

# Commonwealth of Kentucky

Traffic Records Assessment

June 16, 2017

National Highway Traffic Safety Administration Technical Assessment Team



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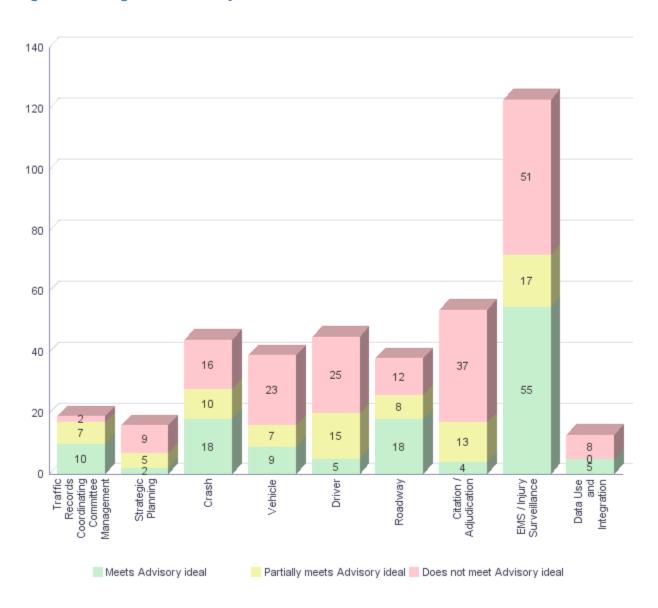


# **Executive Summary**

Out of 391 assessment questions, Kentucky met the Advisory ideal for 126 questions (32.2%), partially met the Advisory ideal for 82 questions (21%), and did not meet the Advisory ideal for 183 questions (46.8%).

As Figure 1 illustrates, within each assessment module, Kentucky met the criteria outlined in the *Traffic Records Program Assessment Advisory* 52.6% of the time for Traffic Records Coordinating Committee Management, 12.5% of the time for Strategic Planning, 40.9% of the time for Crash, 23.1% of the time for Vehicle, 11.1% of the time for Driver, 47.4% of the time for Roadway, 7.4% of the time for Citation / Adjudication, 44.7% of the time for EMS / Injury Surveillance, and 38.5% of the time for Data Use and Integration.

Figure 1: Rating Distribution by Module







**Figure 2: Assessment Section Ratings** 

	Crash	Vehicle	Driver	Roadway	Citation / Adjudication	EMS / Injury Surveillance
Description and Contents	83.3%	100.0%	60.0%	93.3%	59.6%	82.4%
Applicable Guidelines	100.0%	54.5%	100.0%	66.7%	64.9%	87.7%
Data Dictionaries	60.0%	66.7%	50.0%	66.7%	42.9%	90.0%
Procedures / Process Flow	77.1%	66.7%	53.9%	100.0%	39.5%	90.2%
Interfaces	46.7%	51.5%	57.1%	91.7%	33.3%	33.3%
Data Quality Control Programs	60.1%	39.0%	42.7%	51.9%	38.5%	52.6%
Overall	68.7%	54.1%	52.1%	72.7%	46.0%	69.1%

	Overall
Traffic Records Coordinating Committee Management	80.0%
Strategic Planning for the Traffic Records System	52.4%
Data Use and Integration	59.6%

#### Recommendations

Figure 2 shows the aggregate ratings by data system and assessment module. Each question's score is derived by multiplying its rank and rating (very important = 3, somewhat important = 2, and less important = 1; meets = 3, partially meets = 2, and does not meet = 1). The sum total for each module section is calculated based upon the individual question scores. Then, the percentage is calculated for each module section as follows:

$$Section \ average \ (\%) = \frac{Section \ sum \ total}{Section \ total \ possible}$$

The cells highlighted in red indicate the module sub-sections that scored below that data system's weighted average. The following priority recommendations are based on improving those module subsections with scores below the overall system score.

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."





Kentucky can address the recommendations below by implementing changes to improve the ratings for the questions in those section modules with lower than average scores. Kentucky can also apply for a NHTSA Traffic Records GO Team, for targeted technical assistance.

# **Strategic Planning Recommendations**

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

## **Crash Recommendations**

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

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

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

## **Vehicle Recommendations**

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

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

## **Driver Recommendations**

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

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

# **Roadway Recommendations**

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

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

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





# **Citation / Adjudication Recommendations**

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

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

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

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

# **EMS / Injury Surveillance Recommendations**

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

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

# **Data Use and Integration Recommendations**

Improve the traffic records systems capacity to integrate data to reflect best practices identified in the Traffic Records Program Assessment Advisory.





#### Introduction

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. These components address driver demographics, licensure, behavior and sanctions; vehicle types, configurations, and usage; engineering, education, enforcement measures; crash-related medical issues and actions; and how they affect highway traffic safety.

Quality traffic records data exhibiting the six primary data quality attributes—timeliness, accuracy, completeness, uniformity, integration, and accessibility—is necessary to improve traffic safety and effectively manage the motor vehicle transportation network, at the Federal, State, and local levels. Such data enables problem identification, countermeasure development and application, and outcome evaluation. Continued application of data-driven, science-based management practices can decrease the frequency of traffic crashes and mitigate their substantial negative effects on individuals and society.

State traffic records systems are the culmination of the combined efforts of collectors, managers, and users of data. Collaboration and cooperation between these groups can improve data and ensure that the data is used in ways that provide the greatest benefit to traffic safety efforts. Thoughtful, comprehensive, and uniform data use and governance policies can improve service delivery, link business processes, maximize return on investments, and improve risk management.

Congress has recognized the benefit of independent peer reviews for State traffic records data systems. These assessments help States identify areas of high performance and areas in need of improvement in addition to fostering greater collaboration among data systems. In order to encourage States to undertake such reviews regularly, Congress' Moving Ahead for Progress in the 21st Century (MAP-21) 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.

# **Background**

In 2012, the National Highway Traffic Safety Administration published an updated *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, including: State highway safety offices, the Governors Highway Safety Association (GHSA) and the Association of Transportation Safety Information Professionals (ATSIP), as well as staff from NHTSA, FMCSA, and FHWA. The *Advisory* provides information on the contents, capabilities, and data quality of effective traffic records systems by describing an ideal that supports quality data driven decisions and improves highway safety. 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 designed to be 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 a given State.

# **Methodology**

A State initiates the assessment process by submitting a formal request to its NHTSA Regional Administrator. Once that request is passed onto the NHTSA National Center for Statistics and Analysis Traffic Records Team, it appoints an assessment facilitator to work with the State Governor's Representative to identify a State assessment coordinator and appropriate State respondents for each assessment question. Respondents enter the data into NHTSA's State Traffic Records Assessment Program (STRAP), the Web-based application for the assessment. 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 3. Actual schedules can vary as dates may be altered to accommodate State-specific needs.

**Figure 3: Traffic Records Assessment Time Table** 

Upon NHTSA	TR Team receipt of request	Initial pre-assessment conference call			
1 month prior to kickoff meeting		Facilitator introduction pre-assessment conference call			
Between facili	tator conference call and	State Coordinator assigns questions, enters contact information into STRAP, and builds initial document library			
	Monday, Week 1	On-site kickoff meeting			
	Tuesday, Week 1 – 12pm EST, Friday, Week 3	Round 1 Data Collection: State answers standardized assessment questions			
nt	Friday, Week 3 – Wednesday, Week 5	Round 1 Analysis: Assessors review State answers and rate the responses and request necessary clarifications			
Assessment	Thursday, Week 5 – 12pm EST, Friday, Week 7	Round 2 Data Collection: State responds to the assessors' initial ratings and requests for more information and clarification			
Friday, Week 7 – Wednesday, Week 9		Round 2 Analysis: Assessors review additional information from the State and, adjust initial ratings			
As	Thursday, Week 9 – 12pm EST, Friday, Week 11	Round 3 Data Collection: State provides final response to the assessors' ratings			
	Friday, Week 11 – Monday, Week 13	Round 3 Analysis: make final ratings			
	Tuesday, Week 13 – Monday, Week 14	Facilitator prepares final report			
Week 15		NHTSA delivers final report to State and Region			
(After complete	tion of assessment)	NHTSA hosts webinar to debrief State participants			
(After comple	tion of assessment)	(OPTIONAL) State may request GO Team assistance			





Following a kickoff meeting that explains the assessment process, schedule, and confirms question assignments, each respondent is sent an email with a token enabling them to log onto STRAP and answer assessment questions that had been assigned to them. The respondents may (a) answer a question, (b) answer the question and refer that question to another person to answer it as well, (c) refer the question—decline the question and send the question to someone else to answer—or (d) decline the question.

The traffic records assessment is an iterative process that includes three question-answer cycles. In each, State respondents have the opportunity to answer each question assigned to them before the assessors examine their answers and supporting evidence, at which point the assessors rate each response. The second and third question and answer cycles are used to clarify responses and provide the most accurate rating for each question. In an attempt to prioritize the capabilities of each system being assessed, each question is ranked as "very important," "somewhat important" or "less important." To assist the State in responding to each question, the *Advisory* also provides State respondents with standards of evidence that identify the specific information necessary to answer each assessment question.

Figure 4: State Schedule for the Traffic Records Assessment

Kickoff	March 07, 2017
Begin first Q&A Cycle	March 07, 2017
End first Q&A Cycle	March 31, 2017
Begin second Q&A Cycle	April 13, 2017
End second Q&A Cycle	April 28, 2017
Begin third Q&A Cycle	May 11, 2017
End third Q&A Cycle	May 26, 2017
Assessors' Final Results Complete	June 07, 2017
Final Report Due	June 20, 2017
Debrief	June 26, 2017

A group of qualified independent assessors rates 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.

In order for NHTSA to accept and approve an assessment each question must have an answer. When appropriate, however, a State may answer questions with "no, we do not have this capability/use this practice" 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 grant funds.

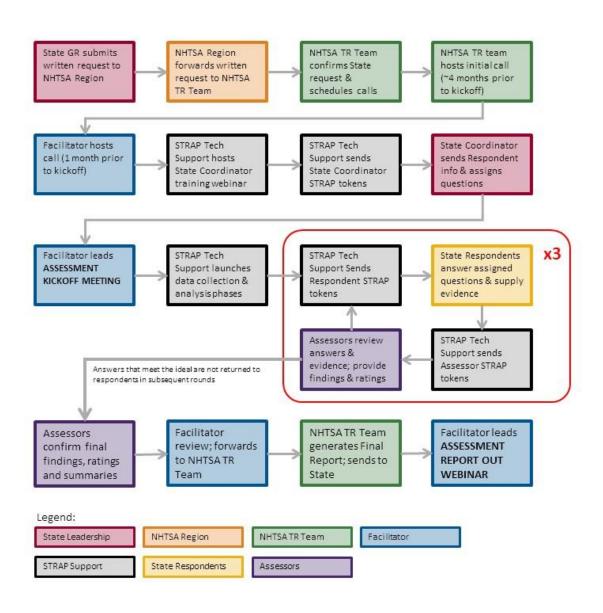




The complete traffic records assessment process is outlined in Figure 5 below.

States are encouraged to use the conclusions of this report as a basis for the State data improvement program strategic planning process, and are encouraged to review the conclusions at least annually to gauge how the State is addressing the items in this report. NHTSA can provide support in addressing these conclusions by means of GO Teams. NHTSA's Traffic Records GO Team program helps States improve their traffic records systems by deploying teams of subject matter experts to deliver tailored technical assistance and training based on States' actual needs.

**Figure 5: State Traffic Records Assessment Process** 







# **Results**

For each question, a rating was assigned based on the answers and supporting documentation provided by the State. The ratings are shown as three icons, depicting 'meets', 'partially meets', or 'does not meet'.

## Legend:







Meets

Partially meets

Does not meet



# **Traffic Records Coordinating Committee Management**

The Commonwealth of Kentucky TRCC is identified as the Kentucky Traffic Records Advisory Committee (KTRAC). Although KTRAC membership includes both executive and technical level members, the organizational structure does not support a formal two-tier structure. The current high level Traffic Records Strategic Plan (TRSP) is included in the Kentucky Strategic Highway Safety Plan (SHSP). Kentucky is in the process of developing a much more detailed standalone TRSP, and along with the effort, is planning KTRAC organizational changes. The changes lay out a more defined TRCC with both/separate executive and technical groups.

The KTRAC meets on regular basis and is supported by a Charter. The make-up of the KTRAC is broad-based and includes all core data systems as well as local agency representation. KTRAC also includes IT members from their respective agencies. These individuals provide IT insight and technical expertise regarding project planning and implementation. They also have access to resources within the Kentucky Commonwealth Office of Technology and reach out to them if more information is needed.

It appears, overall, that the KTRAC is functioning well and providing coordination of Kentucky's core data systems. There are several areas in which change could help to further facilitate improvement:

Although the KTRAC Charter appears to be up to date and covers most aspects of coordination, it does not include a supporting Memo of Understanding or signature page detailing its periodic update and approval. As the new TRSP is developed and the KTRAC responsibilities are being reviewed and updated, this would be an excellent opportunity to improve the credibility and authority of the KTRAC with an updated charter including a formal approval process.

Kentucky recently completed an assessment of the current state of its traffic records databases. As part of the effort an assessment document was prepared. The document is an excellent start in developing a formal traffic records inventory. The State is encouraged to build on the document to include information about each system, such as, the custodian, contact information, system accessibility, and documentation. By consolidating the discrete systems documentation maintained by custodial agencies into a coherent whole, the KTRAC-maintained traffic records inventory can improve accessibility and analysis for all stakeholders. Aside from the obvious information technology benefits of a Traffic Records Inventory, full knowledge and understanding of the data, its uses, the circumstances of its collection and its accessibility help to encourage interactions between data analysts, data users, and those whose jobs are related to traffic safety.

The KTRAC should consider a more active role in the identification, funding, development, prioritization, and implementation of traffic records improvement projects. For example, when a custodial agency considers making changes to its traffic records-related systems, the KTRAC should be briefed so it can assess potential impacts on other systems and identify potential opportunities to leverage investments. This could be a provision of the updated strategic plan and development of a more defined and separate technical and executive level committees.

Although the new strategic plan appears to be making good progress toward identifying core system performance measures and monitoring their progress, the KTRAC is encouraged to





leverage its collaborative efforts to ensure that all components of the TRS are supported by formal data quality management programs. Quality management should be further enhanced by the development of performance measures that serve to alert collectors, users and managers of the data to system degradation or improvement. Such measures are important means of ensuring that data quality is a focus of the KTRAC and help to inform all those who deal with traffic records data of the positive effects of performance measurement. Measures should be developed that are specific to the State's areas of focus, whether it's accuracy or completeness of data or some other aspect. Each of these measures can be used in a variety of ways. Completeness can measure the individual reports that the State receives and it can measure the completeness of the file as a whole. When it becomes difficult to submit a report due to an incomplete data element, it occasionally happens that the report is not amended or corrected, and consequently never submitted. In that regard, the records that are submitted may rank highly in completeness, but the dataset itself may not be complete.

Measures help to focus on data improvement by setting goals, fostering friendly competition among agencies, and encouraging those involved when they see their progress. Good measures also help to demonstrate effects of new projects, legislative enactments and mandates, and policy shifts. As such, they often provide justification for funding, changes in the law where needed, and changes in manpower allocation. The NHTSA Model Performance Measures for State Traffic Records Systems document is a good resource for considering and implementing measures for all the traffic records datasets and can be found at http://www-nrd.nhtsa.dot.gov/Pubs/811441.pdf.

#### Question 1:

Does the State have both an executive and a technical TRCC?

#### Standard of Evidence:

Provide a charter and/or MOU. Also provide a roster with all members' names, affiliations, and titles for both the executive and technical TRCC.



Question Rank: Very Important

#### **Assessor conclusions:**

The Commonwealth of Kentucky TRCC is identified as the Kentucky Traffic Records Advisory Committee (KTRAC). The KTRAC Charter and membership list were provided. Responses indicate the KTRAC includes both technical and executive level members. However, it does not appear the KTRAC includes a formal executive and technical level organizational structure. The State is currently involved in developing a stand alone Traffic Records Strategic Plan. In the past, the Traffic Records Strategic Plan has been included in the Kentucky Strategic Highway Safety Plan (SHSP). It was reported that the new plan, lays out a more defined TRCC with both/separate executive and technical groups.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%





#### Question 2:

Do the executive TRCC members have the power to direct the agencies' resources for their respective areas of responsibility?



## Standard of Evidence:

Provide a charter and/or memorandum of understanding (MOU). Also provide a roster with all members' names, affiliations, and titles for the executive TRCC.

Question Rank: Very Important

#### **Assessor conclusions:**

The Kentucky Traffic Records Advisory Committee (KTRAC) charter does not explicitly detail the development of an executive-level TRCC. As stated by the respondents, the new TR Strategic Plan will include a plan for the development of both a technical level and executive level TRCC. The Governor's Executive Committee on Highway Safety will still play a role with the Kentucky Office of Highway Safety in steering the efforts of the TRCC. The Strategic plan will include position descriptions and responsibilities for the executive committee. Currently executive members of the KTRAC meet independently to provide some influence on the direction of the agencies' resources for their respective areas of responsibility.

Respondents	2	Responses	2	Response	100%
assigned	2	received		rate	100 /0

#### Question 3:

Does the executive TRCC review and approve actions proposed by the technical TRCC?



#### Standard of Evidence:

Provide a narrative example of recent actions or programs approved by the executive TRCC (e.g., an approved project or funding proposal).

Question Rank: Very Important

#### Assessor conclusions:

The Kentucky Traffic Records Advisory Committee (KTRAC) charter does not explicitly detail the development of an executive-level TRCC. As part of the process of developing the stand alone Traffic Records Strategic Plan, formation of the executive and technical levels within the TRCC is being developed. While Kentucky does have a process in place for review and approval of traffic records projects, the nature of the quasi-executive level TRCC precludes the State's ability to have such a group approve actions proposed by a technical level TRCC.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 4:

Does the TRCC include representation from the core data systems at both the executive and technical levels?



#### Standard of Evidence:

Identify the executive and technical TRCC members that represent the core data systems: crash, driver, vehicle, roadway, citation and adjudication, and injury surveillance.

Question Rank: Very Important

#### **Assessor conclusions:**

While not identified as executive or technical level groups, Kentucky does have representation on the KTRAC from each of the core data systems.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 5:

Does the TRCC consult with the appropriate State IT agency or offices when planning and implementing technology projects?



#### Standard of Evidence:

Provide a narrative example of the TRCC's process of consulting the appropriate IT agency or offices. Identify the appropriate agency or offices and their responsibilities.

Question Rank: Somewhat Important

#### Assessor conclusions:

The KTRAC membership includes IT representation from their respective agencies. These individuals provide IT insight and technical expertise regarding project planning and implementation. They also have access to resources within Kentucky Commonwealth Office of Technology and reach out to them if more information is needed.

Respondents	2	Responses	2	Response	100%
assigned	_	received	_	rate	10070





#### Question 6:

Is there a formal document authorizing the TRCC?

#### **Standard of Evidence:**



Provide the authorizing document (e.g. MOU, charter).

Question Rank: Very Important

#### **Assessor conclusions:**

The Commonwealth of Kentucky KTRAC Charter was provided. The charter includes the committee's responsibilities and agency membership. The State might expand the charter to include more information about the development of the traffic records strategic plan, the role of the executive and technical level groups, the chairperson, and the traffic records coordinator.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 7:

Does the TRCC provide the leadership and coordination necessary to develop, implement, and monitor the TRCC strategic plan?



#### Standard of Evidence:

Provide a narrative describing the TRCC's role in developing the TRCC strategic plan as well as implementation of a project detailed in the plan.

Question Rank: Very Important

#### **Assessor conclusions:**

The current Traffic Records Strategic Plan is included in the Kentucky Strategic Highway Safety Plan (SHSP) dated 2011-2014. The responses indicated that the KTRAC participated in the development of the Traffic Records Emphasis area in the SHSP; some as consultants and others as subject matter experts. The KTRAC and the Kentucky Office of Highway Safety are currently taking the lead to develop a stand-alone Traffic Records Strategic Plan. Once developed, the Plan will be updated annually to describe the State's vision for its traffic records systems and improvement projects.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 8:

Does the TRCC influence policy decisions that impact the State's traffic records system?



#### Standard of Evidence:

Provide a narrative describing a specific example of how the TRCC is engaged by component agencies in the course of their decision-making processes.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

While no direct evidence was provided where the KTRAC influenced policy decisions that impacted the State's traffic records system, the respondents, in conjunction with the supporting documentation confirmed that system stakeholders did indeed use the KTRAC as a opportunity to discuss database needs and develop opportunities to address same. In addition, the Governor's Executive Committee on Highway Safety plays a role in the review of such requests for improvements.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 9:

Does the TRCC allocate federal traffic records improvement grant funds?

# Standard of Evidence:



Specify what funds the TRCC is responsible for allocating (e.g., §405(c)) and provide a narrative describing how the TRCC allocated the most recent program year's funding.

Question Rank: Very Important

#### **Assessor conclusions:**

While the KTRAC doesn't necessarily allocate the federal funds, Kentucky provided details from the KTRAC draft Strategic Plan that outlined the TRCCs project selection process. The draft SP does allow for the technical level TRCC to review proposals and provide recommendations to the Kentucky Office of Highway Safety.

Respondents assigned	2	Responses received	2	Response rate	100%	
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#### Question 10:

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



#### Standard of Evidence:

Provide at least one performance measure for each of the six core systems and describe how the TRCC identified it and has tracked its progress over time.

Question Rank: Very Important

#### **Assessor conclusions:**

The KTRAC sponsors an ongoing Traffic Records Assessment Program grant conducted by the University of Kentucky Transportation Center. The intent of the project is to continually review core system performance measures and monitor progress. The 2017 Kentucky Highway Safety Performance Plan was provided to support the evidence requirement. The Plan includes the project, but information about at least one performance measure for each of the six core systems and how the TRCC identified and tracked its progress over time was not provided. As part of the new Traffic Records Strategic Plan development, the TRCC has created performance measures or metrics in order to measure and monitor progress of the core systems. However, that Plan is not fully implemented. Once the State implements that Plan and tracks the proposed performance measures it would meet the ideal as described by the Advisory.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 11:

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?



#### Standard of Evidence:

Provide the charter or MOU and minutes from the two most recent technical TRCC meetings.

Question Rank: Somewhat Important

#### Assessor conclusions:

The KTRAC seems to provide coordination among safety stakeholders to address challenges and needs to promote the State's traffic records systems. The KTRAC membership, charter, and minutes from two 2016 meetings was provided.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 12:

Does the TRCC have a traffic records inventory?

#### **Standard of Evidence:**



#### Assessor conclusions:



Somewhat Important

The Assessment of Current State of Kentucky's Traffic Records Databases document was provided as an inventory of the State's systems. The document in its current form appears to be, as suggested, the status of the systems. The document is an excellent start in developing a formal traffic records inventory. The State is encouraged to built on the document to include information about each system, such as, the custodian, contact information, system accessibility, and documentation. The document could then be the basis for developing data governance policies, integration projects, user information, and data quality management.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 13:

Does the technical TRCC have a designated chair?

#### Standard of Evidence:



Provide a position description, identify the individual, and describe the chair's responsibilities.

Question Rank: Very Important

#### Assessor conclusions:

The KTRAC membership, KY Draft Traffic Records Strategic Plan outline, and the KTRAC chairpersons' responsibilities were provided. The membership list identifies the cochairpersons. The new strategic plan will expand on chairperson responsibilities and include a position description.

Respondents	2	Responses	2	Response	100%
assigned		received	2	rate	100 /0





#### Question 14:

Does the TRCC have a designated coordinator?

#### Standard of Evidence:



Provide a position description, identify the individual, and describe the coordinator's responsibilities.

Question Rank: Very Important

#### Assessor conclusions:

The KTRAC membership, the KY Draft Traffic Records Strategic Plan outline, and the traffic records coordinator list of responsibilities were provided. The membership list identifies the traffic records coordinator. The coordinator position description and responsibilities will be included in the new strategic plan.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 15:

Does the executive TRCC meet at least once annually?

#### Standard of Evidence:



Provide a schedule of executive meeting dates from the past two program years.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

While the KTRAC doesn't have a specific executive level committee that meets annually, the Governor's Executive Committee on Highway Safety serves as a quasi-executive level committee and provides guidance to the KTRAC.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 16:

Does the technical TRCC meet at least quarterly?

#### Standard of Evidence:



Provide a schedule of technical TRCC meeting dates for the past program year. If the TRCC has topical sub-committees, identify these groups, their purposes, and meeting dates as well.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

The State response indicates that the KTRAC meets quarterly. The meeting schedule shows the KTRAC met in early 2016 and again in June and August, 2016. Finally the KTRAC met in early February 2017.

Respondents	2	Responses	2	Response	4000/
assigned	2	received	2	rate	100%

#### Question 17:

Does the TRCC oversee quality control and quality improvement programs impacting the core data systems?



#### Standard of Evidence:

Provide meeting minutes or reports that document the quality control activities that the TRCC undertakes regularly.

Question Rank: Very Important

#### Assessor conclusions:

The 2017 Kentucky Highway Safety Performance Plan includes a grant project to look at the quality components of each of the core data systems. It was further reported that the project reviews quality control and areas in which improvements can be made. The project reports out at each of the KTRAC meetings. If there is an area of concern, the KTRAC will discuss the appropriate action or next steps. The minutes for two 2016 KTRAC meetings were provided where quality management discussions occurred. Finally, the Assessment of the Current State of Kentucky's Traffic Records Database document was also provided which includes system performance measures, baseline measures, and the measure's current values.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 18:

Does the TRCC address technical assistance and training needs?

#### Standard of Evidence:



Document TRCC discussion of technical assistance and training needs with meeting agendas or minutes.

Question Rank: Somewhat Important

#### Assessor conclusions:

The KTRAC addresses technical assistance and training needs as they arise. A recent example of supporting training was funding of an FY 2017 project request by the Kentucky State Police (KSP). The KSP developed training modules for the updated KyOPS system. This system comprises various applications, including the E-crash and E-citation systems. Minutes from the September 2016 KTRAC meeting were provided that documented discussions about technical assistance and technical needs.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 19:

Does the TRCC use a variety of federal funds to strategically allocate resources for traffic records improvement projects?



#### Standard of Evidence:

Provide an inventory of federal funds used to support traffic records improvement projects in the last program year.

Question Rank: Very Important

#### **Assessor conclusions:**

The KTRAC uses a variety of federal funds to strategically allocate resources for traffic records improvement projects. The 2017 Kentucky Highway Safety Performance Plan was provided and includes a project list and the federal funds used to support traffic records improvement projects.

Respondents	2	Responses	2	Response	100%
assigned		received	2	rate	100 /0





## **Strategic Planning**

Prior to the Moving Ahead for Progress in the 21st Century (MAP-21) and Fixing America's Surface Transportation (FAST) Act federal authorization packages, the Commonwealth of Kentucky's Traffic Records Strategic Plan was a component of the state's overall Strategic Highway Safety Plan (SHSP). As a result of the federal requirements to qualify for traffic records improvement funds, the Kentucky Office of Highway Safety, with the University of Kentucky Transportation Center, has undertaken a process to create a new, stand-alone Traffic Records Strategic Plan.

Because the current strategic plan is part of the SHSP, many of the components of an ideal strategic plan are missing. Despite this obstacle, the Office of Highway Safety has worked hard to ensure that Kentucky's Traffic Records Advisory Committee (KTRAC) has continued to meet frequently to strategize on the best ways to improve the state's records systems, addressed local traffic records needs as able, assisted with traffic records training needs, and worked on performance measures through the Kentucky Database Performance Measurement Project.

The strength of a state's strategic plan can often predict how successful the state's TRCC is in implementing key strategies necessary to make needed improvements in their records systems. In an effort to enhance the ability of Kentucky's new strategic plan to further enable the KTRAC to address system deficiencies, the following considerations may provide the direction necessary for the state to truly see improvement in overall data quality among all their systems:

- Address data system deficiencies identified via the 2017 Traffic Records Assessment process, including the six data attributes as appropriate for each traffic records system. Use the TRA as a starting point to identify not only potential strategies, but also appropriate measures upon which to gauge success.
- Identify all funds allocated to strategies designed to improve the data systems, including funds beyond the Office of Highway Safety's control. This will allow the KTRAC to take a more comprehensive look at the state's efforts as a whole when making resource allocation decisions. This effort will also assist in leveraging federal funds to identify state and local dollars for records improvement efforts.
- Prioritize strategies for traffic records improvements. Kentucky may want to consider using a logic or risk/reward model that would reveal low cost, high reward strategies for implementation.
- Ensure that projects and countermeasures selected include timelines for completion as well as the identification of the persons/positions/agencies responsible for the project implementation. This will serve the KTRAC well in keep projects on track.
- Include a process for reviewing and updating the strategic plan annually. This is essential in monitoring the progress of countermeasures, identifying areas that need assistance, and redirecting the KTRACs efforts as appropriate.

Overall, Kentucky's current traffic records strategic plan includes some of the suggested components necessary to aid in the overall improvement of the state's traffic records systems. With a few enhancements, 2017 KTRAC Strategic Plan will provide the direction for



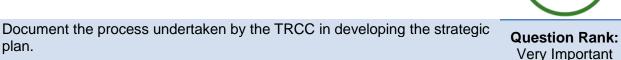


improvements to the accessibility, accuracy, completeness, timeliness, integration, and uniformity of the various data systems for years to come.

#### Question 20:

Does the TRCC develop the TRCC strategic plan?

#### Standard of Evidence:



#### Assessor conclusions:

Kentucky's current Traffic Records Strategic Plan is combined with the State's 2011-2016 Strategic Highway Safety Plan. The state has undertaken a collaborative effort by the Kentucky Office of Highway Safety (OHS) and the KTRAC to develop a new traffic records strategic plan. The process being used to develop the Plan by the KTRAC and OHS will guide the State's traffic records improvement efforts. The state expects the process to be complete by May 2017.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received		rate	00.7 /0

#### Question 21:

Does the TRCC strategic plan address existing data and data systems deficiencies and document how these deficiencies are identified?

#### Standard of Evidence:

Identify, with appropriate citations, how the strategic plan addresses existing data and data systems deficiencies and documents how they were identified.

Question Rank: Very Important

## **Assessor conclusions:**

While Kentucky is currently developing a new TRCC strategic plan, the traffic records section of the SHSP doesn't qualify as a complete strategic plan. It is very limited in scope and does not detail a plan to address existing data and data systems deficiencies or document how these deficiencies are identified.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received		rate	00.7 /6





#### Question 22:

Does the TRCC strategic plan identify strategies that address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems?



#### Standard of Evidence:

Identify, with appropriate citations, how the strategic plan identifies strategies that address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems.

**Question Rank:** Very Important

#### **Assessor conclusions:**

The current, limited strategic plan does not identify strategies to address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems. The responses and supporting documentation indicated that KTRAC has identified performance measures to address the six data attributes and it is assumed that the new strategic plan will identify strategies to address these performance measures.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 23:

Does the TRCC strategic plan indicate what funds are used to undertake efforts detailed in the plan and describe how these allocations contribute to the plan's stated goals?



#### Standard of Evidence:

Identify, with appropriate citations, how efforts detailed in the plan are funded and explain how these allocations address the plan's stated goals as specified in the strategic plan.

Question Rank: Very Important

#### **Assessor conclusions:**

While Kentucky is currently developing a new TRCC strategic plan, the traffic records section of the SHSP doesn't qualify as a complete strategic plan, nor does it indicate what funds are used to undertake efforts detailed in the plan and describe how these allocations contribute to the plan's stated goals.

Respondents 3 Responses received	2 Respons	66.7%
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#### Question 24:

Does the TRCC have a process for prioritizing traffic records improvement projects in the TRCC strategic plan?

#### Standard of Evidence:

Identify, with appropriate citations, how the TRCC prioritizes traffic records improvement projects as specified in the strategic plan.

Question Rank: Very Important

#### **Assessor conclusions:**

The State response did not address current processes, but indicated the new strategic plan is in development and will have a system to prioritize needs and projects for making traffic records improvements.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 25:

Does the TRCC have a process for identifying performance measures and corresponding metrics for the six core data systems in the TRCC strategic plan?



#### Standard of Evidence:

Identify, with appropriate citations, how the TRCC identifies performance measures and any corresponding metrics for each of the six core data systems as specified in the strategic plan.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky supports a grant project designed to assess the state of Kentucky's Traffic Records Database. The project includes reviewing results of the Kentucky Database Performance Measurement Program, which established performance measures for each database. These performance measures addressed one or more of the six performance attributes in each database. It was indicated that the new strategic plan in development will have a process for including performance measures and corresponding metrics for the six core data systems.

Respondents	3	Responses	3	Response	100%
assigned	3	received	3	rate	100 /0





#### Question 26:

Does the TRCC have a process for identifying and addressing technical assistance and training needs in the TRCC strategic plan?



#### Standard of Evidence:

Identify, with appropriate citations, how the TRCC identifies and addresses technical assistance and training needs as specified in the strategic plan.

Question Rank: Somewhat Important

#### Assessor conclusions:

User training has been approved for funding of various projects. While there is no formal process for identifying training needs, the new strategic plan will potentially look into the process of identifying and funding training needs.

Respondents	2	Responses	2	Response	100%
assigned	3	received	3	rate	100 /6

#### Question 27:

Does the TRCC have a process for leveraging federal funds and assistance programs in the TRCC strategic plan?



#### Standard of Evidence:

Identify, with appropriate citations, how the TRCC leverages federal funds and assistance programs as specified in the strategic plan.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

While Kentucky is currently developing a new TRCC strategic plan, the KTRAC does not have a process for leveraging federal funds and assistance programs. Responses noted that a process could be considered with development of the new plan.

Respondents assigned	3	Responses received	2	Response rate	66.7%
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#### Question 28:

Does the TRCC have a process for establishing timelines and responsibilities for projects in the TRCC strategic plan?

#### Standard of Evidence:

Identify, with appropriate citations, how the TRCC establishes timelines and responsibilities for projects in the plan.

Question Rank: Very Important

#### **Assessor conclusions:**

A process for establishing timelines and responsibilities for grants within the Office of Highway Safety is in place, though not specifically through the KTRAC. It is expected the process will be carried forward and included in the new TR strategic plan in development.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 29:

Does the TRCC have a process for integrating State and local data needs and goals into the TRCC strategic plan?



#### Standard of Evidence:

Identify, with appropriate citations, how the TRCC integrates State and local data needs and goals into the TRCC strategic plan.

Question Rank: Very Important

#### **Assessor conclusions:**

The KTRAC doesn't currently have a fully structured means to integrate State and local data needs and goals into the TRCC strategic plan, but it does appear to part of the current planning process. The draft Strategic Plan outline includes a methodical project call and selection process.

assigned received rate	Respondents assigned	Responses received	2 Res	sponse rate 66.7%	<b>)</b>
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#### Question 30:

Does the TRCC consider the use of new technology when developing and managing traffic records projects in the strategic plan?



#### Standard of Evidence:

Identify, with appropriate citations, a project or projects in the strategic plan whose development included the application or consideration of new technology.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

It does not appear the KTRAC has a traditional process of considering new technology when developing and managing traffic records projects in the strategic plan. However, an example was cited where an agency considered new technology in a project development (KyOPS Systems). The responses did not indicate that the new strategic plan will consider new technology when evaluating future traffic records projects, but this will be recommended.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /0

#### Question 31:

Does the TRCC consider lifecycle costs in implementing improvement projects?



#### Standard of Evidence:

Identify, with appropriate citations, a project or projects in the strategic plan whose development included consideration of lifecycle costs.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

While Kentucky is currently developing a new TRCC strategic plan, it does not appear the KTRAC has a traditional process of considering lifecycle costs in implementing improvement projects.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%





#### Question 32:

Is the strategic plan responsive to the needs of all stakeholders, including local users?

#### Standard of Evidence:

Identify, with appropriate citations, specific instances demonstrating that local stakeholder needs are incorporated into the TRCC's strategic plan.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Since the current traffic records strategic plan is included in the SHSP, it is a cooperative process, including stakeholders from all levels of engagement. While the current process of distribution of funds appears to consider local needs in addition to statewide needs, the draft strategic plan includes processes to allow KTRAC to take local needs more into consideration in the future.

Respondents	2	Responses 2	Response	66.7%	
assigned	3	received	2	rate	00.7%

#### Question 33:

Does the strategic plan make provisions for coordination with key federal traffic records data systems?



#### Standard of Evidence:

Provide a narrative demonstrating how the strategic plan coordinates with key federal traffic records data systems. Provide citations from the strategic plan if appropriate.

Question Rank: Somewhat Important

#### Assessor conclusions:

Coordination with key federal traffic records data systems is not a provision of the current traffic records strategic plan. The new strategic plan under development will address coordination with federal systems as a strategic planning best practice and in accordance with the MAP-21 Fixing America's Surface Transportation Act (FAST) legislation.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





#### Question 34:

Does the TRCC have a process for identifying and addressing impediments to coordination with key Federal traffic records data systems?



#### Standard of Evidence:

Provide a narrative detailing the processes used by the TRCC to identify and address impediments to coordination with key Federal traffic records data systems. Provide citations from the strategic plan if appropriate.

Question Rank: Very Important

#### **Assessor conclusions:**

The KTRAC and the KY Office of Highway Safety work closely with their federal partners. They are members of the KTRAC, participate on technical committees, and are available to discuss any impediments and make suggestions to resolve them.

Respondents	2	Responses 2	Response	66.7%	
assigned	3	received	2	rate	00.7%

#### Question 35:

Is the TRCC's strategic plan reviewed and updated annually?

#### Standard of Evidence:

Provide a narrative detailing the frequency and depth of strategic plan reviews and updates. Identify the stakeholder agencies represented in the review process. Provide a schedule or cite the plan itself if appropriate.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky's current Traffic Records Strategic Plan is included in the SHSP and is not updated annually. A provision of the new plan is to review and update the document annually with a major revision to take place every five years.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	_	rate	00.7 /6





#### Crash

KyOPS, Kentucky Open Portal Solutions, is the Kentucky's Statewide Crash Reporting System that is housed at the Kentucky State Police. It is available free of charge to agencies statewide. According to the 2015 Kentucky Crash Facts Book, there were 161,393 total crashes reported in the State resulting in 694 fatalities. The Kentucky State Police is the statewide repository for all collision reports, regardless of investigating agency. All reports are housed at the Criminal ID and Records branch. The majority of collision reports are submitted electronically, though paper submissions are scanned and entered manually. The data is collected in fields that are coded into a database that allows the information to be queried as needed for report retrieval and statistical purposes. Kentucky has a state statute that clearly defines the rules for collecting crash data.

According to the respondents, Kentucky utilizes MMUCC, ANSI D-16, and D-20 as primary sources for defining its crash system. The State is in the process of updating the crash system and the State has indicated that they will use these standards to ensure the system continues to comply with national standards.

KyOPS is used throughout the state. All agencies have the option of utilizing the electronic system for submitting reports with the current exception of constables. According to the respondents, six agencies are still utilizing paper bases crash reporting methods. One of those agencies is the Louisville Metro Police Department, which is a very large agency in the state. It would be very beneficial for the State to encourage this agency to develop an electronic crash report that is consistent with, and conforms to, the KyOPS system. It would also be beneficial for the State to prepare a formal plan to have all agencies in report crashes electronically to the centralized crash database.

#### Opportunities

The State has done a great job in creating and setting up the KyOPS system. As with any system, there are opportunities for improvement that would greatly enhancement the system –

It is recommended that the State create a formal data dictionary that contains every crash element and every validation included in the system. The data dictionary should be reviewed periodically to ensure the system conforms and adheres to MMUCC and contains elements the State deems necessary. There also needs to be a formal process in place within the TRCC to update the document.

The State should work to create interfaces to other electronic traffic records systems. The respondents indicated that there is an interface into the State's Driver's License system that allows the crash form to be populated by the driver's license data. While this is beneficial and ensures data quality at the person level of the crash report, it would be of value to create additional linkages into the driver's license system.

Another area of improvement for the State would be the inclusion of performance reporting. The State responded that some performance measures have been developed, but did not provide any tangible examples. Performance reports in the areas of completeness, timeliness, uniformity, accessibility, and integration would allow State administrators to review how well the





data systems perform in terms of overall crash data collection and would greatly enhance the State's ability to provide feedback to the different traffic safety agencies.

Finally, it would be beneficial for the State to create routine reporting features to present to the TRCC. Having a specific set of reports that are tailored to the needs of the TRCC would greatly enhance the State's ability to make informed decisions with regard to future traffic records projects and improvements.

#### Question 36:

Is statewide crash data consolidated into one database?

#### Standard of Evidence:

Provide a description of the statewide database and specify how the data is consolidated.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Kentucky has described in detail the statewide crash system that is utilized at the Kentucky State Police.

Respondents	e	Responses	2	Response	50%
assigned	O	received	3	rate	30%

#### Question 37:

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

#### Standard of Evidence:



Identify what agency has the custodial responsibility for the statewide crash system, detail the extent of the agency's role, and provide all relevant statutes.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky State Police has the custodial responsibility for the statewide crash system. The extent of the agency's role involves housing the database at the Criminal ID and Records Branch, scanning/manually entering crash reports that are received in a paper format, and making the data available for report retrieval and statistical purposes. The authority for this activity is given in section 189.625 of the Kentucky Revised Statutes.

Respondents	6	Responses	2	Response	50%
assigned	U	received	3	rate	30 /6





#### Question 38:

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

#### Standard of Evidence:

Provide the fatal crash inclusion criteria for the statewide crash system.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky provided a narrative of the State statute that describes the criteria requiring the submission of fatal crashes to the statewide crash system.

Respondents	6	Responses	2	Response	50%
assigned	О	received	3	rate	30%

#### Question 39:

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



#### Standard of Evidence:

Provide the injury crash inclusion criteria for the statewide crash system.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky has provided a narrative the describes the criteria requiring the submission of injury crashes to the statewide crash system. The State supplied the language from the State statute and also the inclusion criteria from the crash report.

Respondents	6	Responses received	3	Response rate	50%
assigned		received		rate	





#### Question 40:

Does the State have criteria requiring the submission of PDO crashes to the statewide crash system?

#### Standard of Evidence:

Provide the PDO crash submission criteria for the statewide crash system.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky provided a narrative describing the criteria required for the submission of PDO crashes to the statewide crash system. The criteria states that "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."

Respondents	6	Responses	2	Response	E00/
assigned	0	received	3	rate	50%

#### Question 41:

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



#### Standard of Evidence:

Provide the non-trafficway reporting criteria for the statewide crash system.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Kentucky's response concerning crashes in non-trafficway areas are collected is somewhat vague. It is a State traffic system weakness that the crash system does not identify when a crash report for non-traffic way areas is required. This is currently decided by agency policy and procedures and not at the executive TRCC level.

Respondents	6	Responses	2	Response	50%
assigned	0	received	3	rate	30%





#### Question 42:

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

#### Standard of Evidence:



Provide example reports and/or analyses that examine locations, roadway features, behaviors, driver characteristics, or vehicle characteristics as they relate to crash risk. If referencing large documents like the SHSP, please cite relevant page numbers.

**Question Rank:** Very Important

#### Assessor conclusions:

Kentucky provided a few reports that show the use of crash data, but it's more of an analysis between crash, citation, I/O reports, etc and does not examine locations, roadway features, behaviors, driver characteristics, or vehicle characteristics as they relate to crash risk. The State has provided a satellite map that shows crashes, but they seem to be joined by citations. NIBRS, and crashes.

Respondents	6	Responses 3	2	Response	50%
assigned	0	received	3	rate	30%

#### Question 43:

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



#### Standard of Evidence:

Describe the State's network screening and countermeasure selection processes. Describe how construction projects are funded based on the analysis of crash data. If referencing large documents like the SHSP, please cite relevant page numbers.

**Question Rank:** Very Important

#### Assessor conclusions:

Data from the crash system are reportedly used to guide engineering and construction projects, but a specific example or a detailed narrative demonstrating this use was not available for review. A State respondent did comment that KYTC Division of Highway Design used cross-median collision occurrences to determine candidate installation locations for hightension cable barrier.

Respondents	6	Responses	2	Response 500	50%
assigned	O	received	3	rate	<b>30</b> / <sub>0</sub>





### Question 44:

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



#### Standard of Evidence:

Provide a sample location-based analysis and any associated law enforcement activities. If a State DDACTS program exists, provide details.

Question Rank: Very Important

#### Assessor conclusions:

Data from the crash system is regularly used to prioritize law enforcement activity. The State provided reports that show examples of this use.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30 /0

#### Question 45:

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



# Standard of Evidence:

Describe how crash data is used to evaluate safety countermeasure programs. If referencing large documents like the SHSP, HSP, or Crash Facts, please cite relevant page numbers.

Question Rank: Very Important

# **Assessor conclusions:**

Data from the crash system is reportedly used to evaluate safety countermeasure programs. However, the examples provided do not detail or show any countermeasures.





#### Question 46:

Is MMUCC a primary source for identifying what crash data elements and attributes the State collects?



#### Standard of Evidence:

Provide a narrative description of the process by which MMUCC was used to identify what crash data elements and attributes are included in the crash database and on the Police Accident Report (PAR).

Question Rank: Very Important

#### **Assessor conclusions:**

MMUCC was a primary source for identifying what crash data elements and attributes the State collects.

Respondents	6	Responses	2	Response	50%
assigned	0	received	3	rate	50%

#### Question 47:

Are the ANSI D-16 and ANSI D-20 used as sources for the definitions in the crash system data dictionary?



#### Standard of Evidence:

Provide a narrative description of the process by which ANSI D-16 and ANSI D-20 were used to define data elements in the crash system's data dictionary and user manual.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

The State is using the ANSI D-16 and ANSI D-20 as a foundation for ensuring that they are in compliance with uniform definitions, classification, and other federal requirements.

Respondents 6 Responses assigned received	3 Response	50%
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### Question 48:

Does the data dictionary provide a definition for each data element and define that data element's allowable values?

#### Standard of Evidence:

Provide a copy of the crash system data dictionary.

Question Rank: Very Important

### **Assessor conclusions:**

Kentucky supplied a spreadsheet that describes all the fields on the crash report and the corresponding attributes for each data field. While this is not a "true" data dictionary, this document provides the necessary information.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	<b>30</b> / <sub>0</sub>

# Question 49:

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



#### Standard of Evidence:

Provide a copy of the crash system data dictionary. If the crash system edit checks and validation rules are documented elsewhere, provide the appropriate document.

Question Rank: Somewhat Important

# **Assessor conclusions:**

A document that describes the crash system edit checks and validation rules was not provided. However, some of the information that would be expected in such a document resides in a collision edits file.

Respondents assigned	6	Responses received	3	Response rate	50%	
assiyiicu		received		late		





#### Question 50:

Is the data dictionary up to date and consistent with the field data collection manual, coding manual, crash report, and any training materials?



#### Standard of Evidence:

Describe the processes to update the crash system's data dictionary, field data collection manual, coding manual, crash report, and training manuals. Specify which of the documents exist and describe processes to keep them consistent with each other.

Question Rank: Very Important

#### Assessor conclusions:

No processes to update the crash system's data dictionary, field data collection manual, coding manual, crash report, and training manuals were described. The State has indicated that it is in the process of updating the training manual.

Respondents	6	Responses	2	Response	50%
assigned	0	received	3	rate	50%

#### Question 51:

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



### Standard of Evidence:

Provide a list of data elements that are populated in the crash system through linkages to other traffic records system components (e.g., the driver file, the vehicle file, the roadway inventory, or statewide mapping system).

Question Rank: Somewhat Important

# Assessor conclusions:

Documentation that details the list of data elements that are populated in the crash system through linkages to other traffic records system components was not provided.

assigned 6 received 3 rate 50%	Respondents assigned	6	Responses received	3	Response rate	50%
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#### Question 52:

Do all law enforcement agencies collect crash data electronically?

# Standard of Evidence:



Provide a list of all reporting agencies and specify their data collection methods. Specify any State plans for achieving 100% electronic in-field data collection.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Kentucky provided a list of agencies that submit crash data electronically and the agencies that submit crash data via paper reports. While the list of paper crash submission agencies is small, the State has not provided a narrative on the plan to migrate these agencies to the electronic submission method.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%

#### Question 53:

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



#### Standard of Evidence:

Describe—using a narrative or flow diagram—all data submission processes used to transmit data from collecting agencies to the statewide crash data system. Include the percentage of total data submitted for each specified method.

Question Rank: Very Important

# Assessor conclusions:

Kentucky provided a list of agencies that submit crash data electronically and the agencies that submit crash data via paper reports. While the list of paper crash submission agencies is small, the State has not provided a narrative on the plan to migrate these agencies to the electronic submission method.

Respondents 6 Responses assigned received	Response 50%	
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### Question 54:

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



#### Standard of Evidence:

Describe the validation processes used by the collecting agencies. Specify if the validation rules are applied to the data prior to submission to the statewide crash system. Include, in the description, how the validation rules are distributed to the collecting agencies and how the State checks the submitted data for consistency to rules in the statewide crash system.

Question Rank: Very Important

#### Assessor conclusions:

All agencies submitting crash data electronically have to use the edit checks provided in the State's KYOPS system.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%

#### Question 55:

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?



#### Standard of Evidence:

Provide a process flow diagram (preferred) or narrative description documenting key processes governing the collection, reporting, and posting of crash data—including the submission of fatal crashes to the State FARS unit and commercial vehicle crashes to SafetyNet.

Question Rank: Very Important

#### **Assessor conclusions:**

A process flow diagram or narrative description documenting key processes governing the collection, reporting, and posting of crash data—including the submission of fatal crashes to the State FARS unit and commercial vehicle crashes to SafetyNet was not provided.

Respondents	6	Responses	3	Response	50%
assigned	U	received	3	rate	<b>30</b> /6





#### Question 56:

Are the processes for managing errors and incomplete data documented?

# Standard of Evidence:



Provide a process flow diagram (preferred) or narrative description documenting the processes for managing errors and incomplete data.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky provided a narrative that describes the process officers use in the electronic system (KYOPS) for managing errors and incomplete data.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	<b>30</b> /6

# Question 57:

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?



#### Standard of Evidence:

Provide a copy of the retention policy.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Kentucky provided a document that describes the State's crash data retention policy.

Respondents	6	Responses	2	Response	50%
assigned	U	received	3	rate	<b>30</b> / <sub>0</sub>





#### Question 58:

Does the crash system interface with the driver system?

# Standard of Evidence:



Provide narrative description of the crash-to-driver system interfaces that enable: verification and validation of the driver's personal information, access to driver records, identification of inconsistencies between the crash and driver records, and/or identification of the driver's prior crash involvement?

Question Rank: Somewhat Important

### Assessor conclusions:

The crash system does not reportedly integrate with the State's driver licensing system.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	<b>30</b> / <sub>0</sub>

#### Question 59:

Does the crash system interface with the vehicle system?

#### Standard of Evidence:



Provide narrative descriptions of the crash-to-vehicle system interfaces that enable: verification and validation of the vehicle information, access to vehicle records, and/or identification of inconsistencies between the crash and vehicle records.

Question Rank: Somewhat Important

# **Assessor conclusions:**

There is a link to the vehicle repository that allows the population of fields in the crash report, but the State does not interface the crash data with vehicle data to enable verification and validation of the vehicle information, access to vehicle records, and/or identification of inconsistencies between the crash and vehicle records.

Respondents	6	Responses	2	Response	50%
assigned	U	received	3	rate	JU /6





#### Question 60:

Does the crash system interface with the roadway system?

# Standard of Evidence:



Provide narrative descriptions of the crash-to-roadway interfaces that enable: verification and validation of the roadway information, and/or identification of inconsistencies between the crash and roadway records.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The crash data and roadway data are linked, and the process by which the crash system uses data from the roadway system was described.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%

#### Question 61:

Does the crash system interface with the citation and adjudication systems?

# Standard of Evidence:

Provide narrative descriptions of the crash-to-citation and -adjudication interfaces that enable: verification and validation of citations and/or alcohol or drug test information in the crash record; identification of any inconsistencies between crash and citation records; and access to criminal history, contact history, and location history.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

KYOPS houses both the crash form and the citation form, but the crash data and citation/adjudication data are not linked and do not enable verification and validation of citations and/or alcohol or drug test information in the crash record; identification of any inconsistencies between crash and citation records; and access to criminal history, contact history, and location history.

Respondents	6	Responses	2	Response	50%
assigned	U	received	3	rate	<b>30</b> / <sub>0</sub>

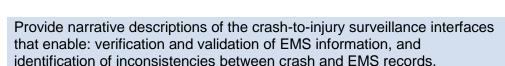




#### Question 62:

Does the crash system interface with the injury surveillance system?

#### Standard of Evidence:





Question Rank: Somewhat Important

#### **Assessor conclusions:**

Respondents to this question reported no link between crash data and injury surveillance data.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%

# Question 63:

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?



# Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks or validation rules ensure entered data falls within the range of acceptable values and is logically consistent between fields.

Question Rank: Very Important

#### **Assessor conclusions:**

The KYOPS system has built-in business rules and edit checks to allow the officers to validate a crash report. However, the State does not have a formal methodology or data dictionary that describes the edit checks that are used.

Respondents	6	Responses	2	Response	50%
assigned	U	received	3	rate	30 /6





### Question 64:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide crash database.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

A description of the process by which limited state-level correction authority is granted to quality control staff working with the statewide crash database was provided.

Respondents	6	Responses	2	Response	<b>E0</b> 0/
assigned	О	received	3	rate	50%

### Question 65:

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



# **Standard of Evidence:**

Provide the formal methodology or describe the process by which rejected crash reports are returned to the originating officer and then resubmitted to the statewide crash database.

Question Rank: Very Important

#### **Assessor conclusions:**

A description of the process by which rejected crash reports are returned to the originating officer and then resubmitted to the statewide crash database was provided.

Respondents	6	Responses	3	Response	50%
assigned		received	· ·	rate	0070





#### Question 66:

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



#### Standard of Evidence:

Provide a complete list of crash system timeliness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**Very Important

#### **Assessor conclusions:**

The State appears to have a number of crash timeliness performance measures tailored to the needs of data managers and data users.

Respondents	6	Responses	4	Response	66.7%
assigned	U	received	4	rate	00.7 /6

# Question 67:

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



# Standard of Evidence:

Provide a complete list of crash system accuracy measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The State has accuracy performance measures tailored to the needs of data managers and data users.

Respondents	6	Responses	1	Response	66.7%
assigned	U	received	~	rate	00.7 /6





### Question 68:

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



#### Standard of Evidence:

Provide a complete list of crash system completeness measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The Program Manager lists one completeness performance measure which is supported by the report (p. 26) referenced by the Systems Consultant, indicating that 100% of FARS reports are matched after yearly reconciliation. Apparently, the State evaluated another completeness performance measure but found it to be "not available or useful."

Respondents	6	Responses	1	Response	66.7%
assigned	U	received	4	rate	00.7 /6

#### Question 69:

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



# Standard of Evidence:

Provide a complete list of crash system uniformity measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky has stated that uniformity measures exist but they were not described.

Respondents	6	Responses received	4	Response	66.7%
assigned		received		rate	





### Question 70:

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

#### Standard of Evidence:

Provide a complete list of crash system integration measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

Integration performance measures have reportedly been developed, but no description was provided.

Respondents	6	Responses	4	Response	66.7%
assigned	0	received	4	rate	00.7%

# Question 71:

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



#### Standard of Evidence:

Provide a complete list of crash system accessibility measures the State uses, including the most current baseline and actual values for each.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Accessibility performance measures are reportedly used, but no description was provided. While the State allows access to the crash data via public portal, this is not the same as accessibility performance measures.

Respondents	6	Responses	4	Response	66.7%
assigned	U	received	4	rate	00.7 /6





#### Question 72:

Has the state established numeric goals—performance metrics—for each performance measure?



#### Standard of Evidence:

Provide the specific, State-determined numeric goals associated with each performance measure in use.

Question Rank: Very Important

# **Assessor conclusions:**

The State has performance metrics for four of the six NHTSA-recommended performance measures.

Respondents	e	Responses	4	Response	66.7%
assigned	0	received	4	rate	00.7%

# Question 73:

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



#### Standard of Evidence:

Provide a sample report, list of receiving law enforcement agencies, and specify the frequency of issuance.

Question Rank: Very Important

# **Assessor conclusions:**

No description of performance reporting that provides specific timeliness, accuracy, and completeness feedback to each law enforcement agency was provided. The error notifications generated by the system are not a suitable substitute nor are the letters sent out for paper reports.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%





### Question 74:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, and prompt form revisions.

**Question Rank:** Very Important

#### **Assessor conclusions:**

Kentucky reportedly uses the observation of high frequency errors to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions, but has not provided the formal methodology used to do so.

Respondents	6	Responses	2	Response	50%
assigned	U	received	3	rate	30 /6

#### Question 75:

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?



### Standard of Evidence:

Provide the formal methodology or describe the process by which quality control reviews comparing the narrative, diagram, and coded contents of the report are considered part of the statewide crash database's data acceptance process.

Question Rank: Somewhat Important

# Assessor conclusions:

Quality control reviews comparing the narrative, diagram, and coded contents of the report are regularly conducted as part of the State's data acceptance process.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%





### Question 76:

Are independent sample-based audits periodically conducted for crash reports and related database contents?

#### Standard of Evidence:

Describe the formal audit methodology, provide a sample report or other output, and specify the audits' frequency.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

There are no independent sample-based audits periodically conducted for crash reports and related database contents.

Respondents	6	Responses	2	Response	50%
assigned	O	received	3	rate	30%

# Question 77:

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



#### Standard of Evidence:

Describe the analyses, provide a sample report or other output, and specify the analyses' frequency.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky has not provided an analyses or sample report that demonstrates periodic comparative and trend analyses that could be used to identify unexplained differences in the data across years and jurisdictions.

Respondents assigned	6	Responses received	3	Response rate	50%	
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# **Question 78:**

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

#### Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform changes.

Question Rank: Somewhat Important

# Assessor conclusions:

The update the process for transmitting and utilizing key users' data quality feedback to inform changes was described. This process seems to be ad-hoc and not formal in nature.

Respondents assigned 6 Responses 7 Response 7 Tate 50%

# Question 79:

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



#### Standard of Evidence:

Provide a sample quality management report and specify how frequently they are issued to the TRCC.

Question Rank: Very Important

# **Assessor conclusions:**

The TRCC does not receive data quality management reports for review.

Respondents 6 Responses 3 Response 50% rate





# Vehicle

The Kentucky Transportation Cabinet, Department of Vehicle Regulation is the custodial agency of the vehicle data system which maintains critical information related to ownership and identification of vehicles. The State's Automated Vehicle Information System (AVIS) maintains all vehicle information in a single location, validates every VIN using a verification software application, and registration documents include a 2D barcode. The county clerks are responsible for entering title and registration data into AVIS.

It is believed that Kentucky is meeting many of the Traffic Records Program Assessment Advisory ideals related to vehicle data; however, the lack of evidence or requested information provided to the assessors did not allow for the ability to entirely rate the systems capabilities.

The Kentucky vehicle system provides title information electronically in real-time to the National Motor Vehicle Title Identification System (NMVTIS). It appears that the State queries NMVTIS before issuing new titles; however, it is not known specifically when these queries are performed during the transaction process. Kentucky implements a number of NMVTIS brand codes, but not all of them. It is believed that the Division of Motor Carriers participates in the Performance Registration Information System (PRISM) program, however there was not any evidence or information provided to substantiate PRISM participation.

Due to the age of the State vehicle system a complete data dictionary does not exist for every data field and edit checks are limited to alpha and numeric fields only. It appears that a replacement system may be planned and will have additional data checks, pull down menus, and radio buttons to ensure proper data entry for all fields. It is believed that the Kentucky Revised Statutes Chapters 186, 186A, and 190 have the collection, reporting, and posting procedures for registration, title, and title brand information formally documented; however, an actual copy of these statutes or an actual description of the procedures was not provided.

Kentucky has a comprehensive process flow diagram describing the vehicle system and some of the processes for titling and registration. The process flow diagram does not include time required to complete each step, alternative data flows in the event that the system is down, error correction or error handling, and purging timelines or procedures. These types of diagrams can be an excellent tool for identifying inefficiencies and can be very useful when updating systems.

The State's vehicle data system flags stolen vehicles in real time through an interface with the NCIC stolen vehicle program. Stolen vehicle flags are manually removed by staff in AVIS when the vehicle is recovered and the application is either approved or cancelled. AVIS only records and maintains title brand history that was previously applied by the last issuance State only. However, they utilize VIN searches to NMVTIS to retrieve a vehicle's extended brand history if necessary.

The State vehicle and driver system are not unified and it is unknown what the data entry conventions are for each system. While it appears that the vehicle system data can be used to verify and validate vehicle information during the initial creation of a citation or crash report there was not sufficient information provided to confirm this. Vehicle data discrepancies identified during the data entry in the crash data system cannot be flagged for possible updating in the vehicle system. Vehicle VIN, title number, and plate number are the key variables used to





retrieve records from the vehicle system.

Vehicle system data is not processed in real-time. Real time updating should be explored if a new vehicle system is being planned. This would eliminate nightly batch processes and queries to external systems would get integrated into a real-time processing system. State level correction to vehicle system errors is done by authorized personnel in the Commonwealth Office of Technology (COT) or Office of Information Technology (OIT).

The State should consider developing a concept for a formal data quality management program that includes timeliness, accuracy, completeness, uniformity, integration, and accessibility performance measures for the vehicle data system. This would give the State a greater ability to fully understand the quality of their vehicle data. Such a quality control program would be a great tool for data managers and data users to quickly and easily recognize areas that need further improvement. High frequency errors should be used to generate new training content and data collection manuals, update validation rules, and prompt form revisions. Kentucky should also consider performing periodic independent sample-based audits to examine vehicle data or reports, and conducting periodic comparative and trend analyses to identify unexplained differences in data across years and area jurisdictions. Finally, data quality reports should be created and provided to the State's TRCC committee for regular review.

# Opportunities:

Ensure the data dictionary definitions and enhanced system edit checks are properly documented and included in the new vehicle system.

Update process flow diagrams to include times, alternate data flows, error correction, and purging processes.

If an updated vehicle system is being planned naming conventions of personal information should be the same as the driver system.





### Question 80:

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?



# Standard of Evidence:

Provide the custodial agency's name.

Question Rank: Somewhat Important

# Assessor conclusions:

Per KRS 186A.185 and 601 KAR 2:010(6), the Commissioner of the Department of Vehicle Regulation maintains custodial responsibility over vehicle data in Kentucky that resides in a single location.

Respondents assigned 4 Responses 1 Response 25%

#### Question 81:

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



# Standard of Evidence:

Describe the circumstances in which the VIN is validated and used.

Question Rank: Less Important

# **Assessor conclusions:**

Kentucky validates VINs using VINtelligence by R.L. Polk. VINs are validated during title and registration transactions and are checked anytime ownership is change.

Respondents 4 Responses 1 Response 25%





### Question 82:

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?



#### Standard of Evidence:

Provide a sample document, and identify the information encoded.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky vehicle registrations include an appropriate PDF417 2D barcode that includes the following information: date of issue, expiration date, plate number, name, address, city, state, zip, VIN, make, vehicle year, body style, and issue year. A sample registration was attached as evidence.

Respondents	4	Responses	4	Response	250/
assigned	4	received		rate	25%

### Question 83:

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



#### Standard of Evidence:

Explain how and how often the State uploads data to NMVTIS, specifying the manner of transmittal and its frequency (e.g., real-time, nightly, weekly).

Question Rank: Somewhat Important

# **Assessor conclusions:**

Kentucky vehicle system provides title information data electronically to the National Motor Vehicle Title Information System (NMVTIS) immediately upon each title and registration transaction that is entered into the State's Automated Vehicle Information System (AVIS).

Respondents	1	Responses	1	Response	25%	
assigned	7	received	ı	rate	23 /0	





#### Question 84:

Does the vehicle system query the National Motor Vehicle Title Information System (NMVTIS) before issuing new titles?



#### Standard of Evidence:

Provide the NMVTIS query processing instructions or provide a screen print of the query tool.

Question Rank: Very Important

#### **Assessor conclusions:**

The State responded that the vehicle system queries the National Motor Vehicle Title Information System (NMVTIS) behind the scenes before issuing new titles so they do not have a screen print or processing instructions. Additional information describing the verification method was not provided.

Respondents	1	Responses	4	Response	25%
assigned	4	received	ı	rate	25/0

#### Question 85:

Does the State incorporate brand information on the vehicle record that are recommended by AAMVA and/or received through NMVTIS, whether or not the brand description matches the State's brand descriptions?



#### Standard of Evidence:

Provide the list of the State's title brands and their definitions.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky implements a number of the NMVTIS brand codes but not all of them. For example, NMVTIS denotes a difference between junk and salvage, whereas Kentucky has a salvage designation but not a junk designation based on the provided evidence.

Respondents assigned	4 Responses received	1 Response rate	25%
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### Question 86:

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

#### Standard of Evidence:

Provide the PRISM processing instructions or a screen print.

Question Rank: Very Important

# **Assessor conclusions:**

The Division of Motor Carriers reportedly participates in the Performance and Registration Information Systems Management (PRISM) program. However, there was not any evidence or information provided to substantiate PRISM participation.

Respondents assigned 4 Responses 1 Response 25%

# Question 87:

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

#### Standard of Evidence:

Provide a narrative description of the data dictionary and provide an extract.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

The State acknowledges that due to the age of the vehicle system a complete documented data dictionary does not exist for every data field. They did provide a very detailed process flow diagram and business process map numbers and definitions for many of the data fields. It is highly recommended that a documented definition for each data field be created in a common data dictionary in the future.

Respondents 4 Responses 1 Response 25% assigned received rate





#### Question 88:

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



#### Standard of Evidence:

Provide a narrative description of the data dictionary's edit check and data collection guidelines and provide an extract.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The vehicle system appears to have some edit checks such as confirming numbers are in numeric fields and alphas in alpha fields. Due to the age of the system, some edit checks are performed at entry and others on the back-end. The replacement system will have additional data checks, pull down menus, and radio buttons to ensure proper data entry for all fields.

Respondents	4	Responses	4	Response	25%
assigned	4	received		rate	25 /0

#### Question 89:

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



# Standard of Evidence:

Provide a narrative description of the data dictionary's procedure for applying title brands and provide a copy of the brands applied.

Question Rank: Very Important

# Assessor conclusions:

Documented procedures for the collection, reporting, and posting for registration, title, and title brand information are reportedly contained in the Kentucky Revised Statutes Chapters 186, 186A, and 190. Title brands include rebuilt, odometer not actual mileage, exceed mechanical limits, water damage, hail damage, and salvage. A copy of the the statutes or a narrative describing the procedures was not provided.

Respondents	4	Responses	4	Response	25%
assigned	4	received	ı	rate	23%





### Question 90:

Is there a process flow diagram describing the vehicle data system?

# Standard of Evidence:

Provide the process flow diagram.

Question Rank: Somewhat Important

# Assessor conclusions:

The State provided an excellent vehicle process flow diagram that describes the vehicle system. The diagram was created/validated almost 10 years ago, so it is encouraged that the diagram be kept current.

Respondents 4 Responses 1 Response 25%

#### Question 91:

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



#### Standard of Evidence:

Provide a narrative description of the procedures for flagging and identifying vehicles reported as stolen. Provide the appropriate excerpt from the instruction manual.

Question Rank: Very Important

#### Assessor conclusions:

The vehicle system identifies stolen vehicles when a VIN is entered through the AVIS system, which is then transmitted to NCIC. If NCIC returns a stolen vehicle code the title can not be printed until NCIC is cleared by the Kentucky State Police.

Respondents 4 Responses 1 Response 25% assigned received 1 rate





### Question 92:

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?



# Standard of Evidence:

Provide a narrative description of how the flags are removed. Provide the appropriate excerpt from the instruction or procedures manual.

Question Rank: Very Important

# Assessor conclusions:

The stolen vehicle flag is removed from the vehicle system manually by staff in the Automated Vehicle Information System when the vehicle is recovered and the application is either approved or cancelled.

Respondents	4	Responses	4	Response	25%
assigned	4	received		rate	25%

### Question 93:

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



#### Standard of Evidence:

Provide a narrative description of how title brand information is applied.

Question Rank: Very Important

# Assessor conclusions:

AVIS records and maintains title brand history that was previously applied by last issuance State only. Kentucky relies on VIN searches to NMVTIS to retrieve a vehicle's extended brand history.

Respondents	4	Responses	4	Response	25%
assigned	4	received	•	rate	25 /0





### Question 94:

Are the steps from initial event (titling, registration) to final entry into the statewide vehicle system documented in a process flow diagram?



#### Standard of Evidence:

Provide the process flow diagram. If diagram does not exist, provide a narrative describing the process in detail.

**Question Rank:** Very Important

# Assessor conclusions:

The supplied process flow diagram documents the flow of the title system; however, the complete registration process was not included in the supplied evidence.

Respondents	4	Responses	4	Response	25%
assigned	4	received	1	rate	25%

# Question 95:

Is the process flow diagram or narrative annotated to show the time required to complete each step?



#### Standard of Evidence:

Provide the process flow diagram. If diagram does not exist, provide a narrative describing the process in detail.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State does not have a process flow document that annotates the time required to complete each step. This additional information in the current process flow diagram could be beneficial to identify inefficiencies

Respondents	1	Responses	4	Response	25%
assigned	4	received	•	rate	25 /6





### Question 96:

Does the process flow diagram or narrative show alternative data flows and timelines?



#### Standard of Evidence:

Provide the process flow diagram that specifies alternative data flows and timelines. If diagram does not exist, provide a narrative describing the process in detail.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Kentucky does not have a process flow diagram or narrative that can show alternative data flows and timelines.

Respondents	4	Responses	4	Response	25%
assigned	4	received	•	rate	25/0

#### Question 97:

Does the process flow diagram or narrative include processes for error correction and error handling?



# Standard of Evidence:

Provide the process flow diagram that specified the processes for error correction and error handling. If diagram does not exist, provide a narrative describing the process in detail.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The only information provided was that errors are sent back to county clerks to be corrected. Additional information about how that process occurs and how corrections make their way into the system was not provided.

Respondents	4	Responses	1	Response	25%
assigned	7	received	•	rate	25/0





### Question 98:

Does the process flow diagram or narrative explain the timing, conditions, and procedures for purging records from the vehicle system?



#### Standard of Evidence:

Provide the process flow diagram that specifies the schedule and process for purging records. If diagram does not exist, provide a narrative describing the process in detail.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Kentucky does not have a process flow diagram or narrative that explains the timing, conditions, and procedures for purging records from the vehicle system. It is not known if vehicle records are purged from the system and, if they are, what the procedures are.

Respondents	4	Responses	1	Response	25%
assigned	-	received		rate	<b>2</b> J /0

#### Question 99:

Are the driver and vehicle files unified in one system?

### Standard of Evidence:

Provide a narrative description of the unified system's main components and identify the variables that link the vehicle and driver files.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The driver and vehicle files are not unified in one system. There are a number of advantages in having the systems unified and it is recommended that Kentucky examine the feasibility of this in the future.

Respondents assigned	4	Responses received	1	Response rate	25%	
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### Question 100:

If the driver and vehicle files are separate, is personal information entered into the vehicle system using the same conventions used in the driver system?



#### Standard of Evidence:

When the driver and vehicle systems are separate, provide extracts from the driver and vehicle system manuals detailing the data entry conventions for each.

**Question Rank:** Very Important

#### **Assessor conclusions:**

Driver data is entered by the circuit court clerk and vehicle data is entered by the county court clerk. It is unknown what the data entry conventions are for each system.

Respondents	4	Responses	4	Response	25%
assigned	4	received	ı	rate	25%

### Question 101:

Can vehicle system data be used to verify and validate the vehicle information during initial creation of a citation or crash report?



#### Standard of Evidence:

Provide a narrative description of the procedures governing the use of vehicle system data to verify and validate vehicle information during initial creation of a citation or crash report. ALTERNATIVE EVIDENCE: Describe how the vehicle system is accessed, if it is, to validate and verify vehicle information during crash report creation.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Based off of the information provided, it is unclear if vehicle system data can be used to verify and validate the vehicle information during initial creation of a citation or crash report.

Respondents assigned	4 Responses received	1 Response rate	25%
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#### Question 102:

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



#### Standard of Evidence:

Provide an appropriate extract from the vehicle system manual that details the process for addressing a record flagged by the crash system.

Question Rank: Less Important

# **Assessor conclusions:**

The law enforcement vehicle crash system does not interface with the vehicle system so records are not flagged if data discrepancies occur.

Respondents	4	Responses	4	Response	250/
assigned	4	received	1	rate	25%

# Question 103:

Are VIN, title number, and license plate number the key variables used to retrieve vehicle records?



#### Standard of Evidence:

Identify the key variables used to retrieve vehicle records.

Question Rank: Very Important

#### **Assessor conclusions:**

Vehicle VIN, title number, and plate number are the key variables used to retrieve records from the vehicle system.

Respondents	<sub>4</sub> Responses	Response	25%
assigned	4 received	rate	25%

# Question 104:

Is the vehicle system data processed in real-time?

#### Standard of Evidence:

Provide a narrative statement explaining the answer.



Question Rank: Very Important

#### **Assessor conclusions:**

Vehicle system data is not processed in real-time. Ideally, nightly batch processes would be eliminated and the queries to external systems would get integrated into a real-time processing system.

Respondents	1	Responses	1	Response	25%
assigned	7	received	•	rate	<b>2</b> J /0





### Question 105:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks or validation rules ensure entered data falls within the range of acceptable values and is logically consistent between fields.

**Question Rank:** Very Important

### **Assessor conclusions:**

The AVIS system interfaces with driver license data for verification and the Vintelligence software is used to get the make, model and year of the vehicle. Ideally, additional data edits and validations would take place to ensure that data falls within acceptable ranges and is logically consistent.

Respondents	4	Responses	4	Response	25%
assigned	4	received	ı	rate	25%

#### Question 106:

Is limited state-level correction authority granted to quality control staff working with the statewide vehicle system to amend obvious errors and omissions?



#### Standard of Evidence:

Name the authority that allows quality control staff to correct the statewide vehicle database.

Question Rank: Somewhat Important

# **Assessor conclusions:**

State level correction to vehicle system errors is authorized by the Commonwealth Office of Technology (COT) or Office of Information Technology (OIT). The Department of Vehicle Regulation does not have the authority to correct or amend obvious errors and omissions in the vehicle system; however, they can electronically request an error correction by COT or OIT.

Respondents	1	Responses	1	Response	25%
assigned	7	received	ı	rate	25 /0





### Question 107:

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



#### Standard of Evidence:

Provide a complete list of vehicle system timeliness measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

#### Assessor conclusions:

While the State has established a metric for timeliness for the average time to post a transaction by the county clerks they do not have a baseline measurement or any actual value for 2014 and 2015. In 2016 the performance measure reflects that real time posting occurs from the county clerks to the vehicle system; thereby, not having a need for this performance measure. Additionally, the documentation provided indicates that the new system that drives the metrics will not be operational until 2019.

Respondents	4	Responses	2	Response	50%
assigned	4	received	2	rate	<b>30</b> / <sub>0</sub>

#### Question 108:

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



#### Standard of Evidence:

Provide a complete list of vehicle system accuracy measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

There are no accuracy performance measures for the vehicle system tailored to the needs of data managers and data users. Ideally, performance measures would be created in order to track system and user performance across time.

Respondents	1	Responses	2	Response	50%
assigned	4	received	2	rate	30 /6





### Question 109:

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



#### Standard of Evidence:

Provide a complete list of vehicle system completeness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:** Very Important

#### **Assessor conclusions:**

There are no completeness performance measures tailored to the needs of data managers and data users. Ideally, completeness measures would be created in order to track system and user performance across time.

Respondents	1	Responses	2	Response	50%
assigned	4	received	2	rate	30 /6

# Question 110:

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



# Standard of Evidence:

Provide a complete list of vehicle system uniformity measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

There are no uniformity performance measures tailored to the needs of data managers and data users. Ideally, uniformity performance measure would be put into place to track performance across users, regions, and temporal system changes.

Respondents	4	Responses	2	Response	50%
assigned	4	received	2	rate	30%





### Question 111:

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



#### Standard of Evidence:

Provide a complete list of vehicle system integration measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

#### **Assessor conclusions:**

There are currently no integration performance measures tailored to the needs of data managers and data users. Ideally, integration performance measure would be put into place to track performance across systems that are tied to one another across time, especially within the context of system changes. In the State response, it was stated that the new system, KAVIS, that is currently being developed will contain this functionality.

Respondents	4	Responses	2	Response	E00/
assigned	4	received	2	rate	50%

#### Question 112:

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



#### Standard of Evidence:

Provide a complete list of vehicle system accessibility measures the State uses, including the most current baseline and actual values for each.

Question Rank: Somewhat Important

# **Assessor conclusions:**

There are currently no accessibility performance measures for the vehicle system tailored to the needs of data managers and data users. When KAVIS is fully implemented the number of times the database is used and the number of users able to perform inquires could possibly become a performance measure if there is a baseline established and current actual values for each. There should also be a performance metric or goal tied to the performance measure.

Respondents	1	Responses	2	Response	50%
assigned	7	received		rate	





# Question 113:

Has the State established numeric goals—performance metrics—for each performance measure?



# Standard of Evidence:

Provide the specific, State-determined numeric goals associated with each performance measure in use.

Question Rank: Very Important

# **Assessor conclusions:**

The State has not established numeric goals—performance metrics—for each performance measure. These goals are needed to be able to set targets that motor vehicle staff can work towards and to provide measurable performance comparisons across time

Respondents	4	Responses	2	Response	50%
assigned	4	received	2	rate	30 /6

#### Question 114:

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?



# Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, and prompt form revisions.

Question Rank: Very Important

# **Assessor conclusions:**

The detection of high frequency errors is not used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions. It is highly recommended that these high frequency errors be rolled back into the greater system improvement process.

Respondents assigned	4	Responses received	1	Response rate	25%	
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#### Question 115:

Are independent sample-based audits conducted periodically for vehicle reports and related database contents for that record?

# Standard of Evidence:

Describe the formal audit methodology, provide a sample report or other output, and specify the audits' frequency.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Independent sample based audits are not conducted for vehicle reports or related database contents. Audits should be independent of the normal day-to-day review, but not necessarily conducted by parties outside the department or division of State government that normally reviews the data. Periodic sample based audits can provide information that could prompt updates to manuals, forms or validation rules. At a minimum these audits should occur annually.

Respondents	1	Responses	4	Response	25%
assigned	4	received	ı	rate	23 /0

# Question 116:

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

#### Standard of Evidence:

Describe the analyses, provide a sample report or other output, and specify the analyses' frequency.

Question Rank: Very Important

# **Assessor conclusions:**

Periodic comparative and trend analyses are not used to identify unexplained differences in the data across years and jurisdictions. These trend analyses are useful in providing a comparative year-over-year view into the performance of systems and the organization as a whole.

Respondents	4	Responses	4	Response	25%
assigned	4	received	ı	rate	25 /0





# Question 117:

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

# Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform changes.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Data quality feedback from key users is not regularly communicated to data collectors and data managers. This feedback loop is critical to providing meaningful system updates to improve the data quality of a system.

Respondents	4	Responses	4	Response	25%
assigned	4	received	1	rate	25/0

# Question 118:

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



# Standard of Evidence:

Provide a sample quality management report and specify how frequently they are issued to the TRCC.

Question Rank: Very Important

# **Assessor conclusions:**

Data quality management reports are not provided to the TRCC for regular review. A strong TRCC can be beneficial in many ways and it is recommended that data reports be provided to them on a regular basis.

Respondents	4	Responses	4	Response	25%
assigned	4	received	I	rate	23%





# Driver

The Kentucky Transportation Cabinet's Division of Driver Licensing is the custodian responsible for the driver license system, oversight of driver license issuance, and driver records. Driver licenses are issued by Circuit Clerks with the State's court system. The Division of Driver Licenses documents procedures for driver license issuance used by the Circuit Clerks.

The driver records are updated electronically to reflect adjudications and sanctions, including those related to driving under the influence, from the courts. Traffic school and driver education completions reported by the courts are also recorded. Driver license actions are noted on the driver record and drivers are notified. Based on the information provided, it does not appear that the State administratively sanctions drivers for unlawful breath alcohol level or refusal to submit to a breath test. The State does not have a separate DUI data system.

While linkages exist between crash, citation, and adjudication data, the responsibilities of the various data custodians and descriptions of the linkages and related processes should be documented.

Per State statute, records are purged after five years, seemingly in their entirety; at a minimum, original issuance dates should be retained for the life of an active driver record and documentation of purging processes should be developed.

While some driver system controls are in place through data edits and access protocols, the evidence provided by the State did not provide assurances that these controls are sufficient. State statute was cited as the defining factor for the driver license system, including its data fields and system changes. The State's process for data quality review includes system error reports, activity logs, and monitoring by management. Little explanation was provided regarding how these monitoring activities are used, what and how action is taken for data or system corrections, improper system access, or other irregularities. The State is strongly encouraged to develop a data dictionary, establish processes for implementing system improvements to improve data quality, strengthen data quality management practices, and solidify access protocols and documentation to ensure access is properly authorized.

The State's driver license system follows the AAMVA UNI data processing flow, which requires interaction with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS). While the Social Security Online Verification system is also used for license issuance, it is not clear whether the Systematic Alien Verification for Entitlement system is used.

The Division of Driver Licensing fraud section uses facial recognition software. The Division trains Circuit Clerks to identify document fraud and system edits prevent duplicate records. To what extent these processes are used, or exactly what they are, is unknown.

The State is strongly encouraged to develop system performance measures. Performance measures establish standards that are helpful when prioritizing system enhancements or corrections, as they objectively provide gauges for where resources should be used. They are also helpful in identifying data or system problems that might otherwise go undetected. Closer collaboration with the State's traffic records coordinating committee is advised, as the





committee is charged with developing the State's traffic records strategic plan. This plan should include performance measures and assist with distribution of federal funding to assist with system improvements.

# Question 119:

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



#### Standard of Evidence:

Provide a narrative identifying the custodial agency.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky's driver system is owned, controlled, and maintained by the Kentucky Transportation Cabinet's Division of Driver Licensing.

Respondents	2	Responses	4	Response	33.3%
assigned	3	received	ı	rate	33.3%

# Question 120:

Can the State's DUI s data system be linked electronically to the driver system?



# Standard of Evidence:

Provide a narrative explanation of a State's linking protocols that demonstrated how a citation on the DUI data system is linked to a record on the driver system. Include identification of the linkage portal and organizations responsible for maintaining the link and the linking fields used.

Question Rank: Very Important

# Assessor conclusions:

The State does not have a DUI data system. Each night, the State's courts electronically send DUI convictions to the Division of Driver Licensing, where they are loaded to the driver license system. See www.nhtsatsis.net/MIDRIS/resources.htm for more information about DUI data systems.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 121:

Does the driver system capture novice drivers' training histories, including provider names and types of education (classroom or behind-the-wheel)?



# Standard of Evidence:

Provide a narrative documenting the availability of novice driver training history (including motorcycle and commercial license training), and specify the pertinent data fields and audit checks in the data dictionary or provide a sample system report.

**Question Rank:** Less Important

# **Assessor conclusions:**

Teens under 18 years of age must complete a 4-hour course for licensing. Course completion is entered on the driver record upon receipt from class instructors, although it is not clear what information is entered or whether that entry is done manually or electronically. Motorcycle safety course completions are scanned to the driver record. No information was provided regarding data fields and audit checks.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 122:

Does the driver system capture drivers' traffic violation and/or driver improvement training histories, including provider names and types of education (classroom or behind-the-wheel)?



# Standard of Evidence:

Provide a narrative documenting the availability of traffic violation and/or driver improvement training history, including motorcycle and commercial license training, by specifying the pertinent data fields and audit checks in the data dictionary or provide a sample report.

**Question Rank:** Less Important

# **Assessor conclusions:**

The State collects traffic school and drug and alcohol class information from the courts. Specific codes are used on the driver record entry to identify the type of training; however, it is not clear specifically what pertinent data is reflected on the driver record besides the established codes.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 123:

Does the driver 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)?



# Standard of Evidence:

Provide a narrative documenting the availability of original issuance dates for all permits, licensing, and endorsements by specifying the pertinent data fields and audit checks in the data dictionary or provide a sample report.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State purges information after five years, including original issuance dates. Once purged, the information is not available. Original issuance dates should be maintained for the life of an active driver record.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 124:

Is driver information maintained in a manner that accommodates interaction with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS)?



# Standard of Evidence:

Demonstrate functional integration with the PDPS and CDLIS. AAMVA audit reports can be provided as supporting documentation.

Question Rank: Very Important

# **Assessor conclusions:**

The State follows the AAMVA UNI data processing flow for FMCSA which requires interaction with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS) as evident from the Annual Program Review that was provided.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %





#### Question 125:

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



# Standard of Evidence:

Provide, at a minimum, a table of contents and sample elements from the data dictionary or a sample data dictionary report.

Question Rank: Very Important

# Assessor conclusions:

A driver license system data dictionary or excerpts thereof were not provided. The State has a map for driver history entries.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

# Question 126:

Are all valid field values—including null codes—documented in the data dictionary?



# Standard of Evidence:

Provide sample valid data field values from the data dictionary.

Question Rank: Very Important

# **Assessor conclusions:**

A data dictionary was not provided. Efforts should be made to create a data dictionary for all data fields in the driver system.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

# Question 127:

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

# Standard of Evidence:



Provide an example edit check and data collection guideline.

Question Rank: Very Important

# **Assessor conclusions:**

Edits are in place for all data entry fields in the driver system. An example page of "Consistency Checks" was provided.

Respondents 3 Responses 1 assigned received	Response rate 33.3%
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# Question 128:

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

# Standard of Evidence:



Provide a narrative explanation of the controls and procedures that ensure the data dictionary is kept up to date.

Question Rank: Very Important

#### Assessor conclusions:

The State does not have a data dictionary, although codes are updated in the table as changes are made.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

# Question 129:

Does the custodial agency maintain accurate and up to date documentation detailing the licensing, permitting, and endorsement issuance procedures (manual and electronic, where applicable)?



# Standard of Evidence:

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The DDL maintains the Circuit Clerk manual that documents issuance procedures. This manual was provided. The manual does not have a revision date or a table of revisions. Based on a quick search, it appears the last update was in early 2016, with one update prior to that in 2015, and a few others in 2014.

Respondents assigned 3	Responses received 2	Response rate	66.7%
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# Question 130:

Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of relevant citations and convictions (manual and electronic, where applicable)?



# Standard of Evidence:

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Courts submit convictions electronically to the Division of Driver Licensing. A sample page of electronic transfer was provided, showing DUI convictions. The transmission and update process and how these processes are documented was not adequately explained.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 70

#### Question 131:

Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of driver education and improvement course (manual and electronic, where applicable)?



# Standard of Evidence:

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

Question Rank: Somewhat Important

# **Assessor conclusions:**

This question speaks to how driver education and improvement course data is added to the driver record. The response and the documentation address the electronic transmission of convictions. Specific information explaining the process for the reporting and recording of driver education and improvement courses as well as the percentage of reporting that is accomplished manually and electronically was not provided.

Respondents assigned	3	Responses received	2	Response rate	66.7%
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# Question 132:

Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of other information that may result in a change of license status (manual and electronic, where applicable)?



# Standard of Evidence:

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

Question Rank: Somewhat Important

# **Assessor conclusions:**

While the State maintains dates of transmission from other agencies that may affect driver status, the State does not appear to have up-to-date documentation detailing the reporting and recording of other information that may result in a change of license status. Not all change of license status comes from reporting by other agencies.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 133:

Does the custodial agency maintain accurate and up to date documentation detailing any change in license status (e.g., sanctions, withdrawals, reinstatement, revocations, and restrictions)?



# Standard of Evidence:

Provide a narrative or flow diagram describing the processes and procedures governing the actual change to the license status, including timelines for each type of change.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Changes are documented in the driver system, actions are taken, and notification is provided to the affected driver. It does not appear that these processes are documented.

Respondents 3 Responses 2 Response assigned received rate	66.7%	
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#### Question 134:

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

# Standard of Evidence:

Provide the process flow diagram.

Question Rank: Very Important

# **Assessor conclusions:**

The Division of Driver Licensing provided a diagram that outlines the driver data system's key data process flows, including inputs from other data systems.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

#### Question 135:

Are the processes for error correction and error handling documented for: license, permit, and endorsement issuance; reporting and recording of relevant citations and 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?



# Standard of Evidence:

Provide the documentation or flow diagram that describes the processes and procedures for error correction and error handling in each of the listed process areas.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State provided an error report that is used to generate corrections for convictions; however, there was not any explanation of how these corrections are handled. This question also asks for the error correction processes for license, permit, and endorsement issuance; incorrect reporting and recording of driver education and improvement courses; and any other incorrect information that may result in a change of license status.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 136:

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

# Standard of Evidence:

Provide the documentation or flow diagram that describes the processes and procedures for purging data and the timelines for these actions.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Kentucky statute KRS 180.018 requires purging of portions of driver records and provides timelines. Statutory authority does not, however, speak to the processes or procedures used to carry out that authority.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

#### Question 137:

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



# Standard of Evidence:

Provide the documentation or flow diagram that describes the processes and procedures for administrative license suspension.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The Division of Driver Licensing is the driver records custodian and the courts determine the sanctions associated with a DUI. Based on this, it appears that DDL does not administratively suspend a license based on a DUI arrest independent of adjudication.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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#### Question 138:

Are there established processes to detect false identity licensure fraud?

# Standard of Evidence:



Provide a narrative describing the systems or processes used to detect individuals attempting licensure under a new identity.

Question Rank: Very Important

#### **Assessor conclusions:**

The Division of Driver Licensing has a fraud section that uses facial recognition software. The Division trains Circuit Clerks to identify document fraud and system edits prevent duplicate records. It is not clear to what extent these processes are used, or exactly what they are.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 139:

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



# Standard of Evidence:

Provide a narrative describing the systems or processes used to detect internal fraud by individual users or examiners.

Question Rank: Very Important

# **Assessor conclusions:**

The State has an activity log that records all activity by all users of the driver system. This log is created electronically and cannot be modified. Management reviews this report for any irregularities, which are then investigated to ensure proper actions were taken. The Circuit Clerk is responsible for verifying issuance documents and whether or not cameras are installed in the issuance area. Kentucky State Police conduct driver tests and are responsible for auditing the process. Information from the Circuit Clerk and Kentucky State Police regarding their processes to detect internal fraud was not provided.

Respondents	3	Responses	2	Response	66.7%	
assigned	J	received	_	rate	00.1 /0	





# Question 140:

Are the established processes to detect CDL fraud (including hazmat endorsements)?



# Standard of Evidence:

Provide a narrative describing the systems or processes used to detect commercial driver's license fraud, including for hazmat endorsements.

Question Rank: Very Important

#### **Assessor conclusions:**

The State maintains an activity log for commercial driver license entries. Hazmat approvals are done by law enforcement, who is also responsible for conducting and auditing driver testing. It is not clear what measures other than the activity log and self-audits are used to detect CDL fraud.

Respondents	2	Responses	4	Response	33.3%
assigned	3	received	ı	rate	33.3 /0

#### Question 141:

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



# Standard of Evidence:

Provide copies of the relevant policies and procedure manuals.

Question Rank: Very Important

# **Assessor conclusions:**

The Division of Driver Licensing conforms to State and cabinet policies for appropriate system and information security. However, it is not known what those policies are. The State also utilize MOU's for outside agencies accessing the data from the driver system. However, it is not clear specifically what those policies or procedures are and what the language is in the MOU that addresses information security. The MOU provided is a cover letter and not an actual MOU.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %





# Question 142:

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

# Standard of Evidence:

Provide copies of the relevant procedures or manuals.

Question Rank: Very Important

# **Assessor conclusions:**

The State has controls in place to protect driver records from access by unauthorized users, yet these controls were not provided or explained. Information regarding the actual procedures for tracking and releasing of driver information was not provided. For example, are paper copies of driver records released? If so, what controls are in place to ensure the person receiving the record is entitled to it?

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /0

#### Question 143:

Can the State's crash system be linked to the driver system electronically?

# Standard of Evidence:

Provide a narrative explanation of a State's linkage protocols that demonstrates how records in the crash system are linked to the driver record. Include identification of the linkage portal and the organization responsible for maintaining the link and the linking fields used.

Question Rank: Very Important

# Assessor conclusions:

Kentucky State Police are the custodian for crash data. It does appear that Kentucky Division of Driver Licensing receives crash data electronically for use on the driver record and has shared responsibility for the crash linkage with other associated agencies as it connects to different program platforms. However, it is not clear what the linkage protocols are.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 144:

Can the State's citation system be linked to the driver system electronically?



# Standard of Evidence:

Provide a narrative explanation of a State's linkage protocols that demonstrates how records in the citation system are linked to the driver record. Include identification of the linkage portal and the organization responsible for maintaining the link and the linking fields used.

Question Rank: Very Important

# Assessor conclusions:

The State receives citations from the courts electronically from the Circuit Court Clerk with the judicial ruling. However, it is also not clear if there is an actual citation system that is linked to the driver system or if it is only adjudicated citations that are sent electronically to the driver system. It is also not clear what the linking protocols are.

Respondents	2	Responses	4	Response	33.3%
assigned	3	received	ı	rate	33.3%

# Question 145:

Can the State's adjudication system be linked to the driver system electronically?



#### Standard of Evidence:

Provide a narrative explanation of a State's linkage protocols that demonstrates how records in the adjudication system are linked to the driver record. Include identification of the linkage portal and the organization responsible for maintaining the link and the linking fields used.

Question Rank: Very Important

# **Assessor conclusions:**

The Division of Driver Licensing receives adjudication data from the courts electronically. The DDL shares responsibility for linking with other associated agencies, yet those agencies are not identified. No explanation of how the data is linked, or by which fields, was provided.

Respondents assigned	3	Responses received	1	Response rate	33.3%
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# Question 146:

Is there an interface link between the driver 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?



# Standard of Evidence:

Provide a narrative description of the policy for checking the PDPS, CDLIS, SSOLV, and SAVE for licensing commercial and non-commercial drivers (both original issuances and renewals).

Question Rank: Very Important

# **Assessor conclusions:**

The State uses the Problem Driver Pointer System, the Commercial Driver Licensing System, and the Social Security Online Verification system. It is not clear whether the State uses the Systematic Alien Verification for Entitlement system. Policies guiding the use of these systems - when and how they are checked and to what end - are not provided or explained.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

# Question 147:

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



#### Standard of Evidence:

Provide a narrative description of the protocols granting authorized law enforcement personnel access to information in the driver system.

Question Rank: Very Important

# **Assessor conclusions:**

The State acknowledges that law enforcement have access to the driver system and access is granted on a user by user basis. However, they did not describe the protocols for granting authorized law enforcement personnel access to information in the driver system.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	_	rate	00.7 /0





# Question 148:

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



# Standard of Evidence:

Provide a narrative description of the protocols granting authorized law enforcement personnel access to information in the driver system.

Question Rank: Very Important

# **Assessor conclusions:**

While the Division of Driver Licensing provides access to the Circuit Clerks, the access described is for issuance of driver licenses. Is access to driver records provided to the courts for consideration in adjudicating cases or for identification?

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 149:

Does the custodial agency have the capability to grant authorized personnel from other States access to information in the driver system?



#### Standard of Evidence:

Provide a narrative description of the protocols granting authorized law enforcement personnel access to information in the driver system.

Question Rank: Very Important

# **Assessor conclusions:**

Other states do not have access to the driver license system. Access to driver records by other states may be through avenues other than direct access to the driver system. Other states may have access to Kentucky's driver information, perhaps through PDPS, CDLIS, or NLETS, and driver histories may be returned for such inquiries; however, the State did not provide information to support or confirm this access.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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#### Question 150:

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



# Standard of Evidence:

Provide a narrative description of the driver system's data quality management programs and the most recent data quality reports issued.

**Question Rank:** Very Important

# **Assessor conclusions:**

The State has data rules for the driver system. Data quality management considers all aspects of data - from collection to transmission to posting, and factors like timeliness, accuracy, completeness, uniformity, integration, and accessibility. Ideally such a program includes automated edit checks and validation rules, performance measures, numeric goals, performance reporting, tracking of high frequency errors, quality control reviews, independent sample based audits, periodic comparative and trend analyses, data quality feedback, and data quality management reports.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 151:

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?



# Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks or validation rules ensure entered data falls within the range of acceptable values and is logically consistent between fields.

Question Rank: Very Important

# **Assessor conclusions:**

The State has edits for all entry fields, and provided an example that phone numbers must be numerical and codes must be those in the code tables. It is not clear whether more sophisticated edits are in place, for logical consistency.

Respondents	3	Responses	2	Response	66.7%
assigned	· ·	received	_	rate	00.1 70





# Question 152:

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



# Standard of Evidence:

Provide a complete list of driver system timeliness measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The State does not have timeliness performance measures tailored to the needs of data managers and data users. An example of a timeliness performance measure may be found in the Traffic Records Program Assessment Advisory.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

# Question 153:

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



# Standard of Evidence:

Provide a complete list of driver system accuracy measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The State does not have accuracy performance measures tailored to the needs of data managers and data users. An example of an accuracy performance measure may be found in the Traffic Records Program Assessment Advisory.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 154:

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

# Standard of Evidence:

Provide a complete list of driver system completeness measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The State does not have completeness performance measures tailored to the needs of data managers and data users. An example of a completeness performance measure may be found in the Traffic Records Program Assessment Advisory.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

#### Question 155:

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



# Standard of Evidence:

Provide a complete list of driver system uniformity measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The State does not have uniformity performance measures tailored to the needs of data managers and data users. An example of a uniformity performance measure may be found in the Traffic Records Program Assessment Advisory.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 156:

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

# Standard of Evidence:

Provide a complete list of driver system integration measures the State uses, including the most current baseline and actual values for each.

Question Rank: Very Important

# **Assessor conclusions:**

The State does not have integration performance measures tailored to the needs of data managers and data users. An example of an integration performance measure may be found in the Traffic Records Program Assessment Advisory.

Respondents	3	Responses	1	Response	33.3%
assigned	3	received	1	rate	JJ.J /0

#### Question 157:

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



# Standard of Evidence:

Provide a complete list of driver system accessibility measures the State uses, including the most current baseline and actual values for each.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State does not have accessibility performance measures tailored to the needs of data managers and data users. An example of an accessibility performance measure may be found in the Traffic Records Program Assessment Advisory.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 158:

Has the state established numeric goals—performance metrics—for each performance measure?



# Standard of Evidence:

Provide the specific, State-determined numeric goals associated with each performance measure in use.

**Question Rank:** Very Important

# **Assessor conclusions:**

The State does not have established numeric goals-performance metrics-for each performance measure. For each of the six performance areas, the State should establish performance measures, and, for each measure, the State should establish numerical/quantifiable metrics or standards. Performance measures help identify problems or opportunities, guide investment or resource decisions, and ensure the system is meeting needs.

Respondents	2	Responses	₁ Response	33.3%
assigned	3	received	rate	33.3%

# Question 159:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, and prompt revisions.

Question Rank: Very Important

# **Assessor conclusions:**

The Division of Driver Licensing can request reports and review trends of issues reported by staff. This information is used to update training as needed. The State indicated that system changes are driven only by legislative changes; it appears that data quality issues are not addressed systematically or through programming.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 160:

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

# Standard of Evidence:

Describe the formal audit methodology, provide a sample report or other output, and specify the audits' frequency.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State reviews driver history entries daily for errors. This does not constitute an independent sample based audit. Additional information about independent audits, outside normal day-to-day review, conducted by the Kentucky Transportation Cabinet was not provided.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received		rate	00.7 /6

#### Question 161:

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



# Standard of Evidence:

Describe the analyses, provide a sample report or other output, and specify the analyses' frequency.

Question Rank: Very Important

# **Assessor conclusions:**

The State has the ability to request reports to identify trends or anomalies in data. Neither information describing the nature of the analyses, the frequency, or other protocols nor a sample report was not provided.





# Question 162:

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

# Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform changes.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State's feedback system is for front line users to report issues to supervisors. The supervisors determine root cause and have changes implemented. Based on other responses, it is not clear what those changes might be, as programming fixes are said not to occur outside of legislative changes. Data quality communication should also be encouraged for non-problem issues that could actually yield enhancements to the driver system not just resolve problems.

Respondents	2	Responses	2	Response	66 70/
assigned	3	received	2	rate	66.7%

# Question 163:

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



# Standard of Evidence:

Provide a sample quality management report and specify how frequently they are issued to the TRCC.

Question Rank: Very Important

# Assessor conclusions:

The Division of Driver Licensing has no communication with the Traffic Records Coordinating Committee. It is not clear whether the TRCC includes representatives from the DDL or the Kentucky Transportation Cabinet, as is typical in most states. The TRCC is a required committee if the state receives traffic safety grant funding and, in many states, the State Safety Office assists the TRCC.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	_	rate	00.7 70





# Roadway

The Kentucky Transportation Cabinet (KYTC) is the agency responsible for collecting and maintaining the roadway information system for the State. According to Highway Statistics 2015 (Federal Highway Administration), KYTC maintains 27,636 miles of state-owned highways and ramps. This mileage represents roughly 34% of the 79,857 miles of road in Kentucky.

Roadway and traffic data elements are maintained within a statewide linear referencing system (LRS). Through this LRS, KYTC maintains data on all 79,857 miles of public road and enables linkages between road, traffic data, and the bridge databases. Also nearing completion is a linkage with the pavement database. As the information is maintained by KYTC, all data, including locally submitted data, is collected according to a set of collection, management, and submission standards to insure the similar information quality.

KYTC maintains a data dictionary for all data elements including most of the MIRE Fundamental Data Elements (FDEs). Many MIRE FDE elements are documented but not all. KYTC is developing plans to incorporate further MIRE FDEs and non-FDEs. A formal procedure to ensure the data dictionary is kept up to date is described briefly thru narrative, with updates to the documentation being part of the change process.

Crash data is not directly integrated within the enterprise roadway information system. However, road and traffic data are integrated with crash data outside the roadway data system and used to develop safety analysis and safety management tools including prioritization of Highway Safety Improvement Program (HSIP) projects in several categories: High Friction Surface, Roadway Intersections, Cable Median Barrier, and Roadway Departure Corridors.

# Opportunities

The Kentucky Transportation Cabinet has built an excellent foundation for their enterprise roadway data information system that has undergone continual improvement. As this process continues, KYTC should focus on addressing inclusion of the remaining MIRE FDEs.

With the additional data and established history of merging road data with crash data, KYTC should further their safety analyses by interfacing the data available via the LRS. They could also explore the use of available analysis tools for this purpose.

KYTC should build on their data entry quality control processes by establishing a spectrum of performance measures. This could include a formal process of accessing roadway data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration) by utilizing performance management information available in the National Highway Traffic Safety Administration's (NHTSA), "Model Performance Measures for State Traffic Records Systems". Additional information is also available in a follow-up document published by FHWA titled, "Performance Measures for Roadway Inventory Data".





# Question 164:

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



# Standard of Evidence:

Provide a map displaying all public roads that represents the system's statewide capabilities. Identify what percentage of the public road system is State owned or maintained. Explain whether the State uses a single compatible location referencing system for all public roads or if it has a set of compatible location referencing systems. Prior reports are acceptable.

Question Rank: Very Important

#### **Assessor conclusions:**

The State has a single Linear Referencing System (LRS) that contains all public roads using a single Linear Referencing Method (LRM). The roads are identified by a single compatible location referencing system that uses a county-route-milepoint linear referencing method. Moreover, the State identifies that 34 percent of public roads are state-maintained.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 165:

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



#### Standard of Evidence:

Provide a map displaying roadway features and traffic volume (FDEs) for all public roads (State and non-State routes) that is representative of the system's statewide capabilities. Explain whether the State uses a single compatible location referencing system for all public roads or if it has a set of compatible location referencing systems. Prior reports are acceptable.

Question Rank: Very Important

# **Assessor conclusions:**

The State roadway and traffic data elements are located using a compatible linear referencing system for all public roads with visual proof provided via a map.

Respondents 3 assigned	Responses received	2	Response rate	66.7%
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#### Question 166:

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



# Standard of Evidence:

Describe the enterprise roadway information system, which should enable linking between the various roadway information systems including: roadway, traffic, location reference, bridge, and pavement data.

Question Rank: Very Important

# **Assessor conclusions:**

The State has a single, spatially-enabled Oracle database in which the roadway and traffic data elements are attached to the LRS geometry. A link exists to the bridge database and another link to the pavement database is nearing implementation.

Respondents	2	Responses	2	Response	CC 70/
assigned	3	received	2	rate	66.7%

#### Question 167:

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



# Standard of Evidence:

Provide a map displaying crash locations on all public roads that is representative of the system's statewide capabilities. Explain whether the State uses a single compatible location referencing system for crash, roadway features, and traffic volume on all public roads or if it has a set of compatible location referencing systems. Prior reports are acceptable.

Question Rank: Very Important

# Assessor conclusions:

The State crash and roadway databases can be linked via compatible referencing systems, either route-milepoint or via spatial relations. When crashes are collected, the LRS location is included with the report through the electronic collection system.

Respondents	1	Responses	2	Response	75%
assigned	4	received	3	rate	13/0





# Question 168:

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



# Standard of Evidence:

Describe how the crash data is incorporated into the enterprise roadway information system and provide an example of how it is used for safety analysis.

Question Rank: Very Important

# **Assessor conclusions:**

Though the narrative and examples provided by the State are laudable and excellent uses of crash data in conjunction with roadway elements, the State does not speak to the question regarding incorporation of crash data into the enterprise roadway information system.

Respondents	4	Responses	2	Response	75%
assigned	4	received	3	rate	75%

#### Question 169:

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

# Standard of Evidence:

Provide a list of FDEs collected and their definitions. Specify if the data collected is for all public roads or State roads only. If the State wishes to cite the data dictionary directly, please identify the FDEs.

Question Rank: Somewhat Important

# Assessor conclusions:

The State collects most of the MIRE-FDE for all public roads. The most important omissions are the traffic volumes for local roads that intersect State facilities. In addition, the number of through lanes for local paved roads is missing. Nevertheless, the State has collected a lot of roadway data for local roads.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %





# Question 170:

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



# Standard of Evidence:

Provide a list of additional MIRE data elements collected beyond the FDEs. Specify if the data elements are collected for all public roads or State roads only.

Question Rank: Somewhat Important

# **Assessor conclusions:**

From the narrative given, many of the MIRE data attributes are collected for all public roads.

Respondents	2	Responses	2	Response	CC 70/
assigned	3	received	2	rate	66.7%

# Question 171:

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



# Standard of Evidence:

Identify, with appropriate citations, the MIRE FDE-related contents of the enterprise system's data dictionary. Specify if the data dictionary applies to all public roads or to State roads only.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State provided an extract of the enterprise data dictionary marked with indication of FDE data for all public roads. However, the number of elements marked doesn't seem to match the number of MIRE FDE elements. However, there are some data elements that could not be identified. For example, such data elements as "Intersection Leg ID" and "Leg Type" are not readily apparent.

Respondents assigned 3	Responses received	2	Response rate	66.7%
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# Question 172:

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



# Standard of Evidence:

Identify, with appropriate citations, the additional (non-FDE) MIRE data elements included in the data dictionary. Specify if the data dictionary applies to all public roads or to State roads only.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State provided a marked up extract of a list of fields and their formats, but this does not appear to equate to a data dictionary nor do the markups seem to always connect to the entries.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received		rate	00.7 /6

# Question 173:

Does roadway data imported from local or municipal sources comply with the data dictionary?



# Standard of Evidence:

Provide a narrative statement explaining, how and if any roadway data are accepted and included in the statewide roadway database from local or municipal sources. Describe if the data from local or municipal sources meet the data dictionary standards.

Question Rank: Very Important

# **Assessor conclusions:**

The State contracts with regional agencies to collect local roadway data in conformance with the State data dictionary.

Respondents assigned	3	Responses received	2	Response rate	66.7%
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# Question 174:

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

# Standard of Evidence:



Provide a narrative explanation of the controls and procedures that ensure the data dictionary is kept up to date.

Question Rank: Very Important

# **Assessor conclusions:**

The State data dictionary documentation is generated from within the database and can be accessed at any time from the database users. The State claims that updates to the documentation are part of the change process; however, additional details were not provided.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

# Question 175:

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?



# Standard of Evidence:

Provide documentation or a narrative explaining the process for adding new data elements (e.g., a new MIRE element) to the roadway system. Identify who is responsible for each step in the process.

Question Rank: Very Important

# **Assessor conclusions:**

The State has a detailed change control process for incorporating new MIRE elements into the roadway information system. As explained in the narrative, staff modify the database to accommodate the new data element. There is also a feedback mechanism between the data administrators and the users.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 176:

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



# Standard of Evidence:

Provide documentation or a narrative explaining the process for updating data elements in the roadway system. Identify who is responsible for each step in the process.

Question Rank: Very Important

# **Assessor conclusions:**

The State provided steps for updating existing data elements that starts with a change control meeting with the relevant stakeholders. The stakeholders include such entities as IT, the data customers, and the data custodians of the databases. This process accommodates upstream and downstream users.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /8

# Question 177:

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



# Standard of Evidence:

Provide documentation or a narrative explaining the process of archiving and accessing historical roadway data. Identify who is responsible for each step in the process.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State provided a narrative describing the steps for archiving and accessing historical roadway inventory. The archival database is shared with several KYTC applications and customers.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 178:

Are the procedures that local agencies (e.g., county, MPO, municipality) use to collect, manage, and submit roadway data to the statewide inventory documented?



# Standard of Evidence:

Provide documentation or a narrative explaining the local agency procedures for collecting, managing, and submitting data to the State roadway inventory. Identify who is responsible for each step in the process.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State contracts with regional agencies to collect local roadway data in conformance with standards for collecting, managing, and submitting the data as set forth in a standards document. If submissions do not conform to standards, they are returned for correction.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

#### Question 179:

Are local agency procedures for collecting and managing the roadway data compatible with the State's enterprise roadway inventory?



# Standard of Evidence:

Provide official documentation or a narrative explanation of how compatibility between local data systems and the State roadway inventory is achieved. Identify who is responsible for each step in the process.

Question Rank: Very Important

# **Assessor conclusions:**

The State contracts with regional agencies to collect local roadway data and requires conformance and compatibility with the State roadway data inventory.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 180:

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



# Standard of Evidence:

Provide the guidelines and cite an example of data collection pursuant to the data dictionary.

Question Rank: Very Important

# Assessor conclusions:

The State primarily utilizes the HPMS Field Manual as the guide for collection of roadway elements with supplemental information for some elements.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

# Question 181:

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



# Standard of Evidence:

Describe the location referencing system and the information systems that use it. If there is more than one location referencing system in use, list each and the associated systems.

Question Rank: Very Important

# **Assessor conclusions:**

All State roadway systems use the same LRM, which is county-route-milepoint.

Respondents assigned	3	Responses received	2	Response rate	66.7%	





# Question 182:

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



# Standard of Evidence:

Provide a narrative that describes the interface links connecting the State's roadway information systems. Provide the result of a single query (e.g., table, view) that includes both roadway features and traffic data for a segment of road.

Question Rank: Very Important

# **Assessor conclusions:**

The State has some direct links between the separate roadway information systems and is developing more. Each database is also copied into the State enterprise data warehouse for linkage within.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 183:

Are the location coding methodologies for all regional and local roadway systems compatible?



# Standard of Evidence:

Provide a narrative describing the location referencing system and the associated regional and local roadway systems. If there is more than one location referencing system in use, list each and the associated regional and local systems.

# Question Rank: Somewhat Important

#### Assessor conclusions:

Since the State maintains all roads in Kentucky, by default there is a uniform system that is compatible because it references a single LRS. However, no discussion was provided regarding the location coding methodologies for regional and local roadway systems.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 184:

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



# Standard of Evidence:

Provide a narrative that describes the interface links connecting the regional or local roadway information systems to the State's enterprise roadway information system. Provide the result of a single query (e.g., table, view) that includes both roadway features and traffic data for a local road segment.

Question Rank: Somewhat Important

# Assessor conclusions:

The State has indicated that collection for local road data is contracted and included in the State enterprise roadway system thus negating the need for an interface.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 185:

Does the State enterprise roadway information system allow MPOs and local transportation agencies on-demand access to data?



# Standard of Evidence:

Provide a narrative that describes the system or process that enables localities to query the data system.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State allows the MPOs and local transportation agencies on-demand access to data in the State enterprise roadway information system. This is accomplished with the use of public query tools and GIS files, which are updated and published weekly.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 186:

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

# Standard of Evidence:

Provide a sample report and specify the release schedule for the reports.

Question Rank: Very Important

# **Assessor conclusions:**

The State has some quality reports that are auto-generated on a weekly basis with others generated manually as appropriate.

Respondents	3	Responses	Response 66.7		
assigned	3	received	2	rate	00.7 /6

#### Question 187:

Is the overall quality of information in the Roadway system dependent on a formal program of error/edit checking as data is entered into the statewide system?



#### Standard of Evidence:

Describe the formal program of error/edit checking, to include specific procedures for both automated and manual processes.

Question Rank: Very Important

# **Assessor conclusions:**

The State has a program of error/edit checking as data is entered into the statewide system that includes both automated and manual processes. In support of manual processes, there is extensive training for data entry personnel. The is evidenced by the data owners reviewing data for reasonableness and quality prior to data entry. In support of automated processes, there are automatic error checks when the data is entered. For example, data domains are used to ensure that data entry falls within prescribed values. In addition, minimum and maximum values are used for numeric data fields so that the data is entered within logical data limits.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 188:

Are there procedures for prioritizing and addressing detected errors?

# Standard of Evidence:



Describe the procedures for prioritizing and addressing detected errors in both automated and manual processes. Please specify where these procedures are formally documented.

Question Rank: Very Important

# **Assessor conclusions:**

The State has automated checks that prevent entry of erroneous data and automatically prioritize correction at time of entry. Errors detected manual are addressed immediately at time of entry. If further research is needed prior to entry, entry is postponed.

Respondents	2	Responses	2	Response	66 70/
assigned	3	received	2	rate	66.7%

#### Question 189:

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



# Standard of Evidence:

Describe all the procedures used for sharing quality control information with data collectors.

Question Rank: Very Important

# **Assessor conclusions:**

The State has procedures for providing data quality control information feedback and training. The level of training is based on various factors and the State has materials, examples, and demos available. The work of collectors is supervised closely initially. It remains unclear whether feedback, whether individual or agency-level, is provided in a formal manner.

Respondents	3	Responses	2	Response	66.7%
assigned	3	received	_	rate	00.7 /6





# Question 190:

Is there a set of established performance measures for the timeliness of the State enterprise roadway information system?

# Standard of Evidence:

Provide the metrics used.

Question Rank: Very Important

# Assessor conclusions:

No specific performance measures for timeliness have been developed. The State relies on business rules and a focus on performance rather than measuring that performance due to the many variables outside their control. For the future, the State plans to develop timeliness performance measures as a part of their Strategic Highway Safety Plan.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

#### Question 191:

Is there a set of established performance measures for the timeliness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?



# Standard of Evidence:

Provide the metrics used.

Question Rank: Somewhat Important

#### Assessor conclusions:

The State does not have a set of established performance measures for the timeliness of the roadway data maintained by local agencies. It has a program with business rules and goals; however, there are no real metrics involved in the process that are tracked. For the future, the State plans to develop timeliness performance measures as a part of their Strategic Highway Safety Plan.

Respondents 3 Responses received	2 Response rate	66.7%
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# Question 192:

Is there a set of established performance measures for the accuracy of the State enterprise roadway information system?

# Question Rank: Very Important

# Standard of Evidence:

Provide the metrics used.

# **Assessor conclusions:**

The State's focus on the measurement accuracy of roadway location is laudable, but is not equivalent to a performance measure. The existence of one measurement does not address the accuracy of the database as a whole. In the future, the State intends to implement accuracy performance measures for the enterprise roadway information system as part of its Safety Strategic Plan.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7%

#### Question 193:

Is there a set of established performance measures for the accuracy of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?



# Standard of Evidence:

Provide the metrics used.

Question Rank: Somewhat Important

#### Assessor conclusions:

Though the State's focus on the measurement accuracy of roadway location is laudable, the State's answer does not address the question. First, measurement of accuracy does not equate to a performance measure. Second, the existence of one measurement does not address the accuracy of the database as a whole. In addition, the State plans to implement performance measures relating to accuracy as a part of its Safety Strategic Plan.

Respondents assigned	3	Responses received	2	Response rate	66.7%	
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# Question 194:

Is there a set of established performance measures for the completeness of the State enterprise roadway information system?

# Standard of Evidence:

Provide the metrics used.

Question Rank: Very Important

# Assessor conclusions:

The State has many elements that could easily equate to a completeness performance measure and a process in place to maintain that completeness. For example, the State conducted an project in 2000 - 2004 to assess the inventory of the State highway system. The question then becomes what were the gaps in the inventory during this time period? This would equate to a performance measure for completeness for the time period of the project. Additions from the database are then done with new projects when construction is finished. This implies that the road inventory is near 100 percent complete and the only gaps present are new additions to the roadway network? To answer this question, the State says there are very few gaps in the inventory except for new alignments. Moreover, weekly data checks are done to assess the gaps and this is used as a performance measure. Based on these facts, with some reconsideration, the State could have an established set of performance measures for the completeness of the roadway system.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 %

# Question 195:

Is there a set of established performance measures for the completeness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?



# Standard of Evidence:

Provide the metrics used.

Question Rank: Somewhat Important

#### Assessor conclusions:

The State does not seem to have established performance measures for the completeness of the roadway data maintained by regional and local custodians. In the future, KYTC plans to develop and implement performance measures relating to completeness as part of the Safety Strategic Plan for regional and local agencies.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





# Question 196:

Is there a set of established performance measures for the uniformity of the State enterprise roadway information system?

# dway information system?

# Standard of Evidence:

Provide the metrics used.

# Question Rank: Very Important

# **Assessor conclusions:**

Though the State has established guidelines, metadata, and collection procedures for statewide road data collection which encourage uniformity of data, these do not equate to uniformity performance measures. The future plan for the State is to develop and implement performance measures that deal with uniformity as part of the Safety Strategic Plan.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6

#### Question 197:

Is there a set of established performance measures for the uniformity of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?



# Standard of Evidence:

Provide the metrics used.

# Question Rank: Somewhat Important

#### Assessor conclusions:

Though the State has established guidelines, metadata, and collection procedures for statewide road data collection which encourage uniformity of data, these do not equate to uniformity performance measures. In the future, KYTC plans to develop and implement performance measures relating to uniformity as part of the Safety Strategic Plan for regional and local agencies.

Respondents assigned	3	Responses received	2	Response rate	66.7%
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# Question 198:

Is there a set of established performance measures for the accessibility of State enterprise roadway information systems?

# Standard of Evidence:

Provide the metrics used.



Question Rank: Very Important

# **Assessor conclusions:**

The State shares the roadway database readily and, though this is laudable, it does not equate to a performance measure for accessibility as recognized within the State response. The State intends that to establish performance measure for the accessibility of the enterprise roadway information system in the future as a part of its Safety Strategic Plan.

Respondents	1	Responses	2	Response	50%
assigned	4	received	2	rate	30 /6

# Question 199:

Is there a set of established performance measures for the accessibility of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?



Standard of Evidence:

Provide the metrics used.

Question Rank: Somewhat Important

# Assessor conclusions:

The State shares the roadway database readily and, though this is laudable, it does not equate to a performance measure for accessibility as recognized within the State response. Nevertheless, the State has a well established procedures for the accessibility of their roadway information and they are to be commended on this. In addition, the State intends to establish performance measure for the accessibility of the enterprise roadway information system for local and regional entities in the future as a part of its Safety Strategic Plan.

Respondents	4	Responses	2	Response	50%
assigned	4	received	2	rate	30%





# Question 200:

Is there a set of established performance measures for the integration of State enterprise roadway information systems and other critical data systems?



# Standard of Evidence:

Provide the metrics used.

Question Rank: Very Important

# **Assessor conclusions:**

The State enterprise roadway information system data is shared or integrated with multiple other systems and available for these purposes on a regular basis. Though the several examples provided by the State are laudable, these examples do not equate to integration performance measures. However, the State intends to establish performance measures for the integration of the enterprise roadway information system (and other data systems) in the future as a part of its Safety Strategic Plan.

Respondents	4	Responses	2	Response	50%
assigned	4	received	2	rate	30%

# Question 201:

Is there a set of established performance measures for the integration of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.) and other critical data systems?



#### Standard of Evidence:

Provide the metrics used.

Question Rank: Very Important

# **Assessor conclusions:**

The State enterprise roadway information system data is shared or integrated with multiple other systems and available for these purposes on a regular basis. Though the several examples provided by the State are laudable, these examples do not equate to integration performance measures. The State intends to establish performance measures for the integration of the enterprise roadway information system (and other critical data systems) for local and regional agencies in the future as a part of its Safety Strategic Plan.

Respondents 4 Responses assigned received	2 Response rate	50%
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# **Citation / Adjudication**

While the citation and adjudication data systems are different, for traffic records purposes, the need is to collect all the relevant traffic safety-related data from these separate systems so that this information can be analyzed by authorized users to improve and promote traffic safety in the State. According to the State, some driving and criminal history data is electronically transferred and maintained on a statewide and comprehensive system by the Administrative Office of the Courts (AOC). While it appears that some of the information may be available through routine reports, it is not clear whether any of this data is available in real-time. It also appears that all agencies share one system although access to the information may be limited or only available by special request.

Kentucky citations are assigned unique numbers by statutory authority granted to the Kentucky State Police who design, print and distribute those citations to all law enforcement agencies in the State. It was reported that the AOC is the holder for all citation dispositions but no information or evidence was provided that that all citation dispositions are tracked by a statewide system or whether deferrals or dismissals are posted. Ideally, the record should reflect all of the citation processes that resulted in the disposition of the case. The State reported that the Transportation Cabinet provides three and five- year driver records that reflect the final disposition of all traffic citations submitted to them from the AOC.

It was reported that the Courts' case management systems are not interoperable among all jurisdictions within the State. The AOC indicated that they are moving toward having an interface with the State Police that will work to retrieve conviction data on a citation by citation basis. An example of law enforcement agencies analyzing, mapping, and using crash and citation data involving DUI arrest locations was provided to demonstrate how this data is currently being used.

The State reported that there is no single comprehensive data dictionary for the citation system. However, it was reported that context-specific data dictionaries for each report or data-set distributed are available, although no examples were provided for review. While no single document has been able to keep up with all of the data fields, the AOC-Research and Statistics Team has reportedly published context-specific methodologies, including data dictionaries, for each publication but no examples were provided. Also, it was reported that up-to-date data dictionaries exist and are consistent with the field data collection manual, training materials, coding manuals, and corresponding reports and are in compliance with these materials as of the time they are published.

The procedures and process flows for the citation and adjudication data systems for traffic safety-related purposes must be well documented to be understood, managed, and improved. As a critical element of the traffic records system, the availability of such documentation should be well-known and readily accessible to AOC staff and their colleagues. Including this subject in the Strategic Highway Safety Plan would provide an opportunity to engage those critical stakeholders and others by sharing information and assisting with the creation of appropriate data dictionaries and process flow charts for the citation and adjudication systems.

Similarly, there is an excellent opportunity to develop quality control performance measures for the citation and adjudication systems and to included them as part of the State's highway safety





planning.

#### Question 202:

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

# Standard of Evidence:

Provide a narrative description of the statewide system that provides realtime information on individuals' driving and criminal histories.

Question Rank: Very Important

#### Assessor conclusions:

It was reported by the State that some driving and criminal history data is electronically transferred and maintained on a statewide and comprehensive system by the Administrative Office of the Courts (AOC), but it's not clear if the data is available to anyone in real-time. The AOC has records of criminal offenses including traffic violations, but it doesn't specify whether they are available in real-time. It does appear that data may be available by report.

Respondents	0	Responses	4	Response	50%
assigned	0	received	4	rate	30 /6

# Question 203:

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?



# Standard of Evidence:

Name the groups that have real time access and describe the system that these agencies use to access driver or criminal histories, i.e., police dispatch, direct system access, telephone help desk.

Question Rank: Very Important

# **Assessor conclusions:**

Access to individuals driving and criminal history data is limited to certain groups. It does not appear that all agencies share one system. The State Police and courts have systems, but access is limited or may be available by special requests. It also does not appear that they have real-time access.

Respondents	8	Responses	3	Response	37.5%
assigned	U	received	•	rate	37.370





# Question 204:

Is there a statewide authority that assigns unique citation numbers?

#### Standard of Evidence:



Identify the agency responsible and describe the protocols used to generate and assign unique citation numbers. Provide a copy of the relevant statute or gubernatorial order.

Question Rank: Very Important

# **Assessor conclusions:**

State statues require that the Department of Kentucky State Police in consultation with the Transportation Cabinet shall design, print, and distribute to all law enforcement agencies in the Commonwealth a uniform citation with unique citation numbers as stated in the relevant statute provided.

Respondents	0	Responses	2	Response	25%
assigned	0	received	2	rate	23%

# Question 205:

Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?



# Standard of Evidence:

If a statewide data tracking system exists, describe the means by which citation dispositions are transmitted and posted. If the system is the driver history file, note if deferrals or dismissals are posted. If the statewide system is managed through the courts, indicate whether all courts that handle traffic violations report to the same tracking system.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The Administrative Office of the Courts (AOC) is reportedly the holder for all citation dispositions but no evidence was provided that all citation dispositions are tracked by a statewide system or whether deferrals or dismissals are posted.

assigned o received z rate z576	Respondents assigned	8 Responses received	2 Response rate	25%
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#### Question 206:

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

# Standard of Evidence:

Provide a flow chart or audit report documenting how all types of dispositions are posted to the driver file.

**Question Rank:** Somewhat **Important** 

# Assessor conclusions:

The Administrative Office of the Courts (AOC) is the record holder for dispositions. It was further reported that Kentucky does not have a DMV and that the Transportation Cabinet provides 3 year and 5 year driver's records that reflect the final disposition of all traffic citations submitted to them from the AOC but no evidence was provided that final dispositions are posted to the driver data system.

Respondents	0	Responses	2	Response	37.5%
assigned	0	received	3	rate	37.5%

# Question 207:

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



# Standard of Evidence:

Provide the number of case management systems in use in the State and detail which are interoperable. Indicate if the State has a unified judicial system and if municipal or other local level courts share the same case management system.

**Question Rank:** Very Important

# Assessor conclusions:

The courts' case management systems are not interoperable among all jurisdictions within Kentucky. It does appear that there is some progress being made to accomplish this. The Administrative Office of the Courts (AOC) has an upcoming interface with the Kentucky State Police that will work with AOC to retrieve conviction data on a citation by citation basis. It was also reported that this will not yet be a complete feed.

Respondents	Q	Responses	2	Response	37.5%
assigned	0	received	3	rate	37.370





# Question 208:

Is citation and adjudication data used for traffic safety analysis to identify problem locations, areas, problem drivers, and issues related to the issuance of citations, prosecution of offenders, and adjudication of cases by courts?



#### Standard of Evidence:

Provide an example analysis and describe the policy or enforcement actions taken as a result.

Question Rank: Very Important

#### Assessor conclusions:

Citation data is utilized by law enforcement for analysis for DUI enforcements at identified arrest locations. A sample map was provided that shows locations of DUI arrests. It was stated that legislation determines the need to update statutes and that it may or may not be related to statistical information or court disposition data.

Respondents	0	Responses	2	Response	37.5%
assigned	0	received	3	rate	37.5%

#### Question 209:

Do the appropriate components of the citation and adjudication systems adhere to the National Crime Information Center (NCIC) data guidelines?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the NCIC guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Less Important

# **Assessor conclusions:**

Kentucky's citation and adjudication systems adhere to the NCIC data guidelines. FileNet is used as a data/image capturing tool and all records within the Kentucky State Police system are protected from unauthorized access through appropriate administrative, physical, and technical safeguards. The safeguards include restricting access to those with a need to know to perform their official duties using locks, alarm devices, passwords, and/or encrypted data communications.

Respondents	0	Responses	2	Response	25%
assigned	0	received	2	rate	23 /0





# Question 210:

Do the appropriate portions of the citation and adjudication systems adhere to the Uniform Crime Reporting (UCR) Program guidelines?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the UCR program guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State indicated that they have converted to the new updated federal crime reporting standard National Incident-Based Reporting System (NIBRS). They utilize an application called KYOPS that was developed to allow law enforcement agencies the ability to submit offense and citation data directly to the state while remaining within the FBI NIBRS guidelines and crime reporting specifications. There was no evidence provided that the adjudication system follows any standards.

Respondents	0	Responses	2	Response	37.5%
assigned	0	received	3	rate	37.5%

# Question 211:

Do the appropriate portions of the citation and adjudication systems adhere to the National Incident-Based Reporting System (NIBRS) guidelines?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the NIBRS guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

#### Assessor conclusions:

Both the Kentucky State Police and the Administrative Office of the Courts are reported to be meeting the National Incident-Based Reporting System (NIBRS) guidelines.

Respondents	Ω	Responses	2	Response	37.5%
assigned	0	received	3	rate	37.370





# Question 212:

Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Telecommunications System (NLETS) guidelines?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the NLETS guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The Kentucky State Police reported that their systems adhere to the NLETS guidelines and that the system does support justice, public safety, and other law enforcement agencies as required by NELTS. No specific information detailing specific systems and the courts was provided.

Respondents	0	Responses	2	Response	25%
assigned	0	received	2	rate	25%

# Question 213:

Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Information Network (LEIN) guidelines?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the LEIN guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State reported that the uniform citation does not feed into the Law Enforcement Information Network (LEIN) program and it was reported by the Courts that this was unknown in regards to their system.





# Question 214:

Do the appropriate portions of the citation and adjudication systems adhere to the Functional Requirement Standards for Traffic Court Case Management?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the Functional Requirement Standards for Traffic Court Case Management. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The Kentucky State Police (KSP) provided information regarding how the citation information is fed into the court system, but the Administrative Office of the Courts (AOC) provided no information about their system. No specific systems or example of the guidelines were offered.

Respondents	0	Responses	2	Response	25%
assigned	0	received	2	rate	25%

#### Question 215:

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



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to the NIEM Justice domain guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The Kentucky State Police indicated that they have the capability of exchanging citation data through NIEM using an XML-based information exchange based on the schemas designed by NIEM but no specific systems were mentioned. No information regarding the court data system was provided.





#### Question 216:

Does the State use the National Center for State Courts guidelines for court records?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to NCSC guidelines for court records. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

According to the State Administrative Office of the Court, they recently achieved 100% reporting compliance with National Center for State Courts guidelines for criminal case categories, including traffic offenses. Without a more complete description of the systems, only a partially meets rating can be applied.

Respondents	0	Responses	2	Response	37.5%
assigned	0	received	3	rate	37.5%

# Question 217:

Does the State use the Global Justice Reference Architecture (GRA)?

# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to GRA guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

Global Justice Reference Architecture has been used in some recent interface implementations but no additional description or information regarding the system and the GRA guidelines was provided.

Respondents	0	Responses	2	Response	25%
assigned	0	received	2	rate	25%





# Question 218:

Does the State have an impaired driving data tracking system that meets the specifications of NHTSA's Model Impaired Driving Records Information System (MIDRIS)?



# Standard of Evidence:

Provide a narrative statement detailing the systems and their adherence to MIDRIS guidelines. If not, specify if a comparable guideline is being used.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The Kentucky State Police were unaware of an impaired driver tracking system. They did provide examples of the kinds of data used for analysis regarding DUI collisions and citations that can be obtained through the use of the agency's system. It was reported that a web portal is available, at no cost, to other law enforcement agencies, select State departments, and the public (redacted data). It does appear that some pieces are already in place for the future creation of a model impaired driver tracking system.

Respondents	0	Responses	2	Response	25%
assigned	0	received	2	rate	23%

# Question 219:

Does the citation system have a data dictionary?

# Standard of Evidence:

Question Rank:

Very Important

Provide the data dictionary for the Statewide citation tracking system if one exists. If not, provide the data dictionary for the most widely used court case management system.

# Assessor conclusions:

While there is not a single comprehensive document covering the entire system, context-specific data dictionaries for each report or data-set distributed can be developed.

Respondents	6	Responses	2	Response	33.3%
assigned	O	received	2	rate	33.3%





#### Question 220:

Do the citation data dictionaries clearly define all data fields?

# Standard of Evidence:



If a statewide citation tracking system exists, does its data dictionary clearly define all data fields. If there are two or more repositories of citation data, provide data dictionaries for the two largest. NOTE: This response does not require data dictionaries from individual law enforcement agencies that track their own citations—it refers to a statewide system or one used by multiple agencies.

Question Rank: Very Important

#### **Assessor conclusions:**

The State response indicated, that while no single document has been able to keep up with all of the data fields, the Administrative Office of the Courts-Research and Statistics team typically has published context-specific methodologies including data dictionaries for each publication. However, no sample data dictionaries were provided for review.

Respondents	6	Responses	2	Response	33.3%
assigned	О	received	2	rate	33.3%

# Question 221:

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



# Standard of Evidence:

Provide a narrative describing the process—including timelines and the summary of changes—used to ensure uniformity in the field data collection manuals, training materials, coding manuals, and corresponding reports.

Question Rank: Very Important

# **Assessor conclusions:**

Up-to-date data dictionaries reportedly exist and are consistent with the field data collection manual, training materials, coding manuals, and corresponding reports are in compliance with these materials as of the time they are published. However, no supporting documentation was provided for review.

Respondents assigned	6	Responses received	2	Response rate	33.3%	
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# Question 222:

Do the citation data dictionaries indicate the data fields that are populated through interface linkages with other traffic records system components?



# Standard of Evidence:

Provide a list of data fields populated through interface linkages with other traffic records system components.

Question Rank: Very Important

# **Assessor conclusions:**

No information was provided with regard to the data dictionaries for the citation system.

Respondents	6	Responses	4	Response	16.7%
assigned	O	received		rate	10.7 70

#### Question 223:

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



# Standard of Evidence:

Provide a list of Case Management Systems used by both State and local level courts and note if a data dictionary is available for each one. Provide a data dictionary for one State, one county/district, and one local (municipal) court if they do not use the same case management systems.

Question Rank: Very Important

# **Assessor conclusions:**

No information was provided with regard to the court's case management data dictionaries.

Respondents	6	Responses	4	Response	16.7%
assigned	U	received	ı	rate	10.7 /0

# Question 224:

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



# Standard of Evidence:

Use the data dictionaries provided in response to Question 223.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No information was provided with regard to the court's case management data dictionaries.

Respondents	6	Responses	1	Response	16.7%
assigned	U	received	•	rate	10.770





#### Question 225:

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



# Standard of Evidence:

Provide a list of data fields populated through interface linkages with other traffic records system components.

Question Rank: Somewhat Important

# Assessor conclusions:

No information was provided with regard to the court's case management data dictionaries.

Respondents	6	Responses	4	Response	16.7%
assigned	O	received	1	rate	10.7 /0

# Question 226:

Do the prosecutors' information systems have data dictionaries?

# Standard of Evidence:

Provide a data dictionary for the State prosecutors' office (State level courts that handle the most traffic violations). Indicate whether local prosecutors (cities, counties) have one or numerous types of data systems.

Question Rank: Somewhat Important

# Assessor conclusions:

No information was provided with regard to the prosecutor's information systems.

Respondents assigned	6	Responses received	1	Response rate	16.7%	

# Question 227:

Can the State track citations from point of issuance to posting on the driver file?



# Standard of Evidence:

Provide a flow diagram documenting citation lifecycle process that identifies key stakeholders. Ensure that alternative flows are included (e.g., manual and electronic submission).

Question Rank: Very Important

# Assessor conclusions:

No information was provided on the State's ability to track citations.

Respondents	6	Responses	1	Response	16.7%
assigned	U	received	ı	rate	10.7 /6





# Question 228:

Does the State measure compliance with the process outlined in the citation lifecycle flow chart?



# Standard of Evidence:

Provide a narrative describing how the State measures compliance with the citation lifecycle process specified in the flow chart. If there are official guidance documents, provide them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No information was provided with regard to the State's compliance with processes identified in the citation lifecycle flow chart

Respondents	6	Responses	4	Response	16.7%
assigned	O	received	•	rate	10.7 /0

# Question 229:

Is the State able to track DUI citations?

# Standard of Evidence:



Provide a flow chart that documents the criminal and administrative DUI processes, identifies all key stakeholders, and includes disposition per the criminal and administrative charges.

Question Rank: Very Important

# **Assessor conclusions:**

The State is reportedly able to track DUI citations but no additional information was provided.

Respondents	6	Responses	2	Response	33.3%
assigned	O	received	2	rate	33.3 /0





#### Question 230:

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

# Standard of Evidence:



If no statewide DUI tracking system is in place, indicate whether the driver history record contains the BAC test results.

Question Rank: Very Important

# **Assessor conclusions:**

The State reported that the Administrative Office of the Court database does not contain this information outright in any manner that can be tracked in aggregate, but it may exist in memos or paper filings.

Respondents	6	Responses	2	Response	33.3%
assigned	O	received	2	rate	33.3%

#### Question 231:

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



# Standard of Evidence:

Provide a narrative describing the protocol for reporting (posting) the penalty and/or sanction to the driver and/or vehicle file.

Question Rank: Very Important

# **Assessor conclusions:**

No information was provided with regard to the State's system for tracking administrative driver penalties.

Respondents	6	Responses	4	Response	16.7%
assigned	U	received	ı	rate	10.7 /0





# Question 232:

Does the State have a system for tracking traffic citations for juvenile offenders?



# Standard of Evidence:

Provide a flow chart that documents the processing of juvenile offenders' traffic citations, specifying any charges or circumstances that cause juveniles to be processed as adult offenders.

Question Rank: Very Important

# **Assessor conclusions:**

In addition to defendant information, including age at case filing, juvenile cases, including traffic violations, are categorized separately. No supporting flow chart documentation was made available for review.

Respondents	6	Responses	2	Response	33.3%
assigned	0	received	2	rate	33.3%

# Question 233:

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



# Standard of Evidence:

Provide a flow chart documenting the processing of administrative handling of court payments (mail-ins).

Question Rank: Somewhat Important

# **Assessor conclusions:**

No information was provided to determine whether the State can distinguish between administrative payments and court appearances for the resolution of fines.

Respondents	6	Responses	1	Response	16.7%
assigned	O	received	ı	rate	10.7%





# Question 234:

Does the State track deferral and dismissal of citations?

# Standard of Evidence:



Provide a flow chart documenting the deferral and the dismissal of citations.

Question Rank: Somewhat Important

# Assessor conclusions:

The State reported that this information is unknown and no information/flow chart was provided.

Respondents	6	Responses	4	Response	16.7%
assigned	U	received	1	rate	10.7 /0

# Question 235:

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



# Standard of Evidence:

Provide the criteria for deferring or dismissing traffic citations and charges.

# Question Rank: Somewhat Important

# **Assessor conclusions:**

No information was provided with regard to criteria for deferring or dismissing traffic citations.

Respondents	6	Responses	4	Response	16.7%
assigned	U	received		rate	10.7 /6

# Question 236:

If the State purges its records, are the timing conditions and procedures documented?



# Standard of Evidence:

Provide a narrative documenting whether or not the State purges records. If so, list the types of records the State purges and provide the criteria for doing so.

Question Rank: Somewhat Important

# Assessor conclusions:

It was reported that records are purged and that timing conditions and procedures are documented. However, no list of the types of records or criteria were submitted for review.

Respondents	6	Responses	1	Response	16.7%
assigned	U	received	•	rate	10.7 /6





# Question 237:

Are the security protocols governing data access, modification, and release officially documented?

# Standard of Evidence:

Provide the official security protocols governing data access, modification, and release.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No information was provided with regard to the State's security protocols related to data access and release.

Respondents	e	Responses	4	Response	16.7%
assigned	0	received	ı	rate	10.7%

# Question 238:

Is citation data linked with the driver system to collect driver information, to carry out administrative actions (e.g., suspension, revocation, cancellation, interlock) and determine the applicable charges?



# Standard of Evidence:

Describe how citation, adjudication and driver data are linked and by what means administrative actions are carried out or posted using these linkages.

Question Rank: Very Important

# Assessor conclusions:

No information was provided with regard to linkages between the driver system and the court system.

Respondents	6	Responses	4	Response	16.7%
assigned	O	received	ı	rate	10.7 /6





# Question 239:

Is adjudication data linked with the driver system to collect certified driver records and administrative actions (e.g., suspension, revocation, cancellation, interlock) to determine the applicable charges and to post the dispositions to the driver file?



# Standard of Evidence:

Provide the results of a sample query and describe how the linked information is used to collect certified driver records and administrative charges and to post dispositions to the driver file.

Question Rank: Very Important

# **Assessor conclusions:**

No information was provided with regard to a linkage between the adjudication data and the driver file.

Respondents	6	Responses	4	Response	16.7%
assigned	U	received		rate	10.7 /0

#### Question 240:

Is citation data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock)?



# Standard of Evidence:

Provide the results of a sample query and describe how the linked information is used to collect vehicle information and carry out administrative actions

Question Rank: Somewhat Important

# **Assessor conclusions:**

No linkage between citation data and the vehicle file was indicated.

Respondents assigned	6	Responses received	1	Response rate	16.7%
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# Question 241:

Is adjudication data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock mandates and supervision)?



# Standard of Evidence:

Provide the results of a sample query and describe how the linked information is used to collect vehicle information and carry out administrative actions.

Question Rank: Somewhat Important

# Assessor conclusions:

No linkage was described between the State's adjudication file and vehicle data system.

Respondents	6	Responses	4	Response	46 70/
assigned	0	received	ı	rate	16.7%

# Question 242:

Is citation data linked with the crash file to document violations and charges related to the crash?



# Standard of Evidence:

Provide the results of a sample query and describe how the linked information is used to document violations and charges related to the crash.

Question Rank: Somewhat Important

# Assessor conclusions:

No information was provided to indicate a link between the citation data and the crash data.

Respondents assigned	6	Responses received	1	Response rate	16.7%	

# Question 243:

Is adjudication data linked with the crash file to document violations and charges related to the crash?



# Standard of Evidence:

Provide the results of a sample query and describe how the linked information is used to document violations and charges related to the crash.

Question Rank: Somewhat Important

# Assessor conclusions:

No information was provided to indicate a link between the adjudication data and the crash data.

Respondents	6	Responses	1	Response	16.7%
assigned	U	received	•	rate	10.7 /6





# Question 244:

Is there a set of established performance measures for the timeliness of the citation systems?



# Standard of Evidence:

If there is a statewide citation tracking system in the State, provide timeliness measures used. If there are two or more centralized citation tracking systems, provide timeliness measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No timeliness performance measures have been established for the citation system.

Respondents	6	Responses	2	Response	33.3%
assigned	U	received	2	rate	33.3 /0

# Question 245:

Is there a set of established performance measures for the accuracy of the citation systems?



# Standard of Evidence:

Provide accuracy measures for the statewide citation tracking system. If there are several citation tracking systems, provide accuracy measures for one of them.

Question Rank: Very Important

# **Assessor conclusions:**

No accuracy performance measures have been established for the citation system.

Respondents	6	Responses	2	Response	33.3%
assigned	U	received	2	rate	33.3 /0

# Question 246:

Is there a set of established performance measures for the completeness of the citation systems?



# Standard of Evidence:

Provide completeness measures for the statewide citation tracking system. If there are several citation tracking systems, provide completeness measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No completeness performance measures have been established for the citation system.

Respondents 6 Responses received	2 Response rate	33.3%
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# Question 247:

Is there a set of established performance measures for the uniformity of the citation systems?



# Standard of Evidence:

Provide uniformity measures for the statewide citation tracking system. If there are several citation tracking systems, provide uniformity measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

The State reported that there are uniformity performance measures for the citation system with one being the percent of cases being submitted on the electronic uniform citations.

Respondents	6	Responses	2	Response	33.3%
assigned	O	received	2	rate	33.3%

# Question 248:

Is there a set of established performance measures for the integration of the citation systems?



# Standard of Evidence:

Provide integration measures for the statewide citation tracking system. If there are several citation tracking systems, provide integration measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No integration performance measures have been established for the citation system.

Respondents	6	Responses	2	Response	33.3%
assigned	O	received	2	rate	33.370





# Question 249:

Is there a set of established performance measures for the accessibility of the citation systems?



# Standard of Evidence:

Provide accessibility measures for the statewide citation tracking system. If there are several citation tracking systems, provide accessibility measures for one of them.

Question Rank: Less Important

# **Assessor conclusions:**

No set of accessibility performance measures have been established for the citation system.

Respondents	6	Responses	2	Response	33.3%
assigned	U	received	2	rate	33.3 /0

# Question 250:

Is there a set of established performance measures for the timeliness of the adjudication systems?



# Standard of Evidence:

Provide timeliness measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide timeliness measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No set of timeliness performance measures have been established for the adjudication system.

Respondents	6	Responses	2	Response	33.3%
assigned	U	received	2	rate	33.3 /0

# Question 251:

Is there a set of established performance measures for the accuracy of the adjudication systems?



#### Standard of Evidence:

Provide accuracy measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide accuracy measures for one of them.

Question Rank: Very Important

# **Assessor conclusions:**

No set of accuracy performance measures have been established for the adjudication system.

Respondents 6 Responses received	2	Response rate	33.3%
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# Question 252:

Is there a set of established performance measures for the completeness of the adjudication systems?



# Standard of Evidence:

Provide completeness measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide completeness measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No set of completeness performance measures have been established for the adjudication system.

Respondents	6	Responses	2	Response	33.3%
assigned	O	received	2	rate	33.3 /0

# Question 253:

Is there a set of established performance measures for the integration of the adjudication systems?



# Standard of Evidence:

Provide integration measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide integration measures for one of them.

Question Rank: Somewhat Important

# **Assessor conclusions:**

No set of integration performance measures have been established for the adjudication system.

Respondents	6	Responses	2	Response	33.3%
assigned	U	received	2	rate	33.3 /0





# Question 254:

In States that have an agency responsible for issuing unique citation numbers, is information on intermediate dispositions (e.g., deferrals, dismissals) captured?



# Standard of Evidence:

Provide documentation detailing the numbers of citations issued from the 10 largest law enforcement agencies and the number of dispositions for those citations that are in the driver file over a three month period.

Question Rank: Very Important

# **Assessor conclusions:**

No information was provided on the availability of intermediate dispositions.

Respondents	6	Responses	1	Response	16.7%
assigned	O	received		rate	

# Question 255:

Do the State's DUI tracking systems have additional quality control procedures to ensure the accuracy and timeliness of the data?



# Standard of Evidence:

Provide a narrative description of the additional quality control measures for the DUI tracking systems and specify which systems use which measures. Question Rank: Somewhat Important

# Assessor conclusions:

No additional information was provided with regard to the State's quality control procedures associated with a DUI tracking systems.

Respondents	6	Responses	1	Response	16.7%
assigned	O	received		rate	





# **EMS / Injury Surveillance**

The University of Kentucky is the State's bona fide agent in operating the State's injury surveillance system. Included in its injury surveillance system are emergency department and hospital discharge data, collected by the Kentucky Hospital Association on behalf of the State's Office of Health Policy (within the Kentucky Cabinet for Health and Family Services); trauma registry data, collected by the Kentucky Injury Prevention and Research Center, University of Kentucky; and vital records death data, collected by the Department of Public Health (also within the Kentucky Cabinet for Health and Family Services). Kentucky's EMS data is not included in the State's injury surveillance system. Lastly, Kentucky maintains a prescription drug monitoring program to track drug overdoses in the State. While this program is not used for injury surveillance with regard to traffic records, it may prove a valuable resource in future studies.

# Kentucky EMS Information System

The Kentucky Board of EMS, in compliance with 202 KAR 7:540 Section 5(2), is the entity responsible for the State's collection of electronic patient care reports. The Kentucky State Ambulance Reporting System (KStARS) is the electronic Prehospital Care Reporting (ePCR) component of the Kentucky Emergency Medical Services Information System (KEMSIS). This NEMSIS 3 compliant application is used to collect run reports both individually and in bulk for services using other ePCR solutions. NHTSA v3.4.0 NEMSIS Data Dictionary serves as the KStARS data dictionary.

Each ePCR entered into KStARS is given a validation score. KStARS enforces data validation and rejects invalid records submitted from other systems. For records entered directly into the State system, the provider's EMS data system displays a validation score but does not reject invalid records. Kentucky does not manage and track validation issues on a regular basis; agencies may request record validation scores or average scores through the State office.

External entities interested in de-identified EMS data may request it from the Kentucky Board of EMS under the State's Open Records Act; the request must be in writing and the Board will respond in accordance with internal policies and procedures. Other agencies and researchers seeking identifiable data must execute a data sharing agreement with the Board of Kentucky of EMS.

Though not included in the State's injury surveillance system, the EMS data can serve as a valuable source for information on the severity of injuries sustained in motor vehicle crashes. The integration of EMS data with the hospital and trauma data can provide information on injury outcomes taking into account pre-hospital care.

Emergency Department and Hospital Discharge Data

Emergency department and hospital discharge data are collected by the Kentucky Hospital Association on behalf of the Office of Health Policy. The data is shared with the Kentucky Injury Prevention and Research Center for its injury surveillance program. The Kentucky Inpatient Outpatient Data Collection System (KY IPOP) is an online system that securely allows for the submission, collection, and editing of all inpatient and all outpatient case level data from





facilities, as required by statute and administrative regulation, to the Commonwealth of Kentucky. Data submissions conform to the UB-04 standard.

The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" is the comprehensive, formal document that contains information on data submission requirements and procedures for editing and submitting emergency department and hospital discharge data including validation checks; describes how the data is collected, managed, and maintained; contains file layout information with the data elements, values, and definitions; and serves as the data dictionary. Also included in the manual are procedures for returning data to the reporting emergency departments for quality assurance and improvement. Quarterly reports are generated to identify and correct errors in addition to the instructions provided in the manual.

Kentucky received a Surveillance Quality Improvement grant from the National Center for Injury Prevention and Control that focuses on quality control for injury data. An assessment of the hospital data system was conducted in 2006 and the Kentucky Injury Prevention and Research Center annually calculates hospital data completeness indicators as part of annual data reporting for the CDC Core Violence and Injury Prevention Program.

The emergency department and hospital discharge data have been used for injury surveillance activities, publications such as the annual "Kentucky Injury Indicators", and linked to the State's crash database for the Crash Outcome Data Evaluation System (CODES). Public use data is available to external entities upon completion of a data request form available on the Cabinet for Health Family website.

# Trauma Registry Data

Kentucky Administrative Regulation § 902.28.040 established a single statewide Kentucky Trauma Registry within the Kentucky Injury Prevention and Research Center. The trauma registry data conform to the NTDB standard and upon entry into TraumaBase, the trauma record is subject to validation rules to ensure compliance with the NTDB standards.

Quality control for the trauma data is conducted, though it is not a formal process nor is the process documented. The State employs performance measures for accuracy and completeness; informal methods of measuring timeliness are conducted. Uniformity is addressed through validation checks inherent to TraumaBase and by educating users on correctly mapping user codes to State and national codes. The State works with each submitting trauma center to ensure the submission of quality data but does not provide formal reports back to the submitting entities.

The "Executive Summary, Kentucky Trauma System Evaluation 2016" used trauma registry data to evaluate the State's trauma system. While the focus of the report is primarily on trauma system development and access to trauma care, linked trauma registry and motor vehicle crash data was used to demonstrate the disparities in motor vehicle crash death rates among trauma center levels. It should be noted that funding for the trauma registry has been available for the past six years through the Kentucky Transportation Cabinet's Office of Highway Safety, using federal awards from the National Highway Traffic Safety Administration.

Kentucky's trauma data is confidential and to be used solely by the Department for Public





Health. Aggregate data can be requested by an individual or entity that falls outside the range of permitted users.

#### Vital Records

The Kentucky Electronic Death Registration System (KY-EDRS) enables death records to be filed online with the Kentucky Office of Vital Statistics in compliance with NCHS guidelines. The number of deaths due to motor vehicle crashes is included in the annual "Kentucky Injury Indicators" report and vital records data is central to problem identification and evaluation for maternal and child health programs, child fatality reviews, and in CDC programs.

The Office of Vital Statistics maintains such documentation as a data dictionary, procedures for collecting, editing, error-checking, and submitting vital records data to the statewide repository, and a project scope/vision for the modernization of the EDRS. Edits are inherent in the data collection system, forcing completeness, accuracy, and uniformity, though no performance measures are in place to ensure the system is working correctly.

# Summary

The State has not implemented comprehensive performance measures for its injury surveillance data systems, aside from the trauma data. The lack of performance measures presents an opportunity to set a baseline for each of the six performance measures (timeliness, accuracy, completeness, uniformity, integration, and accessibility), develop performance goals, and monitor systemic improvements to the data systems. This is especially true as the EDRS is facing modernization. Alternatively, and more realistically, the State should consider evaluating the quality of each data system and then selecting the performance measures that are a priority for the respective system and where those performance measures should be applied (i.e. critical data elements). Timeliness, completeness, and accuracy are the most straightforward and commonly evaluated and monitored performance measures. If the State's legislation contains requirements for timeliness of data submission or accuracy of the data, those requirements can be used as the performance goal; statutory requirements in and of themselves are not performance measures.

As the agencies evaluate and subsequently monitor the data systems for quality issues, they can simultaneously 1) identify high frequency errors to inform data collection manuals, training content, and software validation rules; 2) develop provider (EMS, trauma center, hospital) specific data quality reports for critical data elements, again selecting those performance measures which are a priority based on the evaluation of the data system; and 3) develop a template for conducting trend and comparative analyses, from year-to-year or comparing like providers (e.g., hospitals by bed size, trauma level II to trauma level II). Data quality management reports should be shared with the TRCC on a routine basis.

In recent years, data-driven performance management has proven to be critical in meeting grant requirements and rising Congressional expectations. NHTSA has available several publications that address performance measures for traffic records systems, including "Model Performance Measures for State Traffic Records Systems," (DOT HS 811 441) published February 2011. This publication offers examples of performance measures not only for the injury surveillance data systems, but for each of the six components that make up a traffic records system.





Kentucky maintains a robust injury surveillance system and has conducted comprehensive analyses on injuries caused by motor vehicle crashes in the State. Through a cooperative agreement and funding from NHTSA, Kentucky was a CODES (Crash Outcome Data Evaluation System) State and has continued the integration of data to support traffic safety surveillance and research. The Kentucky CODES data is an immensely valuable resource for the injury surveillance community, traffic safety stakeholders, and researchers.

# Question 256:

Does the injury surveillance system include EMS data?

#### Standard of Evidence:



Provide an injury surveillance report that illustrates the use of EMS data and data from other injury surveillance systems.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky collects EMS data, and EMS data is available via limited data extracts for specific projects, but EMS data is not routinely included in the injury surveillance system.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	<b>30</b> / <sub>0</sub>

#### Question 257:

Does the injury surveillance system include emergency department (ED) data?



# Standard of Evidence:

Provide an injury surveillance report that illustrates the use of emergency department (ED) data and data from other injury surveillance systems.

Question Rank: Very Important

## **Assessor conclusions:**

Kentucky's injury surveillance system includes emergency department data. "Kentucky Injury Indicators, 2014" was submitted as evidence. This report utilizes emergency department, hospitalization, and outpatient data as well as census data and death certificate data.

Respondents	<sub>1</sub> Responses	<sub>1</sub> Response	100%
assigned	received	' rate	100 /6





#### Question 258:

Does the injury surveillance system include hospital discharge data?

## **Standard of Evidence:**



Provide an injury surveillance report that illustrates the use of hospital discharge data and data from other injury surveillance systems.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky's injury surveillance system includes hospital discharge data data. "Kentucky Injury Indicators, 2014" was submitted as evidence. This report utilizes emergency department, hospitalization, and outpatient data as well as census data and death certificate data.

Respondents	4	Responses	4	Response	100%
assigned	ı	received		rate	100%

#### Question 259:

Does the injury surveillance system include trauma registry data?

## Standard of Evidence:



Provide an injury surveillance report that illustrates the use of trauma registry data and data from other injury surveillance systems.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky's injury surveillance system include trauma registry data. "Kentucky Trauma Registry, 2015 Annual Report" utilizes trauma registry data as well as emergency medical services, emergency department and hospital discharge data. The comprehensive report covers, among many factors, cause of injuries, age of victims, use of alcohol and use of seat-belts.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

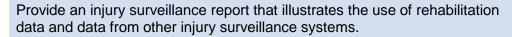




#### Question 260:

Does the injury surveillance system include rehabilitation data?

# **Standard of Evidence:**



Question Rank: Very Important

# **Assessor conclusions:**

Kentucky's injury surveillance system does not include rehabilitation data.

Respondents 2 Responses 2 Response 100%

# Question 261:

Does the injury surveillance system include vital records data?

#### Standard of Evidence:

Provide an injury surveillance report that illustrates the use of vital data and data from other injury surveillance systems.



Very Important

# Assessor conclusions:

Kentucky's injury surveillance system includes vital records data. "Kentucky Injury Indicators, 2014" was submitted as evidence. This report utilizes emergency department, hospitalization, and outpatient data as well as census data and vital records data.

Respondents 1 Responses 1 Response 100%





## Question 262:

Does the injury surveillance system include other data?

#### Standard of Evidence:



List any other databases or sources included in the injury surveillance system and provide a sample report using data from each of these sources. Additional data resources may include medical examiner reports, payer-related databases, traumatic brain injury registry, and spinal cord injury registry.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky maintains a prescription drug monitoring program (PDMP) data that is used to track drug overdose deaths in the State. The State provided a report using 2015-2016 data from the PDMP data system. This information contributes to injury surveillance but is not used in conjunction with traffic records injury data at this time.

Respondents	4	Responses	4	Response	100%
assigned	ı	received		rate	100%

#### Question 263:

Does the EMS system track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?



#### Standard of Evidence:

Provide the most recent motor vehicle-related incident counts for the EMS system, any injury severity categorizations applied, and the provider's primary impression (if applicable).

Question Rank: Very Important

#### **Assessor conclusions:**

The Kentucky State Ambulance Reporting System collects information about motor vehicle crashes. A count of "Traffic/Transportation" incidents by primary impression for 2016 was submitted. Additionally, a record-level report of GCS scores was submitted, indicating that aggregate reporting of injury severity can be compiled.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





## Question 264:

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



#### Standard of Evidence:

Provide the most recent motor vehicle-related incident counts for the emergency department data, any injury severity categorizations applied (e.g., Abbreviated Injury Score, Injury Severity Scale), and principal diagnosis.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky's emergency department data can track the frequency and nature of injuries sustained in motor vehicle crashes in the State; injury severity categorizations (ISS, AIS) cannot be derived from the emergency department data. Documentation demonstrating the used of the Crash Outcome Data Evaluation System (CODES) data was submitted as evidence. The emergency department data does not include information on injury severity categorizations.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	50%

#### Question 265:

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



# Standard of Evidence:

Provide the most recent motor vehicle-related incident counts for the hospital discharge data, any injury severity categorizations applied (e.g., Abbreviated Injury Score, Injury Severity Scale), and principal diagnosis.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky's hospital discharge data can track the frequency and nature of injuries sustained in motor vehicle crashes in the State; injury severity categorizations (ISS, AIS) cannot be derived from the hospital discharge data. Documentation demonstrating the used of the Crash Outcome Data Evaluation System (CODES) data was submitted as evidence.

Respondents	<sub>1</sub> Responses	<sub>1</sub> Response	100%
assigned	' received	rate	100 /0





## Question 266:

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



#### Standard of Evidence:

Provide the most recent motor vehicle-related incident counts for the trauma registry data, any injury severity categorizations applied (e.g., Abbreviated Injury Score, Injury Severity Scale), and principal diagnosis.

Question Rank: Very Important

## **Assessor conclusions:**

The trauma registry tracks injuries due to motor vehicle crashes. The Kentucky Trauma Registry, 2015 Annual Report" includes motor vehicle-related trauma registry counts as well as the distribution of ISS for all trauma registry records. Though motor vehicle crashes were not specifically listed in the ISS distribution, it can be inferred that ISS is applied to motor vehicle crash patients. The annual report does not include diagnosis information.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30%

#### Question 267:

Does the vital records data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?



#### Standard of Evidence:

Provide the most recent motor vehicle-related incident counts from the vital records data and the cause of death.

Question Rank: Very Important

# **Assessor conclusions:**

The vital records data tracks the frequency of deaths due to motor vehicle crashes. The "Kentucky Injury Indicators, 2014" report includes motor vehicle-related death counts, but does not include specific cause of death information

Respondents	<sub>1</sub> Responses	<sub>1</sub> Response	100%
assigned	received	rate	100 /6





## Question 268:

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



## Standard of Evidence:

Provide a sample report or narrative description of a highway safety project that utilized EMS data to identify a problem, evaluate a program, or allocate resources.

Question Rank: Very Important

#### **Assessor conclusions:**

Emergency medical services data is available in a de-identified format for analysis through Kentucky's Open Records Request procedure. Data is available to other entities through the execution of a data sharing agreement, such as with the Kentucky Injury Prevention and Research Center at the University of Kentucky. A sample report or narrative description of a highway safety project that utilized EMS data was not provided.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30%

## Question 269:

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



#### Standard of Evidence:

Provide a sample report or narrative description of a highway safety project that utilized emergency department data to identify a problem, evaluate a program, or allocate resources.

Question Rank: Very Important

# Assessor conclusions:

Emergency department data is available for analysis and used to identify problems, evaluate programs, and allocate resources. The evidence requirement was met via the submission of the documentation for the data release process as well as a research journal article on helmet laws and the effectiveness for reducing head, face and brain injuries (Kentucky was a data contributor for the article).

Respondents	<sub>4</sub> Responses	4	Response	100%
assigned	received	•	rate	100 /6





## Question 270:

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



#### Standard of Evidence:

Provide a sample report or narrative description of a highway safety project that utilized hospital discharge data to identify a problem, evaluate a program, or allocate resources.

Question Rank: Very Important

#### **Assessor conclusions:**

Hospital discharge data is available for analysis and used to identify problems, evaluate programs, and allocate resources. As evidence, the State submitted documentation related to the release of hospital discharge data as well as a fact sheet about the effectiveness of child booster seats, and a recent journal article using linked injury surveillance data evaluating the effectiveness of motorcycle helmet laws in various states (including Kentucky).

Respondents	<sub>1</sub> Responses	<sub>4</sub> Response	100%
assigned	' received	' rate	100 /6

#### Question 271:

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



#### Standard of Evidence:

Provide a sample report or narrative description of a highway safety project that utilized trauma registry data to identify a problem, evaluate a program, or allocate resources.

Question Rank: Very Important

# Assessor conclusions:

The "Executive Summary, Kentucky Trauma System Evaluation 2016" used trauma registry data to evaluate the State's trauma system. While the focus of the report is primarily on trauma system development and access to trauma care, linked trauma registry and motor vehicle crash data was used to demonstrate the disparities in motor vehicle crash death rates among trauma center levels. It should be noted that funding for the trauma registry has been available for the past six years through the Kentucky Transportation Cabinet's Office of Highway Safety, using federal awards from the National Highway Traffic Safety Administration.

Respondents	2	Responses	4	Response	33.3%
assigned	3	received	•	rate	33.3 /0





## Question 272:

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



#### Standard of Evidence:

Provide a sample report or narrative description of a highway safety project that utilized vital records data to identify a problem, evaluate a program, or allocate resources (e.g., research in support of helmet or GDL legislation).

Question Rank: Very Important

#### **Assessor conclusions:**

Vital records data is available for analysis and used to identify problems, evaluate programs, and allocate resources. Vital records data is central to problem identification and evaluation for maternal and child health programs, child fatality reviews, and a CDC program.

Respondents	4	Responses	2	Response	E00/
assigned	4	received	2	rate	50%

#### Question 273:

Does the State have a NEMSIS-compliant statewide database?

# Standard of Evidence:



Demonstrate submission to the nationwide NEMSIS database and provide any relevant State statutes or regulations. If not compliant, provide narrative detailing the State's efforts to achieve NEMSIS compliance.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky has been submitting patient care reports to NEMSIS since 2015 and has attached a map showing their compliance with version 3.

Respondents	2	Responses	4	Response	50%
assigned	2	received	1	rate	JU /6





#### Question 274:

Does the State's emergency department and hospital discharge data conform to the most recent uniform billing standard?



# Standard of Evidence:

Provide the data dictionaries for both the emergency department and hospital discharge data as appropriate as well as any relevant State statutes or regulations.

Question Rank: Very Important

#### **Assessor conclusions:**

The Kentucky Inpatient Outpatient Data Collection System (KY IPOP) is an online system that securely allows for the submission, collection, and editing of all inpatient and all outpatient case level data from facilities, as required by statute and administrative regulation, to the Commonwealth of Kentucky. Data submissions conform to the UB-04 standard. A Data Coordinators manual for hospitals and a data dictionary were submitted as evidence.

Respondents	ts ,	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 275:

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



#### Standard of Evidence:

Provide the trauma registry data dictionary and any relevant State statutes or regulations.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky's trauma registry data conform to NTDS as required by the State administrative rule. A trauma registry data dictionary was not submitted; however the evidence requirement was met as the State regulations were submitted.

Respondents	2	Responses	2	Response	66.7%
assigned	3	received	2	rate	00.7 /6





#### Question 276:

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



#### Standard of Evidence:

Provide a distribution of AIS and ISS scores for the most recent year available.

Question Rank: Somewhat Important

## Assessor conclusions:

Kentucky does not have the capability to derive AIS or ISS from the emergency department or hospital discharge data.

Respondents	₁ Responses	₁ Response	100%
assigned	received	rate	100%

## Question 277:

Are Abbreviated Injury Scale (AIS) and Injury Severity Scores (ISS) derived from the State trauma registry for motor vehicle crash patients?



#### Standard of Evidence:

Provide a distribution of AIS and ISS scores for the most recent year available.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky's trauma registry tracks AIS and ISS for motor vehicle crash patients. The State provided a distribution of AIS and ISS for 2015.

Respondents	2	Responses	4	Response	50%
assigned	2	received	•	rate	30%

# Question 278:

Does the State EMS database collect the Glasgow Coma Scale (GCS) data for motor vehicle crash patients?



# Standard of Evidence:

Provide a distribution of GCS scores for motor vehicle crash patients for the most recent year available.

Question Rank: Less Important

#### **Assessor conclusions:**

The Kentucky State Ambulance Reporting System does collect GCS for trauma patients. A record level extract of GCS on patient reports for traffic/transportation incidents was provided.

Respondents	2	Responses	1	Response	50%
assigned	2	received	•	rate	JU /0





## Question 279:

Does the State trauma registry collect the Glasgow Coma Scale (GCS) data for motor vehicle crash patients?



#### Standard of Evidence:

Provide a distribution of GCS scores for motor vehicle crash patients for the most recent year available.

Question Rank: Less Important

#### Assessor conclusions:

Kentucky's trauma registry collects GCS data. The State provided a distribution of GCS scores for motor vehicle crash patients for 2015.

Respondents	2	Responses	4	Response	50%
assigned	2	received	•	rate	30 /6

# Question 280:

Are there State privacy and confidentiality laws that supersede HIPAA?

# Standard of Evidence:



Provide the applicable State laws and describe how they are interpreted—including the identification of situations that may impede data sharing within the State and among public health authorities.

Question Rank: Very Important

## **Assessor conclusions:**

Kentucky statute requires that trauma registry data "shall be confidential and for use solely by the Department for Public Health, the statewide trauma care director, the advisory committee, and persons or public or private entities that participate in data collection for the trauma registry." This appears to impede sharing of trauma registry data outside of the Department for Public Health.

Respondents assigned	2	Responses received	1	Response rate	50%
assigned		received		late	





## Question 281:

Does the EMS system have a formal data dictionary?

## **Standard of Evidence:**



Provide the data dictionary including, at a minimum, the variable names and definitions.

Question Rank: Very Important

#### Assessor conclusions:

The Kentucky State Ambulance Reporting System refers to the NEMSIS 3.4.0 data dictionary, a copy of which was submitted as evidence.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30 /6

# Question 282:

Does the EMS system have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?



# Standard of Evidence:

Provide a user's manual or other form of documentation of the EMS data collection system. Such documentation should include a list of the dataset's variables and a description of how the data is collected, managed and maintained.

Question Rank: Very Important

## **Assessor conclusions:**

The NEMSIS data dictionary serves as the formal documentation for the Kentucky State Ambulance Reporting System; however, the data dictionary does not address a summary data set or how data is collected, managed, and maintained.

Respondents 2 Responses assigned received	1	Response rate	50%	
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#### Question 283:

Does the emergency department dataset have a formal data dictionary?

## **Standard of Evidence:**



Provide the data dictionary including, at a minimum, the variable names and definitions.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky maintains a data dictionary for the emergency department data. As evidence, the "Kentucky Data Coordinator's Manual For Ambulatory Facilities" and the inpatient and outpatient data dictionary were submitted.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 284:

Does the emergency department dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?



#### Standard of Evidence:

Provide the documentation.

Question Rank: Very Important

## **Assessor conclusions:**

The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" serves as the formal documentation for how the emergency department and hospital discharge data is collected, managed, and maintained. It also contains file layout information with the data elements, values, and definitions.

Respondents assigned	2	Responses received	2	Response rate	100%	
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## Question 285:

Does the hospital discharge dataset have a formal data dictionary?

#### Standard of Evidence:



Provide the data dictionary including, at a minimum, the variable names and definitions.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky maintains a data dictionary for the hospital discharge data. As evidence, the "Kentucky Data Coordinator's Manual For Ambulatory Facilities" and the inpatient and outpatient data dictionary were submitted.

Respondents	Responses	<sub>4</sub> Response	100%
assigned	received	rate	100%

# Question 286:

Does the hospital discharge dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?



#### Standard of Evidence:

Provide the documentation.

Question Rank: Very Important

## **Assessor conclusions:**

The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" serves as the formal documentation for how the emergency department and hospital discharge data is collected, managed, and maintained. It also contains file layout information with the data elements, values, and definitions.

assigned 2 received 2 rate 100%	Respondents assigned	2 Responses received	2 Response rate	100%
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#### Question 287:

Does the trauma registry have a formal data dictionary?

# Standard of Evidence:



Provide the data dictionary including, at a minimum, the variable names and definitions.

Question Rank: Very Important

#### Assessor conclusions:

The trauma registry uses the NTDS data dictionary amended to include State-specific information. A copy of the data dictionary was submitted.

Respondents	2	Responses	4	Response	50%
assigned	2	received	•	rate	30 /6

# Question 288:

Does the trauma registry dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?



# Standard of Evidence:

Provide the documentation.

Question Rank: Very Important

# **Assessor conclusions:**

A trauma registry dataset summary is executed annually for internal analysis, but it is not documented or published. The trauma registry data dictionary provides the characteristics, values, limitations and exceptions to the data but the State is lacking formal documentation as to how the data is collected, managed, and maintained.

Respondents assigned	2	Responses received	1	Response rate	50%	
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#### Question 289:

Does the vital records system have a formal data dictionary?

## **Standard of Evidence:**



Provide the data dictionary including, at a minimum, the variable names and definitions.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky maintains a data dictionary for the vital records data. A file layout was provided that lists the variable names, values, and constraints. While the file did not include definitions, the definitions can be inferred from the name and values.

Respondents	2	Responses	2	Response	100%
assigned	3	received	3	rate	100%

# Question 290:

Does the vital records system have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?



#### Standard of Evidence:

Provide the documentation.

Question Rank: Very Important

## **Assessor conclusions:**

The State provided a project scope/vision document for the modernization of the EDRS, including business and technical requirements regarding how the data should be collected, managed, and maintained. The State also provided a simple data dictionary. Neither document provides a summary dataset that describes characteristics, values, limitations and exceptions for data users.

· .3	ponses 3 eceived	Response rate	100%
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## Question 291:

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



#### Standard of Evidence:

Identify the State agency or third party to which the EMS data is initially submitted.

Question Rank: Very Important

#### Assessor conclusions:

The Kentucky Board of EMS is the sole entity that collects the EMS Data per 202 KAR 7:540 Section 5(2).

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30 /6

# Question 292:

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



#### Standard of Evidence:

Identify the State agency or third party to which the data on emergency department visits is initially submitted.

Question Rank: Very Important

# **Assessor conclusions:**

The Kentucky Hospital Association collects and compiles ED data from hospitals on behalf of the Office of Health Policy.

Respondents	1	Responses	1	Response	100%
assigned		received		rate	100 /6

#### Question 293:

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



# Standard of Evidence:

Identify the State agency or third party to which the data on hospital discharges is initially submitted.

Question Rank: Very Important

# **Assessor conclusions:**

The Kentucky Hospital Association collects and compiles hospital discharge data from hospitals on behalf of the Office of Health Policy.

Respondents	1	Responses	4	Response	100%
assigned	•	received	ı	rate	100 /0





## Question 294:

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



#### Standard of Evidence:

Provide the flow diagram. Alternatively, provide a narrative description of the EMS data process flows from dispatch to submission of the report to the State EMS repository.

Question Rank: Very Important

#### **Assessor conclusions:**

There are three methods by which the Kentucky Board of EMS receives data from agencies. The State does not maintain a process flow diagram however, a narrative describing the processes was provided.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%

#### Question 295:

Is there a process flow diagram that outlines the emergency department data's key data process flows, including inputs from other systems?



# Standard of Evidence:

Provide the flow diagram. Alternatively, provide a narrative description of the emergency department data process flows from patient arrival to submission of the uniform billing data to the State repository.

Question Rank: Very Important

# **Assessor conclusions:**

The State does not have a process flow diagram for emergency department data.

Respondents assigned	2	Responses received	2	Response rate	100%	
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## Question 296:

Is there a process flow diagram that outlines the hospital discharge data's key data process flows, including inputs from other systems?



#### Standard of Evidence:

Provide the flow diagram. Alternatively, provide a narrative description of the hospital discharge data process flows from patient arrival to submission of the uniform billing data to the State repository.

Question Rank: Very Important

## **Assessor conclusions:**

The State does not have a process flow diagram for hospital discharge data.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

# Question 297:

Is there a process flow diagram that outlines the trauma registry's key data process flows, including inputs from other systems?



#### Standard of Evidence:

Provide the flow diagram. Alternatively, provide a narrative description of the hospital discharge data process flows, from trauma activation to submission of the trauma data to the State registry.

Question Rank: Very Important

## **Assessor conclusions:**

A simple process flow diagram was provided for the trauma registry; within the process flow are the clinician, the coding of the data, review of the data, and reporting to the State.

Respondents 2 Responses received	1 Response 50% rate
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## Question 298:

Are there separate procedures for paper and electronic filing of EMS patient care reports?



#### Standard of Evidence:

Provide a copy of the procedures for paper and electronic filing or a narrative describing the procedures.

Question Rank: Less Important

#### Assessor conclusions:

Kentucky does not accept paper filing of patient care reports; however, the State provided three methods by which data can be submitted.

Respondents	2	Responses	4	Response	50%
assigned	2	received	•	rate	30 /6

# Question 299:

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



#### Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process of collecting, editing and submitting emergency department and hospital discharge data to the statewide repository.

**Question Rank:** Very Important

# **Assessor conclusions:**

The "Kentucky Inpatient and Outpatient Data Coordinator's Manual" describes data submission requirements and procedures for editing and submitting emergency department and hospital discharge data, including validation checks.

Respondents	2	Responses	2	Response	100%
assigned		received		rate	100 /0





## Question 300:

Does the trauma registry have documented procedures for collecting, editing, error checking, and submitting data?



#### Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process for collecting, error-checking and submitting trauma registry data.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky maintains documented procedures for collecting, editing, error checking, and submitting trauma registry data. Validation checks are completed at various points in the data submission process - data entry, record finalization, and data export.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%

#### Question 301:

Are there procedures for collecting, editing, error-checking, and submitting data to the statewide vital records repository?



#### Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process for collecting, error-checking and submitting data to the vital records repository.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky maintains procedures for collecting, editing, error-checking, and submitting vital records data to the statewide repository. Vital records data is collected via electronic applications which include smart edits after which vital records staff complete audits of the records as a second check before State file numbers are assigned. Edits or amendments can be made to records at any point after records are certified by following the appropriate procedures as required by statute or administrative regulation.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





## Question 302:

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



#### Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting EMS agencies for correction and resubmission.

Question Rank: Very Important

## **Assessor conclusions:**

Kentucky's EMS data system enforces data validation and rejects invalid records submitted from other systems. For records entered directly into the State system, the provider's EMS data system displays a validation score but does not reject invalid records. Kentucky does not manage and track validation issues on a regular basis; agencies may request record validation scores or average scores through the State office. The State does not maintain documented procedures; a detailed narrative was provided.

Respondents	2	Responses	4	Response	50%
assigned	2	received	1	rate	30%

#### Question 303:

Are there documented procedures for returning data to the reporting emergency departments for quality assurance and improvement (e.g., correction and resubmission)?



#### Standard of Evidence:

Provide a copy of the procedures or a narrative that describes the process for returning data to the reporting emergency departments for correction and resubmission.

Question Rank: Very Important

## Assessor conclusions:

Kentucky maintains documented procedures for returning data to the reporting emergency departments for quality assurance and improvement. The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" details quality assurance information. Quarterly reports are generated to identify and correct error in addition to the instructions provided in the manual.

Respondents	2	Responses	2	Response	100%
assigned		received	2	rate	100 /6





## Question 304:

Are there documented procedures for returning hospital discharge data to the reporting hospitals for quality assurance and improvement (e.g., correction and resubmission)?



#### Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting hospitals for correction and resubmission.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky maintains documented procedures for returning data to the reporting hospitals for quality assurance and improvement. The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" details quality assurance information. Quarterly reports are generated to identify and correct error in addition to the instructions provided in the manual.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 305:

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



## Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting trauma center for correction and resubmission.

Question Rank: Very Important

# Assessor conclusions:

Kentucky's trauma centers are notified of trauma records failing validation upon submission; those records failing validation are not accepted into the State's system until errors are corrected.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30 /6





## Question 306:

Are there documented procedures for returning data to the reporting vital records agency for quality assurance and improvement (e.g., correction and resubmission)?



# Standard of Evidence:

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting vital records agency for correction and resubmission.

Question Rank: Very Important

## **Assessor conclusions:**

Edits and amendments to the vital records data can be made in compliance with statute or administrative regulations. While the State provided references to State statute and rule, a copy of the laws was not provided.

Respondents	5	Responses	2	Response	40%
assigned	3	received	2	rate	40 /0

#### Question 307:

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



# Standard of Evidence:

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the EMS data for analytical purposes.

Question Rank: Very Important

## **Assessor conclusions:**

Aggregate EMS data is available to outside parties for analytical purposes through either an open records request for de-identified data or through a data use agreement for other entities. A sample data sharing agreement was submitted.

Respondents assigned	5	Responses received	1	Response rate	20%	
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## Question 308:

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



#### Standard of Evidence:

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the emergency department data for analytical purposes.

Question Rank: Very Important

# **Assessor conclusions:**

Public use emergency department data is available to outside parties upon completion of a data request form published on the Cabinet for Health and Family Services website.

Respondents	_	Responses	2	Response	40%
assigned	3	received	2	rate	40%

#### Question 309:

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



# Standard of Evidence:

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the hospital discharge data for analytical purposes.

Question Rank: Very Important

#### **Assessor conclusions:**

Public use hospital discharge data is available upon completion of a data request form published on the Cabinet for Health and Family Services website.

Respondents	5	Responses	2	Response	40%
assigned	3	received	2	rate	40 /0





## Question 310:

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



#### Standard of Evidence:

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the trauma registry data for analytical purposes.

Question Rank: Very Important

# **Assessor conclusions:**

Statute specifies that trauma registry data "shall be confidential and for use solely by the Department for Public Health, the statewide trauma care director, the advisory committee, and persons or public or private entities that participate in data collection for the trauma registry." However, the State maintains that "this is still a very broad set of categories that should be adequate to meet the needs of any legitimate data use. The restriction does not apply to aggregate data requested by an individual or entity that falls outside the range of permitted users."

Respondents	5	Responses	4	Response	20%
assigned	3	received		rate	20%

#### Question 311:

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



# Standard of Evidence:

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the vital records data for analytical purposes.

Question Rank: Very Important

## Assessor conclusions:

Through a data sharing agreement, the University of Kentucky is the State's bona fide agent in operating the injury surveillance system. As a result, the University has access to the vital records data. Additionally, aggregate vital records data through CDC WISQARS and WONDER or by request to the Office of Vital Statistics.

Respondents	5	Responses	2	Response	40%
assigned	· ·	received	_	rate	4070





## Question 312:

Is there an interface among the EMS data and emergency department and hospital discharge data?

#### Standard of Evidence:

Provide a narrative description of the interface link between the EMS data and the emergency department and hospital discharge data. If available provide the applicable data exchange agreement.

Question Rank: Somewhat Important

## **Assessor conclusions:**

There is no interface between the Kentucky State Ambulance Reporting System and the emergency department and hospital discharge systems.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

## Question 313:

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

# Standard of Evidence:



Provide a narrative description of the interface link between the EMS data and the trauma registry data. If available provide the applicable data exchange agreement.

Question Rank: Very Important

#### Assessor conclusions:

There is no interface between the Kentucky State Ambulance Reporting System and the State's trauma registry. It should be noted that Kentucky is determining the feasibility of an interface between the EMS and trauma systems.

Respondents assigned	3	Responses received	3	Response rate	100%	
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## Question 314:

Is there an interface between the vital statistics and hospital discharge data?

# Standard of Evidence:

Provide a narrative description of the interface link between the vital statistics and hospital discharge data. If available provide the applicable data exchange agreement.

Question Rank: Somewhat Important

## **Assessor conclusions:**

There is no interface between the State's vital records system and the hospital discharge system.

Respondents	<sub>4</sub> Responses	<sub>1</sub> Response	100%
assigned	' received	rate	100 /6

#### Question 315:

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?



# Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

Question Rank: Very Important

# **Assessor conclusions:**

The response does not address if the State's EMS system contains automated edit checks and validation rules for ensuring quality data.

Respondents assigned	2	Responses received	2	Response rate	100%	
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#### Question 316:

Is limited state-level correction authority granted to quality control staff working with the statewide EMS database in order to amend obvious errors and omissions without returning the report to the originating entity?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide EMS database.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

The Kentucky Board of Emergency Medical Services does not have the authority to amend obvious errors and omissions without returning data to the originating agency.

Respondents	2	Responses	1	Response	50%
assigned		received	•	rate	JU /6

#### Question 317:

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



# Standard of Evidence:

Provide the formal methodology or describe the process by which rejected EMS patient care reports are returned to the collecting agency and tracked through resubmission to the statewide EMS database.

Question Rank: Very Important

# **Assessor conclusions:**

The Kentucky State Ambulance Reporting System rejects invalid EMS records. The State does not track the resubmission of the rejected records.

Respondents assigned	2	Responses received	1	Response rate	50%
assigned		ICCCIVCU		Tate	





## Question 318:

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



## Standard of Evidence:

Provide a complete list of timeliness performance measures for the EMS system and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky regulation states that data provided electronically to the Kentucky Board of EMS shall be no later than the fifteenth day of the month following the last day of the prior reporting month. The State measures the timeliness through a monthly evaluation of submission compliance.

Respondents	2	Responses	1	Response	50%
assigned	_	received	•	rate	JU /0

#### Question 319:

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



#### Standard of Evidence:

Provide a complete list of accuracy performance measures for the EMS system and explain how these measures are used to inform decision-making.

Question Rank: Very Important

# Assessor conclusions:

Validation rules in the Kentucky State Ambulance Reporting System ensure completeness and accuracy and the State produced a validity rule report. The State can identify the accuracy errors but does not measure the number of errors against a goal of, for example, 99% accurate for critical data elements (i.e. response times, disposition) in a given time period.

Respondents	2	Responses	1	Response	50%
assigned	2	received		rate	JU /6





## Question 320:

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



## Standard of Evidence:

Provide a complete list of completeness performance measures for the EMS system and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

Validation rules in the Kentucky State Ambulance Reporting System ensure completeness and accuracy. The State would benefit from setting a goal for completeness, measuring the baseline and then implementing performance measures for its EMS data based on the Model Performance Measures for State Traffic Records Systems (DOT HS 811 441) published by NHTSA.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%

#### Question 321:

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



#### Standard of Evidence:

Provide a complete list of uniformity performance measures for the EMS system and explain how these measures are used to inform decision-making.

Question Rank: Very Important

## Assessor conclusions:

The EMS data system has data validation rules that may pertain to uniformity, but the State did not list any uniformity measures that are used to track performance. The State would benefit from setting a goal for uniformity, measuring the baseline and then implementing performance measures for its EMS data based on the Model Performance Measures for State Traffic Records Systems (DOT HS 811 441) published by NHTSA.

Respondents	2	Responses	1	Response	50%
assigned	_	received	•	rate	30 /0





## Question 322:

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



#### Standard of Evidence:

Provide a complete list of integration performance measures for the EMS system and explain how these measures are used to inform decision-making.

Question Rank: Very Important

# **Assessor conclusions:**

Integration reflects the ability of records in a database to be linked to a set of records in another of the six core databases—or components thereof—using common or unique identifiers. The EMS data is not integrated with other data systems within the State's injury surveillance system.

Respondents	2	Responses	•	Response	100%
assigned	2	received	2	rate	100%

#### Question 323:

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



#### Standard of Evidence:

Provide a complete list of accessibility performance measures for the EMS system and explain how these measures are used to inform decision-making.

Question Rank: Very Important

# **Assessor conclusions:**

Kentucky does not maintain any accessibility performance measures for the EMS data. Accessibility reflects the ability of legitimate users to successfully obtain desired data; accessibility measures typically are obtained via customer satisfaction surveys.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%





## Question 324:

Has the State established numeric goals—performance metrics—for each EMS system performance measure?

## Standard of Evidence:

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Although the Kentucky Board of EMS is reviewing some performance standards, they do not presently have established numeric goals for the performance measures.

Respondents	2	Responses	4	Response	E00/
assigned	2	received	1	rate	50%

# Question 325:

Is there performance reporting for the EMS system that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?



#### Standard of Evidence:

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

Question Rank: Very Important

# **Assessor conclusions:**

The Kentucky Board of Emergency Medical Services provides monthly feedback to agencies regarding timeliness. Additionally, if an EMS service requests assistance feedback on accuracy and completeness is provided.

Respondents	2	Responses	1	Response	50%
assigned	2	received	1	rate	JU /0





#### Question 326:

Are high frequency errors used to update EMS system training content, data collection manuals, and validation rules?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to update EMS system training content, data collection manuals, and validation rules.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky does not have a process for using high frequency errors to update training, manuals, or validation rules in the EMS data system.

Respondents	2	Responses	4	Response	50%
assigned	2	received	•	rate	30 /6

#### Question 327:

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



#### Standard of Evidence:

Provide a sample quality control review of injury records that details the system's data completeness.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Quality control reviews are not conducted at the state level for the EMS data.

Respondents assigned	2	Responses received	1	Response rate	50%	
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## Question 328:

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



## Standard of Evidence:

Describe the analyses, provide a sample record or output, and specify their frequency.

Question Rank: Less Important

## Assessor conclusions:

Kentucky has not performed comparative and trend analyses because it has not yet collected a full year of NEMSIS version 3 data.

· •	ponses eceived	Response rate	50%
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## Question 329:

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

#### Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Kentucky does not provide feedback to the EMS data users nor does the State collect feedback about the EMS data system from its data users.

Respondents	2	Responses	4	Response	50%
assigned	2	received	1	rate	30%

## Question 330:

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



#### Standard of Evidence:

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

Question Rank: Somewhat Important

## **Assessor conclusions:**

EMS Data quality management reports are not produced nor made available to Kentucky's TRCC.

Respondents	4	Responses	4	Response	25%
assigned	4	received	J	rate	23 /0





#### Question 331:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:**Very Important

#### **Assessor conclusions:**

"Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" lists and explains data validation rules that are checked at the time of the submission of hospital data to the State repository.

Respondents	4	Responses	4	Response	100%
assigned	ı	received	•	rate	100 /6

#### Question 332:

Is limited state-level correction authority granted to quality control staff working with the statewide emergency department and hospital discharge databases in order to amend obvious errors and omissions without returning the report to the originating entity?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide emergency department and hospital discharge databases.

Question Rank: Somewhat Important

## **Assessor conclusions:**

In addition to its the authority to "request corrections", the Kentucky Hospital Association has the authority to make corrections as does the Office of Health Policy.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 333:

Are there formally documented processes for returning rejected emergency department and hospital discharge records to the collecting entity and tracking resubmission to the statewide emergency department and hospital discharge databases?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which rejected emergency department and hospital discharge records are returned to the collecting agency and tracked through resubmission to the statewide emergency department and hospital discharge databases.

Question Rank: Very Important

#### Assessor conclusions:

The State reports that there are formally documented processes for returning hospital data for correction and resubmission but additional information describing the process was not available.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

### Question 334:

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



### Standard of Evidence:

Provide a complete list of timeliness performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

Question Rank: Very Important

### **Assessor conclusions:**

The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" addresses the requirements for timeliness submission of inpatient and outpatient data. Timeliness performance measures are addressed via a compliance report provided to the hospitals. Specific details regarding the timeliness performance measures were not provided, nor was information related to timeliness reporting at the State level and if they inform decision-making.

Respondents	2	Responses	2	Response	100%
assigned	2	received	4	rate	100 /6





#### Question 335:

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



### Standard of Evidence:

Provide a complete list of accuracy performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:** Very Important

#### Assessor conclusions:

Kentucky does not have accuracy performance measures for the hospital data system.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 336:

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



#### Standard of Evidence:

Provide a complete list of completeness performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky does not have completeness performance measures for the hospital data system.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /0





#### Question 337:

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



### Standard of Evidence:

Provide a complete list of uniformity performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:** Very Important

#### **Assessor conclusions:**

Kentucky does not have uniformity performance measures for the hospital data system.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 338:

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



#### Standard of Evidence:

Provide a complete list of integration performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### Assessor conclusions:

Kentucky does not have integration performance measures for the hospital data system.

Respondents	2	Responses	2	Response	100%
assigned	_	received	_	rate	10070





#### Question 339:

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



### Standard of Evidence:

Provide a complete list of accessibility performance measures for the emergency department and hospital discharge database and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky does have accessibility performance measures for the hospital data system.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

#### Question 340:

Has the State established numeric goals—performance metrics—for each emergency department and hospital discharge database performance measure?



#### Standard of Evidence:

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Kentucky has not established numeric goal for each emergency department and hospital discharge database performance measure.

assigned received rate	Respondents assigned	2	Responses received	2	Response rate	100%
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#### Question 341:

Is there performance reporting for the emergency department and hospital discharge databases that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?



#### Standard of Evidence:

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

Question Rank: Very Important

#### Assessor conclusions:

Performance reporting for the emergency department and hospital discharge databases providing specific timeliness, accuracy, and completeness feedback is provided "on demand" to requesting entities but further description of the process was not provided.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 342:

Are high frequency errors used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules.

Question Rank: Very Important

#### **Assessor conclusions:**

The "Kentucky Inpatient and Outpatient Data Coordinator's Manual for Hospitals" contains a revision history noting changes to the manual. However, a clear explanation as to the catalyst for the IPOP manual updates (such as in response to high frequency errors) was not provided.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%





#### Question 343:

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



#### Standard of Evidence:

Provide a sample quality control review of injury records that details the system's data completeness.

Question Rank: Somewhat Important

## Assessor conclusions:

Kentucky received a Surveillance Quality Improvement grant from the National Center for Injury Prevention and Control that focuses on quality control for injury data. An assessment of the hospital data system was conducted in 2006 and the Kentucky Injury Prevention and Research Center annually calculates hospital data completeness indicators as part of annual data reporting for the CDC Core Violence and Injury Prevention Program (Core VIPP).

Respondents	₁ Responses	<sub>4</sub> Response	100%
assigned	received	' rate	100%

#### Question 344:

Are periodic comparative and trend analyses used to identify unexplained differences in the emergency department and hospital discharge data across years and agencies?



#### Standard of Evidence:

Describe the analyses, provide a sample record or output, and specify their frequency.

Question Rank: Less Important

## **Assessor conclusions:**

Quarterly trend analyses are conducted but the State did not provide documentation or further narrative explanation.

Respondents assigned	2	Responses received	2	Response rate	100%	
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### Question 345:

Is data quality feedback from key users regularly communicated to emergency department and hospital discharge data collectors and data managers?



### Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

Question Rank: Somewhat Important

## Assessor conclusions:

Data quality feedback is not solicited from the key users for emergency department and hospital discharge data managers.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

### Question 346:

Are emergency department and hospital discharge data quality management reports produced regularly and made available to the State TRCC?



#### Standard of Evidence:

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Hospital data quality management reports are not produced and made available to the State TRCC.

Respondents	1	Responses	2	Response	50%
assigned	-	received	2	rate	JU /0





#### Question 347:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:** Very Important

#### **Assessor conclusions:**

Kentucky's TraumaBase registry systems contains validation checks - both logic and edit checks - that are performed throughout the data entry process and at the time of data export to the State's data management vendor.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30 /6

#### Question 348:

Is limited state-level correction authority granted to quality control staff working with the statewide trauma registry in order to amend obvious errors and omissions without returning the report to the originating entity?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide trauma registry.

Question Rank: Somewhat Important

#### Assessor conclusions:

State-level correction authority is granted to quality control staff working with the statewide trauma registry to amend obvious errors and omissions without returning the report to the originating entity.

Respondents assigned	2	Responses received	1	Response rate	50%	
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#### Question 349:

Are there formally documented processes for returning rejected data to the collecting entity and tracking resubmission to the statewide trauma registry?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which rejected data is returned to the collecting agency and tracked through resubmission to the statewide trauma registry.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky maintains processes for returning rejected data to the collecting entity and tracking resubmission to the statewide trauma registry.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	JU /6

#### Question 350:

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



#### Standard of Evidence:

Provide a complete list of timeliness performance measures for the trauma registry and explain how these measures are used to inform decision-making.

Question Rank: Very Important

## Assessor conclusions:

Kentucky maintains timeliness requirements for the submission of trauma registry data. The State tracks submissions, emails reminders of impending due dates, and generates reports comparing on time and late submissions. Performance measures for timeliness should reflect the overall trauma submissions for a given time period. The State would benefit from setting a goal for timeliness, measuring the baseline and then implementing performance measures for its EMS data based on the Model Performance Measures for State Traffic Records Systems (DOT HS 811 441) published by NHTSA.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30 /6





#### Question 351:

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



#### Standard of Evidence:

Provide a complete list of accuracy performance measures for the trauma registry and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

The State maintains accuracy performance measures tailored to the needs of trauma registry managers and data users with the goal being 100% accuracy. On a quarterly basis, the State tracks compliance with logical consistency and the percentage of fields with valid data.

Respondents	2	Responses	4	Response	<b>E0</b> 0/
assigned	Z	received	ı	rate	50%

#### Question 352:

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



## Standard of Evidence:

Provide a complete list of completeness performance measures for the trauma registry and explain how these measures are used to inform decision-making.

Question Rank: Very Important

### **Assessor conclusions:**

Kentucky has a minimum 90% completeness goal for trauma registry records. Data completeness reports are run and submitted to the state annually. When data fields are incomplete, users are educated on the data meaning and importance via emails.

Respondents	2	Responses	1	Response	50%
assigned	2	received	1	rate	JU /0





#### Question 353:

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



#### Standard of Evidence:

Provide a complete list of uniformity performance measures for the trauma registry and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

Automated checks for data uniformity are inherent to the TraumBase system. TraumBase systems maps user codes to state and/or national codes so Kentucky receives uniform data in coded fields. Users are educated on how to map correctly. No specific performance metrics related to uniformity were provided.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%

#### Question 354:

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



#### Standard of Evidence:

Provide a complete list of integration performance measures for the trauma registry and explain how these measures are used to inform decision-making.

Question Rank: Very Important

## Assessor conclusions:

Kentucky does not have integration performance measures for the trauma registry data system.

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%





#### Question 355:

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



## Standard of Evidence:

Provide a complete list of accessibility performance measures for the trauma registry and explain how these measures are used to inform decision-making.

Question Rank: Very Important

### **Assessor conclusions:**

Kentucky does not have accessibility performance measures for the trauma registry data system.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30 %

#### Question 356:

Has the State established numeric goals—performance metrics—for each trauma registry performance measure?



### Standard of Evidence:

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

Question Rank: Somewhat Important

## **Assessor conclusions:**

Kentucky has established numeric goals—performance metrics—for most of the trauma registry performance measures but not all.

•	sponses 1 Respor	se 50%
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#### Question 357:

Is there performance reporting for the trauma registry that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?



#### Standard of Evidence:

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

Question Rank: Very Important

#### Assessor conclusions:

The State works with each entity to ensure timeliness, accuracy, and completeness, but the entities participate on a voluntary basis. There are no formal performance reports that are provided to all participating entities.

Respondents	2	Responses	4	Response	50%
assigned	2	received	•	rate	30 /6

#### Question 358:

Are high frequency errors used to update trauma registry training content, data collection manuals, and validation rules?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to update trauma registry training content, data collection manuals, and validation rules.

Question Rank: Very Important

## Assessor conclusions:

A data quality review of the trauma registry data was conducted recently, identifying outdated NTDB protocols. The State addresses high frequency errors in semiannual trauma registrar meetings and updates validation rules in the data collection software.

Respondents	2	Responses	1	Response	50%
assigned	2	received	•	rate	30 /8





#### Question 359:

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

#### Standard of Evidence:

Provide a sample quality control review of injury records that details the system's data completeness.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Kentucky conducts quality control reviews to ensure the completeness, accuracy, and uniformity of injury data in the trauma registry. A trauma registry audit evaluating the completeness of data elements in the trauma registry data for a period in 2016 was submitted.

Respondents	2	Responses	4	Response	50%
assigned	2	received		rate	30%

#### Question 360:

Are periodic comparative and trend analyses used to identify unexplained differences in the trauma registry data across years and agencies?



#### Standard of Evidence:

Describe the analyses, provide a sample record or output, and specify their frequency.

Question Rank: Less Important

#### **Assessor conclusions:**

A recent trauma system evaluation report was submitted that addressed data on motor vehicle crash trends throughout the State. The report addressed trend analyses and identified and quantified differences in the trauma registry data across years and providers.

Respondents assigned	2	Responses received	1	Response rate	50%	
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#### Question 361:

Is data quality feedback from key users regularly communicated to trauma registry data collectors and data managers?

#### Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

There is an informal process for communicating data quality feedback from key users to trauma registry data collectors and data managers. The

Respondents	2	Responses	4	Response	50%
assigned	2	received	ı	rate	30%

### Question 362:

Are trauma registry data quality management reports produced regularly and made available to the State TRCC?



#### Standard of Evidence:

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Kentucky does not regularly produce trauma registry data quality management reports. The State did provide a 2016 report on the trauma system but it did not address data quality or performance measures for the trauma data. Such a report is meant to aid other agencies in using the trauma data as part of an overall injury surveillance system, and in this case as the data pertains to motor vehicle crashes.

Respondents 3 Responses 1 Response 33 assigned rate	33.3%	
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#### Question 363:

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?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:** Very Important

#### **Assessor conclusions:**

Smart edits are inherent in the electronic application that collects the State's vital records death data. The State provided examples of the edits.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

## Question 364:

Is limited state-level correction authority granted to quality control staff working with vital records in order to amend obvious errors and omissions without returning the report to the originating entity?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with vital records.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

The State does not have authority to correct obvious errors and omissions. All corrections must be performed by the submitting entity.

Respondents assigned	2	Responses received	2	Response rate	100%
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#### Question 365:

Are there formally documented processes for returning rejected data to the collecting entity and tracking resubmission to vital records?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which rejected data is returned to the collecting agency and tracked through resubmission to vital records.

Question Rank: Very Important

## **Assessor conclusions:**

The electronic vital records system tracks the status of each record and maintains an audit history.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

### Question 366:

Are there timeliness performance measures tailored to the needs of vital records managers and data users?



#### Standard of Evidence:

Provide a complete list of timeliness performance measures for vital records and explain how these measures are used to inform decision-making.

Question Rank: Very Important

## Assessor conclusions:

The State has timeliness requirements for the submission of vital records death data but does not maintain performance measures based on the timeliness requirements.

Respondents assigned	2	Responses received	2	Response rate	100%	
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#### Question 367:

Are there accuracy performance measures tailored to the needs of vital records managers and data users?

#### Standard of Evidence:

Provide a complete list of accuracy performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:** Very Important

#### **Assessor conclusions:**

The State does not maintain accuracy performance measures tailored to the needs of vital records managers and data users.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%

### Question 368:

Are there completeness performance measures tailored to the needs of vital records managers and data users?



#### Standard of Evidence:

Provide a complete list of completeness performance measures for vital records and explain how these measures are used to inform decision-making.

Question Rank: Very Important

### **Assessor conclusions:**

The vital records data system does not allow records to be submitted unless all fields have been completed. However, the State did not list any completeness measures to track performance.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%





#### Question 369:

Are there uniformity performance measures tailored to the needs of vital records managers and data users?



#### Standard of Evidence:

Provide a complete list of uniformity performance measures for vital records and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### Assessor conclusions:

The vital records electronic software identifies fields that require a uniform value. These fields are in compliance with NCHS standards. The completeness measure will always be 100%.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

### Question 370:

Are there integration performance measures tailored to the needs of vital records managers and data users?



#### Standard of Evidence:

Provide a complete list of integration performance measures for vital records and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky maintains integration performance measures for the vital records data including the number of crash records linked with the FARS data and the vital records death data as well as the number of years for which crash, FARS, and death records have been linked.

Respondents assigned	2	Responses received	2	Response rate	100%	
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#### Question 371:

Are there accessibility performance measures tailored to the needs of vital records managers and data users?



#### Standard of Evidence:

Provide a complete list of accessibility performance measures for vital records and explain how these measures are used to inform decision-making.

Question Rank: Very Important

#### **Assessor conclusions:**

There are restrictions with regard to accessing the vital records data; however, the State does not apply any accessibility performance measures.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 372:

Has the State established numeric goals—performance metrics—for each vital records performance measure?



#### Standard of Evidence:

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Kentucky has not established numeric goal for the performance metrics.

Respondents assigned	2	Responses received	2	Response rate	100%
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## Question 373:

Is there performance reporting for vital records that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?



### Standard of Evidence:

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky does not conduct performance reporting and feedback to submitting entities for vital records data.

Respondents	2	Responses	2	Response	100%
assigned		received		rate	100 /0





## Question 374:

Are high frequency errors used to update vital records training content, data collection manuals, and validation rules?



#### Standard of Evidence:

Provide the formal methodology or describe the process by which high frequency errors are used to update vital records training content, data collection manuals, and validation rules.

Question Rank: Very Important

#### **Assessor conclusions:**

Kentucky receives error reports from NCHS and individual entities are contacted to assist with fixing the issues on occasion. However, this process has not been formalized.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 375:

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



## Standard of Evidence:

Provide a sample quality control review of injury records that details the system's data completeness.

Question Rank: Somewhat Important

## **Assessor conclusions:**

Kentucky has a limited process for quality control reviews of vital records data.

Respondents assigned	2	received	2	Response rate	100%

## Question 376:

Are periodic comparative and trend analyses used to identify unexplained differences in the vital records data across years and agencies?



## Standard of Evidence:

Describe the analyses, provide a sample record or output, and specify their frequency.

Question Rank: Less Important

## Assessor conclusions:

The State does not perform comparative or trend analyses for the purpose of identifying data quality issues in the vital records data.

• •	oonses ceived 2	Response rate	100%
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#### Question 377:

Is data quality feedback from key users regularly communicated to vital records data collectors and data managers?

#### Standard of Evidence:

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

Data quality feedback is communicated to the vital records collectors and managers but there is no formal process for transmitting feedback to the data managers nor was documentation submitted.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 378:

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



#### Standard of Evidence:

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

Question Rank: Somewhat Important

### **Assessor conclusions:**

Vital records data quality management reports are not produced nor made available to the State TRCC.

Respondents	4	Responses	2	Response	50%
assigned	4	received	2	rate	<b>30</b> / <sub>0</sub>





## **Data Use and Integration**

Data integration involves the use of disparate datasets in varying combinations to provide data users and policymakers the ability to view and analyze data in a manner that is not possible using a single data source. Integrated data can be used to improve problem identification and program evaluation activities at the State and local level by using other traffic records systems to provide an additional level of information and detail. This additional data can often help decision-makers develop a more accurate picture of existing and emerging highway safety problems.

The process of integrating data, however, is frequently challenging as the databases are managed and housed by different agencies and collected for the specific business activities of those particular agencies. Consequently, the individual data elements within each system that can be used for integration must be identified and standardized. This can be a difficult and time-consuming process and thus is not normally identified as a high priority activity. Other performance measures (i.e. timeliness, accuracy, and completeness) can be specific to one data system and thus easier to use as target measures.

There is widespread use of traffic records data systems in Kentucky, but the State is lacking documentation related to data governance and a data inventory. Governance allows data partners in the State to understand accessibility issues related to each file and, potentially, overcome any confidentiality concerns. A data inventory is a compilation of data dictionaries and system characteristics from all components of the State traffic records system. Such a document is helpful for all partners to understand the qualities and capabilities of each system, as well as analysts and newcomers to the State system who may be unfamiliar with one or more components. The Office of Highway Safety (KOHS) is planning to develop a data inventory and has included the project in the 2017 Traffic Records Strategic Plan.

Although Kentucky does not have a data governance policy, it does have a TRCC that promotes and is supportive of data integration efforts. The Crash Outcome Data Evaluation System (CODES) project is based at the Kentucky Injury Prevention and Research Center (KIPRC) and has been in place since 1999. Through that effort, crash data has been linked to clinical information (EMS, Emergency Department, and hospital discharge) for analysis. The Kentucky Transportation Center (KTC) links crash and roadway data files annually for analyses and the development of Safety Performance Functions. The KTC produces an annual report with study findings, "Analysis of Traffic Crash Data in Kentucky". At this time, driver, vehicle, and citation and adjudication data is not available for integration or analytical efforts. The Traffic Records Coordinating Committee should consider pursuing access to those files to expand the capabilities of the State's integration projects.

With regards to analytical resources, there are a variety in Kentucky available to program managers, decision-makers, and the public. The KOHS website provides fact sheets, reports, and a crash data query tool. Other information, such as convictions and seat belt observation studies, are also available. However, those data sources are independent and there is no regular access to integrated data sets. There is expertise related to the integrated files available for ad hoc requests, such as the Traffic Records Coordinator/GIS Coordinator at KOHS or the KIPRC analyst.





#### Question 379:

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



#### Standard of Evidence:

Identify the data source(s), (crash, roadway, driver, vehicle, citation adjudication, injury surveillance), discuss and provide examples of program specific analysis (e.g., reports, fact sheets, web pages, ad hoc analyses.

Question Rank: Very Important

## **Assessor conclusions:**

Program managers and grantees have access to Kentucky traffic records resources through the Kentucky Office of Highway Safety website. The website provides access to fact sheets and reports as well as the ability to query the crash data. Information related to crash, crime, DUI conviction, and seat belt observations is available.

Respondents	2	Responses	2	Response	100%
assigned	3	received	3	rate	100 /6

### Question 380:

Does the State have a data governance process?

#### Standard of Evidence:

Provide a narrative detailing the State's data governance process, identifying the personnel involved and describing how it supports traffic safety data integration and formal data quality management.



Question Rank: Somewhat Important

## Assessor conclusions:

There is no State governance process.

Respondents assigned	1	Responses received	1	Response rate	100%	
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#### Question 381:

Does the State have a formal traffic records system inventory that identifies linkages useful to the State and data access policies?



#### Standard of Evidence:

Provide a copy of the system inventory specifying all traffic records data sources, system custodians, data elements and attributes, linkage variables, linkages useful to the State, and data access policies.

Question Rank: Very Important

#### **Assessor conclusions:**

While there is no inventory at this time, the KOHS has plans to develop such a document once the new strategic plan is implemented. The beginnings of an inventory is reportedly included in the 2017 draft strategic plan, but that will not be implemented until July 2017.

Respondents	2	Responses	2	Response	100%
assigned	3	received	3	rate	100%

#### Question 382:

Does the TRCC promote data integration by aiding in the development of data governance, access, and security policies for integrated data?



## Standard of Evidence:

Identify, with appropriate citations, the TRCC strategic plan sections that demonstrate the promotion of data integration.

Question Rank: Somewhat Important

### **Assessor conclusions:**

The TRCC promotes data integration through the KOHS funding of the Kentucky Injury Prevention and Research Center CODES project and is supporting a linkage project to identify drugged driving collisions. Ultimately, changes in data governance policies would most likely be accomplished by KTRAC recommendations to the Governor's Executive Committee on Highway Safety (KECHS).

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 383:

Is driver data integrated with crash data for specific analytical purposes?

#### Standard of Evidence:



Document an integrative crash-driver link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include an assessment of graduated drivers' license (GDL) law effectiveness or of crash risk associated with motorcycle rider training, licensing, and behavior.

Question Rank: Very Important

#### Assessor conclusions:

Driver data has not been made available for integration with the crash file.

Respondents 1 Responses 1 Response 100%

#### Question 384:

Is vehicle data integrated with crash data for specific analytical purposes?

#### Standard of Evidence:



Document an integrative crash-vehicle link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include crash trends among vehicle types or vehicle weight restriction by road classification.

Question Rank: Very Important

## Assessor conclusions:

Vehicle data has not been made available for integration with the crash file.

Respondents 1 Responses 1 Response 100% assigned 1 received 1 rate





#### Question 385:

Is roadway data integrated with crash data for specific analytical purposes?

## Standard of Evidence:



Document an integrative crash-roadway link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include the identification of high crash locations and locations with similar roadway attributes or an assessment of engineering countermeasures' effectiveness.

Question Rank: Very Important

#### **Assessor conclusions:**

The Kentucky Transportation Center (KTC) links crash and roadway data annually. Analyses of that file include calculating rates based on traffic volumes and developing Safety Performance Functions. Findings are published in the Analysis of Traffic Crash Data in Kentucky, which is an annual report.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6

#### Question 386:

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



### Standard of Evidence:

Document an integrative crash-citation or adjudication link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include an assessment of the relationship between illegal actions and crashes for specific driver subpopulations (e.g., older drivers) or of crash-involved DUI offenders' adjudications.

Question Rank: Very Important

### **Assessor conclusions:**

Citation and adjudication data has not been made available for integration with the crash file.

Respondents	4	Responses	4	Response	100%
assigned	•	received	•	rate	100 /6





#### Question 387:

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



#### Standard of Evidence:

Document an integrative crash-injury surveillance link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include injury outcomes by specific crash type or injuries associated with occupant protection.

Question Rank: Very Important

### **Assessor conclusions:**

The Kentucky CODES program has successfully linked hospital ED and inpatient files with the crash data. Linkage variables include date and time of crash and admission, date of birth, and zip code.

Respondents	1	Responses	1	Response	100%
assigned		received		rate	100 /6

#### Question 388:

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



#### Standard of Evidence:

Document an integrative link among crash and multiple data systems, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include an assessment of the safety impact of differential speed limits for different vehicle types.

Question Rank: Somewhat Important

#### Assessor conclusions:

The primary linkage is crash and roadway or crash and injury surveillance. There is a project under consideration for linking those three files together.

Respondents	<sub>1</sub> Responses	4	Response	100%
assigned	received		rate	100 /6





#### Question 389:

Is data from traffic records component systems—excluding crash—integrated for specific analytical purposes?



#### Standard of Evidence:

Document an integrative link using at least two traffic record component systems excluding the crash system. Include the systems, their linkage variables, example analysis, and the frequency of linkage. Example analyses could include an assessment of recidivism among specific driver populations.

Question Rank: Somewhat Important

#### Assessor conclusions:

Data from non-crash components of the traffic records system are not integrated.

Respondents	Responses	4	Response	100%
assigned	received	•	rate	100 /6

#### Question 390:

Do decision-makers have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?



## Standard of Evidence:

Identify the analytical resources available: personnel, software, or online resources. Specify the decision-makers who have access to these resources.

Question Rank: Somewhat Important

#### **Assessor conclusions:**

There is no routine access to or availability of integrated data. Requests are handled on an ad hoc basis. Technical and administrative expertise related to integrated data files is available through KOHS and partners. The Traffic Records Coordinator is also the GIS coordinator and responds to data base questions directly or through contact with data custodians. Researchers at the KY Injury Prevention and Research Center provide analytical and interpretive expertise through funding from Section 405 grants or the CDC Core Injury and Violence Prevention Program.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100 /6





#### Question 391:

Does the public have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?



#### Standard of Evidence:

Identify the analytical resources available to the public: personnel, software, or online resources. Specify how the public has access to these resources.

Question Rank: Somewhat Important

### Assessor conclusions:

The public does have access to a number of crash data resources through the Kentucky Office of Highway Safety website; however, the website does not contain any integrated data. The discussion to make such data available is ongoing.

Respondents	2	Responses	2	Response	100%
assigned	2	received	2	rate	100%





# Appendix A

# **Assessment Participants**

## **State Highway Safety Office Representative(s)**

Ms. Noelle Hunter, Ph.D. Kentucky Office of Highway Safety Executive Director

Mr. Greg Thomas Kentucky Transportation Cabinet Secretary

## **State Assessment Coordinator(s)**

Mr. Nathan R. Dean Kentucky Transportation Cabinet Traffic Records Coordinator

Mr. Matt McCoy KY Office of Highway Safety Program Manager

Mr. Michael Schwendau Kentucky Transportation Cabinet Assistant Director

## NHTSA Regional Office Coordinator(s)

Ms. Stephanie Hancock NHTSA Regional Program Manager

## **NHTSA Headquarters Coordinator**

Ms. Sarah Weissman Pascual NHTSA Program Analyst





**State and Local Respondents**The following State and Local staff assisted in the Assessment by providing responses to the Advisory criteria and questions.

Name	Agency	Title
Sgt. Howard Blanton	Kentucky State Police	Police Sergeant
Mr. Drew Chander	Kentucky Board of Emergency Medical Services	Data Administrator
Mr. Matthew Cole	Kentucky Transportation Cabinet	Division Director
Dr. Julia Costich	Kentucky Injury Prevention and Research Center	Assoc. Director
Ms. Carla Crane	Kentucky Cabinet for Health and Family Services	Executive Advisor
Mr. Nathan R. Dean	Kentucky Transportation Cabinet	Traffic Records Coordinator
Mr. Keith Dotson	Kentucky Transportation Cabinet	System Consultant IT
Mr. Eric Green	University of Kentucky, Kentucky Transportation Center	Research Engineer
Mr. Ed H. Harding, III	Kentucky Transportation Cabinet	Systems Consultant IT
Mr. Brandon Haynes	Kentucky Administrative Office of Courts	Administrative Support III
Ms. Samantha Lickliter	Kentucky State Police	Program Coordinator
Mr. Michael Neal	Kentucky Transportation Cabinet	Admin Branch Manager
Mr. Larry C. Newton, Jr.	Kentucky State Police	Commander/Lieutenant
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Mr. Jarrod Stanley	Kentucky Transportation Cabinet	Traffic Engineer
Mr. Daniel Sturtevant	Kentucky Administrative Office of Courts	Research and Statistics Team Leader





Ms. Claudia Valdivieso	Kentucky Office of Vital Statistics	Epidemiologist
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Ms. Stephanie Williams	Kentucky Transportation Cabinet	Director



## **Assessment Facilitator**

Mr. Tim Kerns, Ph.D.

## **Assessment Team Members**

- Mr. Jack Benac
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- Ms. Dana Reiding
- Ms. Jana Simpler
- Ms. Tracy Joyce Smith
- Ms. Linda Williams
- Mr. Fred E. Zwonechek





# **Appendix B**

## **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
AlS 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
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

NEMSIS 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

SAVE Systematic Alien Verification for Entitlements

SHSP Strategic Highway Safety Plan

SME Subject Matter Expert

SSOLV Social Security Online Verification

STRAP State Traffic Records Assessment Program SWISS Statewide Injury Surveillance System

TCD Traffic Control Devices
TRA Traffic Records Assessment

TRIPRS Traffic Records Improvement Program Reporting System

TRCC Traffic Records Coordinating Committee

TRS Traffic Records System UCR Uniform Crime Reports

VIN Vehicle Identification Number

VMT Vehicle Miles Traveled

XML Extensible Markup Language





# **State-Specific Acronyms and Abbreviations**

AOC Administrative Office of the Courts
AVIS Automated Vehicle Information System
COT Commonwealth Office of Technology

KEMSIS Kentucky Emergency Medical Services Information System

KIPRC Kentucky Injury Prevention Research Center

KOHS Kentucky Office of Highway Safety

KStARS Kentucky State Ambulance Reporting System

KTC Kentucky Transportation Center

KTRAC Kentucky Traffic Records Advisory Committee
KY EDRS Kentucky Electronic Death Registration System
KY IPOP Kentucky Inpatient Outpatient Data Collection System

KYTC Kentucky Transportation Cabinet KyOPS Kentucky Open Portal Solutions OIT Office of Information Technology ePCR Electronic Patient Care Report

