stored in the crash data system but did not clarify that citation system interfaces with the crash system, and how the citation system interfaces with the crash system to document violations and charges related to the crash.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that the Division of Driver Licensing within the Department of Vehicle Regulation operates the driver licensing system. The driver licensing system consumes information from the Administrative Office of the Courts to post dispositions to the driver records. It is not clear if this is a result of an adjudication interface from the information provided.

Change Notes: New Question.





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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety indicated that the statewide case system operated by the Administrative Office of the Courts does not keep details regarding vehicles. The connection between the adjudication and the vehicle systems is through the driver licensing system. The court sends case disposition information to the Driver's License System and drivers licensing personnel can then manage information concerning ignition interlock devices.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Office of Highway Safety described the current relationship between an officer, a crash, and related citation. Collision collection software allows the officer to associate a citation with a collision. If a traffic citation is issued in connection with a traffic collision, those citations are submitted to the Administrative Office of the Courts (AOC) and they are assigned to cases inside the statewide case system. The flow of information would be like this: crash collection by officer => officer writes a citation associated with the crash (association stored within the crash system) => citation sent to AOC => AOC assigns to case. The crash data dictionary shows the screen where the association between the collision and citation is recorded.

Change Notes: Rating Improved.

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

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 provided. A baseline of 2.73 days was referenced, but no explanation of what that is a baseline for.

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 Commonwealth reported an accuracy performance measure of 99.8% but no explanation of how this was calculated was provided.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

The Office of Highway Safety reported that, at present, no completeness performance measures tailored to the needs of citation systems managers and data users have been developed. They hope to develop them in the future.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The accuracy performance measure to address accuracy for the adjudication system with a baseline established of 99.8% is contained within the 2022-2026 Highway Safety Plan.

Change Notes: Rating Unchanged.

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 tailored to the needs of citation systems managers and data users have been developed. They hope to develop performance measures in the future.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Office of Highway Safety reported that the current response rate to queries is 100%, so no practical program to improve the rate is necessary. Without the identification of all the accessibility measures used, including the most current baseline and actual values for each, this could not be verified.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety indicated that there are performance metrics for timeliness, uniformity, and accessibility. In order to assess this performance measure, it requires examples of evidence of specific State-determined numeric goals associated with each performance measure in use. None were provided in response to this question.

Change Notes: New Question.





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

Meets Advisory Ideal

The Kentucky Office of Highway Safety provided a copy of their 2022-2026 Highway Safety Plan with a specific performance measure to address timeliness for the adjudication system. This is a good example for the type of evidence required.

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?*

Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that they have the accuracy performance measure to address accuracy for the adjudication system with a baseline established of 99.8% within their 2022-2026 Highway Safety Plan. It was submitted as evidence.

Change Notes: Rating Improved.

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

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

Meets Advisory Ideal

The Kentucky Office of Highway Safety reported a completeness performance measure tailored to the needs of adjudication systems managers and data users within their 2022-2026 Highway Safety Plan and presented the documentation evidence in support. The intended performance measure to address completeness for the adjudication system baseline is established as 99.7%.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

The Office of Highway Safety reported that, at this time, there is not an established or planned performance measure identified at this time for addressing the uniformity of the adjudication system.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

The Office of Highway Safety did not identify any specific integration performance measures tailored to the needs of adjudication systems managers and data users. They reported that efforts continue to update comprehensive data dictionaries to improve integration.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety reported that, at this time, there are no accessibility performance measures tailored to the needs of adjudication systems managers and data users. They reported that they hope to develop performance measures in the future.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety indicated that they do not yet have numeric metrics for all areas but intend to in the future.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety reported that there is not a standalone DUI tracking system.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Kentucky Office of Highway Safety reported that there is not a scheduled audit process.

Change Notes: New Question.

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

Partially Meets Advisory Ideal

The Kentucky Office of Highway Safety reported that progress on performance measures is reported to the TRCC in an Annual Report. The Commonwealth did not provide a copy or sample of the report.

Change Notes: New Question.





Injury Surveillance System

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

Partially Meets Advisory Ideal

The respondent identified the Kentucky Injury Prevention and Research Center (KIPRC) as the entity who quantifies the burden of injury related to motor vehicle crashes. The document that has been shared only lists motor vehicle crashes as a focus area. Because the document does not demonstrate the use of data, such as EMS, emergency department, hospital discharge, trauma registry, or vital records databases it is unknown if KIPRC calculates statistics for the Commonwealth or if it conducts its own motor vehicle crash research.

Change Notes: New Question.

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

Does Not Meet Advisory Ideal

There are no other databases used to quantify the burden of motor vehicle crashes in Kentucky.

Change Notes: Rating Changed.

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

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

Meets Advisory Ideal

TRA-2022-IS Kentucky Revised Statutes - Chapter 216 allows for the sharing of data with appropriate confidentiality agreements.

Change Notes: New Question.

Emergency Medical Systems (EMS) Description and Contents

240. *Is there a statewide EMS database?*

Partially Meets Advisory Ideal

The Kentucky Board of Emergency Medical Services maintains the commonwealth-wide EMS database, the Kentucky State Ambulance Reporting System (K-STARS).

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The 2020 EMS Annual Report was provided as evidence of EMS data being used to track the frequency, severity, and nature of injury related to motor vehicle crashes. While the report





provides data on the frequency of crashes and people involved, it does not discuss the severity nor nature of injuries.

Change Notes: Rating Changed.

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

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

Meets Advisory Ideal

The EMS data has been requested, obtained, and used by the Kentucky Injury Prevention and Research Center at the University of Kentucky. Analyses were presented in the 2020 annual report of the Kentucky Board of Emergency Medical Services.

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

K-STARS is NEMSIS version 3.5 compliant.

Change Notes: Rating Unchanged.

EMS – Data Dictionary

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

Meets Advisory Ideal

The EMS System, K-STARS, has a data dictionary.

Change Notes: Rating Unchanged.

EMS – Procedures & Processes

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

Meets Advisory Ideal

The Kentucky Board of EMS collects and compiles the EMS data from local agencies.

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 EMS data is available to external users through an Open Records Request. The 2020 EMS Annual Report provides the number of requests KBEMS responded to.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The respondent provided regulatory material that authorizes the Kentucky Board of Emergency Medical Services to promulgate administrative regulations requiring ambulance services to furnish EMS information to the Board and authorizes the Board to require the collection and submission of EMS data. However, no description or documentation of the actual procedures in place for such submissions was provided.

Change Notes: Rating Changed.

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

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

Meets Advisory Ideal

All EMS records submitted to the Kentucky State Ambulance Reporting System (KSTARS) must pass a minimum validation test. If a record does not pass validation, it is rejected and the submitting EMS agency must monitor the status of imported records. Agencies using the KSTARS program for direct data entry have additional, logical, validation rules they must meet. Rather than being "returned," records that fail the validation tests are "rejected."

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?*

Does Not Meet Advisory Ideal

The narrative and support documentation submitted by the Commonwealth pertain to automated edit checks and validation rules for the processing of outpatient records submitted by hospitals and ambulatory care facilities. No narrative or documentation were offered that describe the process by which automated edit checks and validation rules ensure that submitted EMS data falls within the range of acceptable values and is logically consistent among fields. The IPOP manual referenced in the response is for the Inpatient Outpatient Data System and does not appear to contain validation rules or edit checks for the EMS data system.

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?*

Partially Meets Advisory Ideal

The responsibility for monitoring the status of rejected records falls to the submitting agency. No information as to whether the Commonwealth also monitors the resubmission of rejected records was provided.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The 2017-2021 and 2022-2026 Traffic Records Strategic Plans both provide a timeliness measure. The 2017-2021 Plan measured the percent of all call records received by the reporting deadline (99.6% in 2016). The 2022-2026 Plan noted the percent of call records submitted within 72 hours (66% in 2016), which is the Commonwealth's new preferred measure. The evidence presented suggests that these measures, although potentially useful, have not been updated since 2016. It also was not clear whether the measures were collected at the level of individual EMS systems and reported back to those systems' managers.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially 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 percent of EMS records with no errors in a critical data element (occupant restraint usage or other data element). The baseline given shows 89% report occupant restraint. Because occupant restraint only applies to a fraction of all EMS run it is not clear how this performance measure is tailored to the needs of the data owner. It is also not clear how reporting occupant restraint usage automatically implies that it is accurate. This performance measure could be considered for tracking completeness.

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

The Completeness Performance Measure is validity score point value, with a baseline measure of 80.4.

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 2017-2021 Plan defined a uniformity measure: the percent of records in the Kentucky Emergency Medical Services Information System (KEMSIS) that are NEMSIS-compliant. Since all EMS records in this system must pass through the national Schematron validation of process prior to being accepted, passing Schematron validation ensures 100% NEMSIS-compliance uniformity across the national mandatory elements in KEMSIS.

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

The 2017-2021 Plan defined the data integration performance measure as establishing connectivity between the EMS records and the Trauma Registry, enabling EMS records to be matched to and incorporated with hospital trauma patient records. The 2022-2026 Plan adopted the same measure and hoped that funding would become available to begin a feasibility study of such a process. As such a study would discover, matching and merging records is a challenging technical task that, in part, depends for success on the quality of the reported identifying data. Data integration is an outcome with varying success rates. A useful measure of integration is more likely to be the number of records that actually find a match as a percent of all records that logically should have a match. Computing this metric at the levels of EMS agencies and hospital trauma centers will provide useful variation for local program managers seeking data quality improvements.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

There are plans to develop data sharing agreements to increase the accessibility of the EMS data system but no accessibility performance measures were provided.

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 established for timeliness, accuracy, completeness, and uniformity.

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?*

Does Not Meet Advisory Ideal

Quality control reviews of the EMS data system are not regularly conducted.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Comparative and trend analyses of the EMS data are not conducted.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Kentucky does not actively solicit feedback from the major users of EMS data.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

EMS data quality reports are not regularly produced nor shared with the TRCC.

Change Notes: Rating Unchanged.

Emergency Department - System Description

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

Meets Advisory Ideal

The Cabinet for Health and Family Services (CHFS) is responsible for collecting and compiling the Kentucky Health Facility and Services data, which includes both the Inpatient and Outpatient data sets.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

From the information provided, it is clear the outpatient data provides the ability to track the frequency, nature, and severity of injuries related to motor vehicle crashes. Evidence that this activity is taking place was not provided.

Change Notes: Rating Changed.

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





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

Partially Meets Advisory Ideal

The response indicates that the emergency department database is available but does not provide examples of how it has been used to identify problems, evaluate programs, or allocate resources.

Change Notes: Rating Changed.

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

Emergency Department – Data Dictionary

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

Meets Advisory Ideal

The outpatient database has a data dictionary, which was provided as evidence.

Change Notes: Rating Unchanged.

Emergency Department – Procedures & Processes

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

Meets Advisory Ideal

The Kentucky Hospital Association collects and compiles emergency department visits.

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

The outpatient database is available to outside researchers, who can submit a data request to the Office of Health Data and Analytics, Division of Analytics. Full data sets can also be requested through the Public Use Dataset Online Request Form or directly from the Cabinet for Health and Family Services.

Change Notes: Rating Unchanged.

Hospital Discharge – System Description

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

Meets Advisory Ideal

The Cabinet for Health and Family Services collects and compiles the Kentucky Health Facility and Services data, which contain the inpatient database.

Change Notes: Rating Unchanged.





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

Does Not Meet Advisory Ideal

A proposal to establish the Kentucky Occupational Motor Vehicle Injury Surveillance (OMVIS) program has been submitted. This program will use hospital discharge data integrated with several other data systems to establish comprehensive surveillance of work-related motor vehicle crashes and resulting injuries. Tracking of the frequency, nature, and severity of motor vehicle crashes using the inpatient database is not taking place.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

The response indicates the inpatient database is available for analysis but no examples of how it was used to identify problems, evaluate programs, or allocate resources have been provided.

Change Notes: Rating Changed.

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

Hospital Discharge – Data Dictionary

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

Meets Advisory Ideal

The hospital inpatient database has a formal dictionary, which was provided as evidence.

Change Notes: Rating Unchanged.

Hospital Discharge – Procedures & Processes

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

Meets Advisory Ideal

The Kentucky Hospital Association collects data from hospital discharge records from individual hospitals.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

No evidence was provided that aggregate hospital discharge data is available to universities, traffic safety professionals, and others for analytical purposes.

Change Notes: Rating Changed.

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





Emergency Department and Hospital Discharge – Guidelines

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

Does Not Meet Advisory Ideal

Both the outpatient and inpatient files contain the information to derive AIS and ISS. Evidence that this is happening was not provided.

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 Kentucky Inpatient and Outpatient Data Collection System's Data Coordinator's Manual contains details regarding procedures for submitting and error checking.

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

The data submission manual for the Kentucky Inpatient and Outpatient Data Collection System (KY IPOPOP) lists the automated edit checks and validation rules that are applied to submitted data.

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

Data submitters receive notification of records with errors and diagnostic codes that describe those errors. The data submitters may enter corrections to individual records using a real-time edit process accessed through a secure interface with the submission website. Alternatively, data submitters may recreate the data submission and resubmit the data batch.

Change Notes: Rating Improved.

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





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

Does Not Meet Advisory Ideal

The performance measure provided in the response is related to the EMS data system. Timeliness performance measures for the hospital data were not provided.

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

The responses reference performance measures for the trauma registry rather than either the outpatient or inpatient data sets.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The responses reference the trauma registry rather than either the outpatient or inpatient data systems.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The responses reference the trauma registry rather than the Inpatient and Outpatient Data Collection System.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

There are no integration performance measures for the Inpatient and Outpatient Data Collection System.

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

The responses reference the trauma registry rather than the Inpatient and Outpatient Data Collection System.

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

The responses reference the trauma registry rather than the Inpatient and Outpatient Data Collection System.

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?*

Does Not Meet Advisory Ideal

It was reported that data quality is tracked for the Inpatient Outpatient Data Collection System but the only injury surveillance data systems addressed in the attached document were the EMS and Trauma Registry.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

Information regarding a process for gathering feedback from users of the Inpatient and Outpatient data was not provided.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Data quality management reports on emergency department and hospital discharge data are not produced regularly, nor are any such reports made available to the TRCC

Change Notes: Rating Unchanged.

Trauma Registry – System Description

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

Meets Advisory Ideal

The Kentucky Trauma Registry is fully described in its 2020 Annual Report, written by the Kentucky Injury Prevention and Research Center (KIPRC).

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

The Trauma Registry tracks the frequency of motor vehicle crash cases but not the severity or nature of injuries.

Change Notes: Rating Improved.

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

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

Partially Meets Advisory Ideal

The Kentucky Trauma System Evaluation 2016 used Trauma Registry data to examine disparity in motor vehicle crash death rates related to trauma center designations. The report was described in the response and attached to the 2017 Assessment. An example of the Trauma Registry being used in this fashion in the past five years was not provided or described.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially 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 Trauma Registry adheres to the National Trauma Data Standard.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

While the response appears to reference the death certificates file, AIS and ISS are listed elements in the Trauma Registry Data Dictionary which was provided for a different question.

Change Notes: Rating Unchanged.

Trauma Registry – Data Dictionary

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

Meets Advisory Ideal

The trauma registry database has a formal dictionary, which was provided as evidence.

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?*

Partially Meets Advisory Ideal

It was reported that aggregate trauma registry data is available to outside parties "via request to KIPRC." An annual report, written by the Kentucky Injury Prevention and Research Center and containing aggregate data, was provided. No description was provided of the procedure that a researcher might use to request custom aggregate trauma registry data for particular analyses.

Change Notes: Rating Changed.

From 'Meets Advisory Ideal' to 'Partially 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)?*

Meets Advisory Ideal

Trauma centers are notified of rejected submissions and are required to fix the errors and resubmit.

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

Trauma centers are notified of rejected submissions and are required to fix the errors and resubmit.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

While not referenced in the response, the 2022 Strategic Plan states the timeliness performance measure is the percent reporting trauma data by the deadline. The numeric goal is 95 percent with the baseline rate being 82 percent. It is not clear if the this measure applies to trauma centers, file submissions, or individual records. The reporting deadline is also not provided.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

While not specifically stated in the response, the 2022 Strategic Plan states the the goal is to reduce the number of errors by registrars and trauma staff. The plan is to accomplish the goal through





increased training. A performance measure should be a tool used to gauge the performance of a specific system. One example of a way to rephrase this performance measure would be to assess the error rate on critical fields such as cause codes, personal identifiers needed for billing or linkage, or vital signs and other fields needed to assess the performance of the trauma system. Training is a means for improving data quality but does not directly gauge the performance of the trauma registry data system. For examples of performance measures for each data system please see NHTSA's Model Performance Measures for State Traffic Records Systems.

Change Notes: Rating Changed.

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

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

Partially Meets Advisory Ideal

The responses state the goal is to increase the types of centers providing data. The Strategic Plan indicates the goal is to increase the number of trauma cases (note that experiencing more crashes will increase trauma cases without adding more centers). NHTSA's Model Performance Measures for State Traffic Records Systems may be helpful in deriving a performance measure that synthesizes these two ideas.

Change Notes: Rating Changed.

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

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

Does Not Meet Advisory Ideal

The response did not provide any evidence of having defined and used a performance measure of the degree to which Trauma Registry records uniformity conform to a national standard. In this case, that would be conformity to the National Trauma Data Standard.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

The Commonwealth is in the planning and experimentation stage of developing robust data integration processes. Consequently, it has not yet developed measures of the success with which eligible Trauma Registry records are linked to another dataset, such as Crash or EMS records. Current work on the Kentucky Occupational Motor Vehicle (OMV) Injury Surveillance (OMVIS) program will find such measures helpful for assessing the effectiveness of alternative data integration methodologies.

Change Notes: Rating Improved.

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





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

Does Not Meet Advisory Ideal

The Strategic Plan lists the accessibility performance measure to be to increase the number of users of the trauma registry. The baseline number of users is not included in the measure making it hard to track improvements.

Change Notes: Rating Unchanged.

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

Partially Meets Advisory Ideal

A numeric goal has been established for timeliness but not the other performance areas.

Change Notes: Rating Unchanged.

304. *Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the trauma registry?*

Meets Advisory Ideal

The Commonwealth conducted an extensive review of its quality control measures and procedures for key data systems, including its Trauma Registry. The review was documented in "2021 Progress Reports for Databases in the 2018-2021 Traffic Records Improvement Plan."

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

Informal means are used for receiving data quality feedback from users. A formal process is not in place.

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

Trauma Registry data quality management reports are not shared with the TRCC.

Change Notes: Rating Unchanged.





Vital Records – System Description

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

Meets Advisory Ideal

Kentucky has a commonwealth-wide vital records database. The mortality data are used in the Kentucky Injury Indicators report.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The vital records database is used to track the frequency of motor vehicle fatalities. The report "Kentucky Injury Indicators" uses mortality data to put motor vehicle-related deaths in the context of other causes of death and as crude rates, by age and sex groupings.

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

309. *Is the vital records data available for analysis and used to identify problems, evaluate programs, and allocate resources?*

Partially Meets Advisory Ideal

The Kentucky Injury Prevention and Research Center (KIPRC), in collaboration with the Kentucky Department for Public Health, receives analytic copies of the death certificates files, produces mortality reports, and responds to ad hoc data requests. Aggregate mortality tables can also be produced using online interactive query systems, such as the Center for Disease Prevention and Control's WISQARS and WONDER web query systems. While the KIRPC and other groups may use the mortality data to identify problems, evaluate programs, and allocate resources, no evidence of that was offered.

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

The vital records data system has a formal data dictionary.

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

Requests for vital records data may be submitted to the Kentucky Department for Public Health Vital Statistics Office.

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?*

Partially Meets Advisory Ideal

Several edit checks and validation rules are written into the electronic system. A compiled list of all data specifications has not been created.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The response indicates that quality reviews of the vital records system are conducted. A narrative description or reports from the reviews were not provided.

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

Data quality management reports from the vital records system are not provided to 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

The response indicates that there are efforts to link the crash data to the EMS and trauma registry databases. Please note the Advisory makes a distinction between integration (linkage of databases)





and an interface. An interface is a standing or real-time relationship between datasets and a high degree of system interoperability. An interface between the EMS and Trauma Registry data systems was not described.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The response indicates there are efforts to link the EMS and trauma registry data. Note the Advisory makes a distinction between an interface and integration (linkage). An interface between the EMS and trauma registry data systems was not described.

Change Notes: Rating Unchanged.

Data Use and Integration

317. *Do behavioral program managers have access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation?*

Meets Advisory Ideal

The Commonwealth is funding a project at the University of Kentucky's Kentucky Transportation Center (KYTC) that is applying analyses of Crash data to identifying locations in need of behavioral programs (educational and enforcement improvements) and/or engineering initiatives. This project, the Combined Behavioral/Engineering Approach to Preventing Highway Fatalities, will deliver a final report describing the analytic methodology it is developing.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Kentucky does not have a data governance process.

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?*

Partially Meets Advisory Ideal

Kentucky provided a description of the OMVIS program (Occupational Motor Vehicle Injury Surveillance), which will develop linkage methods and processes among emergency department, inpatient hospitalization, trauma registry, workers' compensation, emergency medical services, and crash reports. While this is an ambitious data integration effort, the Commonwealth did not describe any role played by its TRCC. Programs like OMVIS are enabled by facilitating developments in data governance, access, and security policies. The TRCC is in a position to encourage and facilitate such developments. Note that there are several areas in Kentucky's 2022 Strategic Plan that discuss integration goals and efforts.

Change Notes: Rating Changed.

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





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

Does Not Meet Advisory Ideal

There is an interface between the crash and driver data systems to facilitate data entry but an integration of the two data systems that enables analyses does not exist.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

The Commonwealth's vehicle data is integrated with its crash system's data entry but linked records are not available for analyses. This suggests that the crash data system has an interface with vehicle data during data entry but is not integrated with vehicle data for analyses.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

The crash and roadway files are integrated based on route and mile marker. A report evaluating the Strategic Highway Investment Formula for Tomorrow (SHIFT) was provided as evidence.

Change Notes: Rating Unchanged.

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

Does Not Meet Advisory Ideal

Kentucky does not have integrated citation/adjudication and crash data, although a new project has been proposed to accomplish that data integration.

Change Notes: Rating Unchanged.

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

Meets Advisory Ideal

A project by the Universities of Louisville and Kentucky has developed record linkage methodologies and processes that integrate crash, trauma registry, and EMS data. Another project is integrating crash data with injury surveillance data (emergency department and inpatient hospitalization records, trauma registry data, and emergency medical services' patient care reports) for the specific purpose of describing and investigating occupational motor vehicle crash-related injuries.

Change Notes: Rating Unchanged.





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

Meets Advisory Ideal

In addition to the report demonstrating the integration of crash, EMS, and Trauma Registry data, a report using integrated crash, roadway, and hospital data to assess the effect of cable median barriers was provided.

Change Notes: Rating Improved.

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

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

Does Not Meet Advisory Ideal

Kentucky does not have any data integration programs that do not involve crash data. All of its past and present data integration programs are built around the police-reported crash data.

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?*

Meets Advisory Ideal

The Kentucky Transportation Center enhanced the Crash Data Analysis Tool (CDAT) with the addition of integrated roadway data and reporting capabilities to create the public and private-facing data portal CDAT 2.0. A detailed user's manual was provided.

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?*

Does Not Meet Advisory Ideal

The Kentucky Transportation Center at the University of Kentucky offers a data request service. The service is available to anyone and is said to include data integration work. However, the data request summary provided does not address the availability of integrated data. No information was provided on which datasets can be or are integrated and available. No information was provided on user-friendly access tools for analyses using integrated datasets.

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
S2S	AAMVA's State to State 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

ADD	Area Development Districts
AOC	Administrative Office of the Courts
AVIS	Automated Vehicle Information System
CDAT 2.0	Crash Data Analysis Tool
CHFS	Cabinet for Health and Family Services
COT	Commonwealth Office of Technology
CREV	Critical Rates for Evaluation Sections
DMB	Data Management Branch
GRP	Guardrail Rating Program
HIS	Highway Information System
IPOP	Kentucky Inpatient Outpatient data system
KAVIS	Kentucky Vehicle Identification System
KIPRC	Kentucky Injury Prevention Research Center
KOHS	Kentucky Office of Highway Safety
KSP	Kentucky State Police
K-STARS	Kentucky State Ambulance Reporting System
KTC	Kentucky Transportation Center
KTR	Kentucky Trauma Registry
KTRAC	Kentucky Traffic Records Advisory Committee
KTSWDS	Kentucky Traffic Safety Data Service
KyOPS	Kentucky Open Portal System
KYTC	Kentucky Transportation Cabinet
OIT	Office of Information Technology
OMVIS	Occupational Motor Vehicle Injury Surveillance
SHIFT	Strategic Highway Investment Formula for Tomorrow
TED	Transportation Enterprise Database

