

Illinois Traffic Records Coordinating Committee  
2017 Traffic Safety Information Systems Strategic Plan  
(Status Report)

*Completed by*

Illinois Department of Transportation  
Bureau of Safety programs and Engineering

June 30, 2017

Submitted

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## **Background and Summary Reports on the Recent Traffic Records Assessment**

Motor vehicle traffic fatalities increased in 2016, matching a National trend. Presented/discussed during a recent meeting of the TRCC, low gas prices, coupled with an improving economy have led to an increase in miles driven by the motoring public. Combined with this increase in miles driven (and greater opportunity for crashes) are the ongoing contributing factors by motorists for speeding, lack of seat belt use, impaired driving, and the use of smartphones and other driver distractions while operating a motor vehicle. To be able to target the increase in deaths, injuries and property damage on the highways, quality data is essential in the ever-evolving need to diagnose the contributing factors to crashes and assessment of implemented countermeasures. The data assist in identification of innovative and targeted strategies in areas that will have the greatest impact on achieving our goals.

Quality traffic safety related data are critical for highway traffic safety decision makers as they seek to develop and evaluate engineering, enforcement, education and emergency medical services safety countermeasures. The Bureau of Safety Programs and Engineering (BSPE) manages programs addressing occupant protection, child passenger safety, impaired driving, distracted driving, motorcycle safety, community traffic safety, senior drivers, teenage drivers, pedestrian safety and other traffic safety programs. Program managers use data and analyses to identify problems, assign priorities, allocate resources, and measure program effectiveness. The BSPE incorporates a safety management process to address safety analysis problems in countermeasure selection, economic analysis, and project development for the state's roadway system. As behavioral and engineering safety analyses become more comprehensive, it requires datasets that are more integrated and enhanced to address safety issues.

As traffic records system components become more integrated, this benefits the traffic records community. The resulting integrated datasets enable users to conduct analyses and generate insights impossible to achieve if based solely on the contents of any singular data system. The linked components can add detail to the understanding of each motor vehicle crash event, the roadway environment, and the people and vehicles involved. Connecting datasets through integration expands the information available to decision-makers while avoiding the expense, delay, and redundancy associated with collecting the same information separately. Interface linkages of traffic records system components exist primarily to support key business processes, and are usually accomplished in real-time. Integrated datasets enable users to conduct in-depth analysis and are usually accomplished at regularly scheduled points in time, such as the end of the calendar year or when all records for a set period are considered final.

### **Overall Assessment Results**

Based on the 2016 Illinois traffic records assessment report, Illinois Out of 391 assessment questions, Illinois met the Advisory ideal for 180 questions (46%), partially met the Advisory ideal for 56 questions (14.3%), and did not meet the Advisory ideal for 155 questions (39.6%). According to the assessment , Illinois met the criteria outlined in the *Traffic Records Program Assessment Advisory* 73.7% of the time

for Traffic Records Coordinating Committee Management, 81.3% of the time for Strategic Planning, 81.8% of the time for Crash, 41% of the time for Vehicle, 20% of the time for Driver, 76.3% of the time for Roadway, 16.7% of the time for Citation / Adjudication, 42.3% of the time for EMS / Injury Surveillance, and 15.4% of the time for Data Use and Integration.

Since 2011, traffic records systems (crash reports, roadway, driver and vehicle, citation data and health care data) have been improved in several ways that make analyses more easily accomplished and more useful as well. A complete traffic records program is necessary for planning (problem identification), operational management or control and research and evaluation of a state's highway safety activities.

### Crash Data

- Accessibility of crash data has been improved dramatically because of the availability of the external online "Safety Data Mart" which allows users to produce a variety of reports as well as map-based output from the IDOT GIS.
- Accessibility of statewide roadway information has been improved by moving the Illinois Roadway Information System application from a mainframe environment to a SQL server database.
- An automated process has been developed to provide electronic large truck- related crash file for the SAFETYNET.
- Illinois has successfully partnered with 10 approved third party vendors to assist local agencies in collecting their XML crash data to be submitted to IDOT.
- IDOT will continue to implement the Safety Portal initiative. This is a comprehensive and collaborative environment for anyone involved with realizing safety improvement measures on Illinois roadways. This environment will bring together data, knowledge, training and tools which will assist Bureau of Safety Programs and Engineering, Bureau of Local Roads and Streets, District personnel, county engineers, federal, state and local law enforcement agencies to provide better analysis of crash information to achieve improvements in safety.

### EMS Data

- Illinois revised its EMS data collection system to one that is NEMSIS compliant and that will allow agencies to submit data electronically via software provided by the state or by their own third-party vendor. This revision will allow the Illinois Department of Public Health (IDPH) to begin receiving data from all agencies across the state for the first time in several years. This effort will allow Illinois to fill a significant void and make tremendous improvements in the timeliness, completeness, accuracy and uniformity of the state's EMS data.

### Roadway Data

- The state has demonstrated notable progress in the roadway component of the traffic records system since the 2011 traffic records assessment. The most notable of the improvements was in the Illinois Roadway Information System (IRIS) which has a mainframe application to a SQL server database.

### Driver and Vehicle Data

- The Illinois Secretary of State's Office administers the driver licensing and vehicle registration and titling services for the state. The integrity of the driver file is enhanced by the use of facial recognition technology to identify those applicants who may already have a driver license under some other identity. The Social Security On-line Verification and the Systematic Alien Verification for Entitlements systems are checked prior to license issuance as well.
- Driver records completeness suffers somewhat from the courts' ability and willingness to allow convictions to be diverted from a driver history for attendance at a driver improvement school or performance of community service. These opportunities decrease the overall completeness of the driver file. However, the state does post all crash involvement to the driver records and linking to the vehicle file is possible through the driver license number.
- The Vehicle Services Department maintains complete vehicle records that meet appropriate standards and records include appropriate indicators such as stolen and salvage. The National Motor Vehicle Title Information System (NMVTIS) facilitates exchanges of such information between states and helps to prevent title and odometer fraud by making such information available nationwide. Illinois is currently the only state that is not a participant in the NMVTIS system.
- In FY 2017 IDOT has funded the Data Warehouse project with the Illinois Office of the Secretary of State (SOS). SOS maintains information systems to support both Drivers License and Vehicle Services. The databases contain information on approximately 8.7 million drivers and 11 million registered vehicles in Illinois. The goal is to provide highly accessible, intuitive, points of access to SOS Drivers and Vehicles joined data.

### Statewide Injury Surveillance System (SWISS) Records

- Illinois has an injury surveillance system consisting of multiple datasets collected or managed under the direction of the Illinois Department of Public Health (IDPH). These data sets include:
  - Pre-hospital EMS data
  - Emergency Department data
  - Hospital Discharge data
  - Trauma Registry data
  - Vital Statistics data
  - Head and Spinal Cord Registry data
- Since the 2011 assessment, the state has made significant improvements in the type, quality and completeness of injury data. In 2008, collection of External Causes of Injury Codes (E-CODES) became a requirement of the hospital discharge data. Then, in 2009, IDPH began to receive emergency department data from the state's hospitals.

### Data Integration

- Illinois has made significant progress toward linking the crash data to hospital discharge data. Since 2006, Illinois has been a Crash Outcome Data Evaluation

System (CODES) state. The CODES project has developed to link datasets for hospital discharge and crash data for the years 2002, 2003, 2005-2011. There is no current unique identifier between crash and hospital discharge data; consequently, linked datasets have been developed using probabilistic methods based on CODES2000 software. Several reports have been generated based on the linked data. With the inclusion of emergency department data in 2009 and the recent requirement of E-Codes in hospital discharge and emergency department datasets, the CODES program has improved linked crash and health care data.

- Analysts at IDOT, along with other partners, have produced a multitude of reports that focus on traffic safety program areas. CODES data have been used to support legislative activities, especially in the area of occupant restraint.

The current Information system presents challenges, including the timeliness, accuracy and completeness, availability of all traffic safety databases. Many traffic safety databases, such as crash, vehicle, driver, and health care data reports are sometimes incomplete and often are not submitted in a timely manner. Some of them have a delay of up to two years, which is unacceptable.

Tracking injuries is often a challenge, and crash reporting tends to focus on fatalities, although the severity of crashes holds equal importance. In addition, the linkage of crash data to injury data is imperfect, because no unique identifier exists between these two datasets; a unique identifier between crash data and hospital data to assure more complete and accurate records.

Information sharing is also a challenge for Illinois' crash data. Crash data are not user-friendly or easy to understand, which limits many people from using this data source. The public and departments outside of law enforcement and IDOT are unable to access crash data. Between law enforcement, IDOT, SOS, and the court system, information sharing is challenging and difficult to understand.

System-wide approaches to identifying problem areas are limited, while local information capturing is limited. Limited resources in funding and staff also present challenges in completing, organizing, analyzing, and implementing these data.

### **Specific Recommendations and Status Reports on all Specific Items that are Marginally Met or not Met as compared to Traffic Records Advisory Standards**

In the following section, we will address the assessment team's recommendations below by implementing changes to improve the ratings for the questions in those section modules with lower than average scores, mainly on those areas that Illinois didn't meet or marginally met the traffic records advisory standards. The following materials include assessment results all those traffic records items that Illinois didn't meet or met marginally on all existing six core data systems and the State's Traffic Records Coordinating Committee, its data use and management protocols, and the integration of traffic safety data for analysis purposes. The Table below includes the following information:

1. Overall Recommendations
2. Level of Importance of questions (Very Important, Somewhat Important, and Less Important)
3. Specific traffic records' question
4. Assessors' response
5. Assessors' conclusion (Met, Marginally Met, and Not Met the Advisory Standards)
6. Gap Analysis and Status Report

In addition, the questions in those section modules where Illinois met the traffic records advisory standards, we did not take any actions to improve the ratings (**See Appendix 1**).

Finally, as part of the strategic plan, **Appendix 2** provides data and information on Model Inventory of Data Elements (MIRE) Fundamental Data Elements (FDE) Improvements. Currently, based on the 2016 traffic records assessment, Illinois has all the MIRE FDEs.

## ITRCC & STRATEGIC PLAN

### Overall Assessments

None

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Marginally Met/Not Met	Status Report
very important	Does the executive TRCC review and approve actions proposed by the technical TRCC?	The executive TRCC members approve actions for the systems they represent. The process by which the executive TRCC reviews and approves the plan is unclear since they have not held a meeting in two years. The State may want to consider having a process by which the executive TRCC reviews and approves the strategic plan, as well as commits to at least an annual meeting as required under MAP-21.	marginally met	<p><b>Completed</b></p> <p>Illinois has updated its TRCC Executive Committees to commit at least one annual meeting. The committee will review and approve the final TRCC strategic plan.</p>
very important	Does the TRCC identify core system performance measures and monitor progress?	The State has developed example performance measures for all of the systems but not all data manager have implemented the measures. TRCC members are encouraged to take advantage of the expertise from the SHSO and implement measures to monitor progress over time.	not met	<p><b>Partially completed</b></p> <p>Illinois has developed several performance measures for crash, health care data. We are in a process of developing performance measures for all 6 data systems.</p>
somewhat important	Does the TRCC have a traffic records inventory?	The State has separate documents containing data dictionaries for the traffic records systems. It would be helpful if this information was consolidated into a formal traffic records inventory.	not met	<p>On-going</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (<b>see Attachments 1 and 2</b>).</p>

very important	Does the TRCC have a designated coordinator?	The State has been using an employee who has another full time position to act as the traffic records coordinator. The position provides leadership for the traffic records committee, develops the traffic records strategic plan, and chairs the TRCC meetings. A position description is in place to support a full time traffic records coordinator, but the position remains vacant because of a hiring freeze.	marginally met	On-going  The TRCC coordinator will be hired by the end of August, 2017.
somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	not met	On-going
very important	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?	The strategic plan and allocation supplement show how the funds relate to the projects in the strategic plan. However, the funding information for each of the projects is maintained in a document separate from the strategic plan.	marginally met	Completed  The HSP show how the funds relate to the projects. We have detailed funding information for each of the TRCC projects
very important	Does the TRCC have a process for identifying performance measures and corresponding metrics for the six core data systems in the TRCC strategic plan?	The State developed some performance measures for injury surveillance data but these do not appear to be part of the strategic plan. The May 2016 plan update shows the projects by system and area of improvement impacted. Unfortunately, there is a lack of quantifiable performance measurement corresponding to the projects. It is hoped that as budget issues get resolved, this aspect can be added to the annual update.	marginally met	Partially completed  Illinois has developed several performance measures for crash, health care data. We are in a process of developing performance measures for all six data systems. The Data Quality Sub-committee will be in charge of developing performance measures

somewhat important	Does the TRCC have a process for identifying and addressing technical assistance and training needs in the TRCC strategic plan?	Hiring a full-time Traffic Records Coordinator will be a tremendous boost to the TRCC. This person will be able actively seek stakeholders who are interested in the traffic records community. This will enable the committee to learn more and take part in opportunities for technical assistance and training. The TRCC may also want to look to the larger stakeholder communities: the collectors, data entry staff, users, and system maintainers, to assess their training needs or help with technical assistance. Data quality measures can also be a source of determining training needs.	not met	<p>On-going</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (<b>see Attachment 2</b>).</p>
somewhat important	Does the State have a data governance process?	The State does not have a set of documented processes, policies and procedures which document data definitions, content, and management of data sources. The State described its implementation of the CODES data linkage model and provided an example of traffic safety analyses that are enabled by CODES data. However, data governance is a more general management of ALL data assets, including formal processes, policies and procedures that document data definitions and the management of data resources. Data governance also addresses which entities are the custodians of each data resource and the policies and rules governing access to and use of the data resources. The State is encouraged to begin, even if only modestly, to formalize the process of managing the State's traffic records data. For example, the State could identify and document the data linkage mechanisms that are used, the expected level of validation and preparation/cleanup, etc.	not met	<p>On-going</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (<b>see Attachments 1 and 2</b>).</p>

<p>very important</p>	<p>Does the State have a formal traffic records system inventory that identifies linkages useful to the State and data access policies?</p>	<p>The State has a set of documents which each describe in detail available data systems; traffic crash records, hospital patient records, citation data, driver data systems, vehicle and title data systems, and roadway data. The State also has a description of a process linking FARS records to trauma registry records and the State provided a narrative description of its CODES linkage methodology. However, the State does not a traffic records inventory that a) addresses ALL the traffic records systems (including crash, roadway, driver, vehicle, citation and adjudication, and injury surveillance), or b) consolidates the linkage information in a single document. The inventory of traffic records systems might also indicate which systems could be usefully be linked, how they might be or are linked, and describe any data access policies that permit or impede linkages for traffic safety analyses. The State is encouraged to consolidate, into a single document that can be shared amongst the various TRCC parties, the available information regarding the "traffic records data sources, system custodians, data elements and attributes, linkage variables, linkages useful to the States, and data access policies."</p>	<p>marginally met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
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somewhat important	Does the TRCC promote data integration by aiding in the development of data governance, access, and security policies for integrated data?	In Illinois, the CODES project has been a solid example of data integration - to illustrate both how it can be done, and what benefits it provides - of traffic records in Illinois. The CODES project staff provides regular project updates and presentations to the TRCC to highlight the advantages of data integration and to encourage integration of other traffic records systems. At the joint CODES/TRCC meetings, discussions cover the results of data linkages, policies, and how to access the linked data. A document covering data linkage (CODES 2010) provides technical information regarding the linkage of crash and injury surveillance data. While there is coordination and encouragement on at least an informal basis. The TRCC does not play an active role in the development of data governance, data access, and security policies that might facilitate other record linkages among all the traffic safety-related data systems. Future integration projects (such as linking driver database to vehicle database) are already envisaged, and could benefit from such policies and governance direction. The State is encouraged to expand the scope of these discussions and support documentation to cover the wider question of integration across all six traffic records systems, and to begin developing more formal basic data governance processes and policies.	marginally met	<p>On-going</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (<b>see Attachments 1 and 2</b>).</p>
very important	Is driver data integrated with crash data for specific analytical purposes?	At this time, there is no formal data linkage between crash data and driver data. However, it should be noted that crash data analysts do try to verify the driver licenses of the drivers who were involved in crashes by accessing the driver file. Correcting the driver license data in the crash file goes a long way towards better integrating the crash and driver data. The State is encouraged to pursue such integration, as it can help with the work around the financial responsibility provisions, improving the driver information in the crash data, and allow for sophisticated studies between crash and driver data.	not met	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>



		effort.		
somewhat important	Are there examples of data integration among crash and two or more of the other component systems?	The objective of this particular question is to identify integration between the Crash and at least two other different systems. An example would be integration between Crash AND Injury Surveillance AND citations. The State has several examples of linking crash data and multiple datasets WITHIN the injury surveillance system (such as Trauma Registry and Hospital inpatient data), but those do not meet the criteria for this particular assessment question, since they are within the Injury surveillance traffic records system. The State is pursuing "triple linkages" that would meet the criteria of integrating "crash and two or more other component systems." Once the vehicle and driver files linked, the State will be able to achieve two triple matches of crash/vehicle/hospital discharge data; and crash/driver/hospital discharge data. These two examples would meet the advisory ideal for this question.	not met	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>

<p>somewhat important</p>	<p>Is data from traffic records component systems—excluding crash—integrated for specific analytical purposes?</p>	<p>The State performs linkage between Trauma Registry and Hospital Inpatient data in order to augment the hospital discharge data with additional E-codes. The State has also developed a linkage procedure between FARS cases and hospital trauma registry records. However, these linkages do not meet the criteria of this particular assessment question: The former is between two data sets that are both WITHIN the injury surveillance Traffic Records system, and the latter includes FARS, which is part of the Crash records system. An example of a linkage that would meet the criteria would be between injury surveillance and citation/adjudication.</p>	<p>not met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
<p>somewhat important</p>	<p>Do decision-makers have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?</p>	<p>The State has shown ample evidence of access to qualified personnel via the Research and Evaluation Unit at IDOT, and provided examples of several comprehensive reports (such as Problem ID and others). Also, the State is prepared to provide all reports and aggregate level integrated data to interested parties (highway safety professional as well as state legislators). However, the reports are not currently available online (though the state is working to add the reports to the IDOT web site.) The State is encouraged to a) make both the reports and the aggregate level integrated data available on-line, and b) pursue providing decision-makers with direct access to the underlying (even if redacted) data via appropriate analysis tools that would enable quick analysis around various ideas.</p>	<p>marginally met</p>	<p>On going</p> <p>Since the Division of Traffic Safety and Bureau of Safety Engineering merged in 2016, the top level managers and decision makers will have resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets. By the end of September, we will have two additional data analyst and Data Scientist to conduct data linkages and produce traffic safety related reports based on the linked data.</p>

somewhat important	Does the public have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?	The State provides publications such as Fact Sheets, etc. that includes linked data aggregated at a statewide level, and public may request ad-hoc studies or data exports via the web ( <a href="http://www.idot.illinois.gov/about-idot/contact-us/index">http://www.idot.illinois.gov/about-idot/contact-us/index</a> ). However, the reports are not currently available online (though the State is working to add the reports to the IDOT web site). Nor does the public have access to easy-to-use tools or the underlying data (even at the aggregated level) mainly out of concern for confidentiality. The State is encouraged to a) make both the reports and the aggregate level integrated data available on-line, and b) pursue providing decision-makers with direct access to the underlying (even if redacted) data via appropriate analysis tools that would enable quick analysis around various safety scenarios.	marginally met	On going  Since the Division of Traffic Safety and Bureau of Safety Engineering merged in 2016, the top level managers and decision makers will have resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets. By the end of September, we will have two additional data analyst and Data Scientist to conduct data linkages and produce traffic safety related reports based on the linked data.
somewhat important	Do the courts' case management system data dictionaries indicate the data fields populated through interface linkages with other traffic records system components?	The State does not have a standard data dictionary for case management through all of the courts. The State has indicated that several different case management systems are in place but do not demonstrate how any of these may integrate with traffic record components.	not met	This is a challenging project since the state does not have a statewide citation database
somewhat important	Do the prosecutors' information systems have data dictionaries?	The State was unable to provide any data dictionaries utilized by prosecutors' information systems.	not met	This is a challenging project since the state does not have a statewide citation database.
very important	Can the State track citations from point of issuance to posting on the driver file?	The State does not track citation data over its life cycle. Each agency in the State is responsible for tracking its own citation data.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Does the State measure compliance with the process outlined in the citation lifecycle flow chart?	The State does not measure compliance with the process outlined in the citation lifecycle flow chart.	not met	This is a challenging project since the state does not have a statewide citation database.

very important	Does the State have a system for tracking administrative driver penalties and sanctions?	The State does not have a system for tracking administrative driver penalties although they can track sanctions and ensure the accuracy of submitted documents.	marginally met	This is a challenging project since the state does not have a statewide citation database.
very important	Does the State have a system for tracking traffic citations for juvenile offenders?	The State does not have specific system/criteria for tracking traffic citations for juvenile offenders.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Does the State track deferral and dismissal of citations?	The State does not track the deferral or dismissal of citations.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Are there State and/or local criteria for deferring or dismissing traffic citations and charges?	The State does not have any State or local criteria for deferring or dismissing traffic citations and charges. The decision of whether to defer or dismiss is made at the local court level.	not met	This is a challenging project since the state does not have a statewide citation database.
very important	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?	The State has not linked citation data with the driver system to collect driver information, to carry out administrative actions, or to determine the applicable charges.	not met	This is a challenging project since the state does not have a statewide citation database.
very important	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?	The State has not linked the adjudication data with the driver system to collect certified driver records and administrative actions, to determine the applicable charges, or to post the dispositions to the driver file.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is citation data linked with the vehicle file to collect vehicle information and carry out administrative	The State has not linked citation data with the vehicle file to collect vehicle information and carry out administrative actions.	not met	This is a challenging project since the state does not have a statewide citation database.

	actions (e.g., vehicle seizure, forfeiture, interlock)?			
somewhat important	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)?	The State has not linked adjudication data with the vehicle file to collect vehicle information and carry out administrative actions.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is citation data linked with the crash file to document violations and charges related to the crash?	The State has not linked citation data with the crash file to document violations and charges related to any crashes.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is adjudication data linked with the crash file to document violations and charges related to the crash?	The State has not linked adjudication data with the crash file to document violations and charges related to crashes.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is there a set of established performance measures for the timeliness of the citation systems?	The State has not established timeliness performance measures for the citation systems. However, final dispositions are tracked to ensure they are reported to the Secretary of State within a five day timeline after disposition.	not met	This is a challenging project since the state does not have a statewide citation database.
very important	Is there a set of established performance measures for the accuracy of the citation systems?	The State has not established performance measures for the accuracy of the citation systems.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is there a set of established performance measures for the completeness of the citation systems?	The State has not established performance measures for the completeness of the citation systems.	not met	This is a challenging project since the state does not have a statewide citation database.

somewhat important	Is there a set of established performance measures for the uniformity of the citation systems?	The State has not established performance measures for the uniformity of the citation systems.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is there a set of established performance measures for the integration of the citation systems?	The State has not established performance measures for the integration of the citation systems.	not met	This is a challenging project since the state does not have a statewide citation database.
less important	Is there a set of established performance measures for the accessibility of the citation systems?	The State has not established performance measures for the accessibility of the citation systems.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is there a set of established performance measures for the timeliness of the adjudication systems?	The State has not established performance measures for the timeliness of the adjudication systems.	not met	This is a challenging project since the state does not have a statewide citation database.
very important	Is there a set of established performance measures for the accuracy of the adjudication systems?	The State has not established performance measures for the accuracy of the adjudication systems.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is there a set of established performance measures for the completeness of the adjudication systems?	The State has not established performance measures for the completeness of the adjudication systems.	not met	This is a challenging project since the state does not have a statewide citation database.
somewhat important	Is there a set of established performance measures for the integration of the adjudication systems?	The State has not established performance measures for integration of the adjudication system.	not met	This is a challenging project since the state does not have a statewide citation database.
very important	In States that have an agency responsible for issuing unique citation numbers, is information on intermediate dispositions (e.g., deferrals, dismissals) captured?	The State does not have a specific agency that issues citation numbers therefore the information on intermediate dispositions is not captured.	not met	This is a challenging project since the state does not have a statewide citation database.

somewhat important	Do the State's DUI tracking systems have additional quality control procedures to ensure the accuracy and timeliness of the data?	The State has no established quality control measures to ensure accurate and timely DUI data.	not met	This is a challenging project since the state does not have a statewide citation database.
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<u>CRASH</u>
<b>Overall Assessments</b>
1) Improve the applicable guidelines for the Crash data system to reflect best practices identified in the Traffic Records Assessment Advisory.

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Marginally Met/Not Met	Status Report
very important	Do all law enforcement agencies submit their data to the statewide crash system electronically?	The state is working to increase the number of agencies submitting electronically. Based on the report provided by the state, there are currently 211 agencies submitting crashes electronically at 100%. Many other agencies are nearing that mark.	marginally met	On-going  As of April 2017, over 69.3 percent of all crashes received electronically (See attachment A)
somewhat important	Does the crash system interface with the citation and adjudication systems?	The Crash Information System interfaces nightly with the Drivers Division to pull information that is used to update the Driver History in their records. The information transferred refers to crash occurrence and crash severity which then goes into the Driver's record. FARS also uses this process to gather information to driver history. While this indicates that interfacing is done, there appears to be only partial transmittal of information. There is no mention of Citation verification or validation, alcohol or drug test follow-ups, or identification of inconsistencies.	marginally met	On-going  The Crash Information System interfaces nightly with the Driver file from the Secretary of State to update and validate the Driver History in their records
somewhat important	Are there accessibility performance measures tailored to the needs of data managers and data users?	The current accessibility data is tracked by the Safety Portal. The site has the ability to monitor the number of registered users based on roles, such as law enforcement, engineers, federal partners, etc. This provides part of an accessibility measurement. The website also provides the user the ability to request data via email. Either counting requests or the number of "hits" on the portal would provide an excellent opportunity to complete the accessibility measure.	marginally met	On-going  We are a process of updating the portal at IDOT to have accurate counts of users who access the crash data.

somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	not met	This is a challenging project since the state does not have a statewide citation database.
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## ROADWAY

### Overall Assessments

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Marginally Met/Not Met	Status Report
somewhat important	Does the State enterprise roadway information system allow MPOs and local transportation agencies on-demand access to data?	The State provides historical, annual data via the State website but does not provide direct, on-demand access to the enterprise roadway data information system.	marginally met	On-going  The Roadway data are a GIS-based data system and can be access by the public.
very important	Do Roadway system data managers regularly produce and analyze data quality reports?	Though the State data managers do not produce data quality reports regularly, the roadway information system has the capability to generate these reports on request.	marginally met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (see <b>Attachments 1 and 2</b> ).
very important	Are there procedures for prioritizing and addressing detected errors?	The State has edit checks during data entry and detected errors during entry must be corrected before the data can be saved. However, it is unclear how detected errors are prioritized or whether these procedures are formally documented.	marginally met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (see <b>Attachments 1 and 2</b> ).
very important	Is there a set of established performance measures for the timeliness of the State enterprise roadway information system?	The State publishes an annual year end file to the web by mid-April. However, the State response does not speak to timeliness performance measures per the Traffic Records Program Assessment Advisory, namely those listed under the Table 9 Timeliness entry.	not met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (see <b>Attachment 1 and 2</b> ).

somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	not met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance <b>(see Attachments 1 and 2)</b> .
very important	Is there a set of established performance measures for the completeness of the State enterprise roadway information system?	The State has no direct completeness performance measures but does post the IRIS manual to the internet and provides the full GIS roadway information file annually via the internet. The State provided a map showing the complete coverage of the public roadway network; however, this is not completeness of the dataset nor is it a measure.	not met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance <b>(see Attachments 1 and 2)</b> .
very important	Is there a set of established performance measures for the uniformity of the State enterprise roadway information system?	The State has no direct uniformity performance measures but does post the IRIS manual to the internet and provides the full GIS roadway information file annually via the internet. The State has a listing of which MIRE elements are contained but does not appear to report these numbers directly nor is this a performance measure.	not met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance <b>(see Attachments 1 and 2)</b> .
very important	Is there a set of established performance measures for the accessibility of State enterprise roadway information systems?	The State has no direct accessibility performance measures but does post the IRIS manual to the internet and provides the full GIS roadway information file annually via the internet; however, this is not a performance measure.	not met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance <b>(see Attachments 1 and 2)</b> .
very important	Is there a set of established performance measures for the integration of State enterprise roadway information systems and other critical data systems?	The State has no direct integration performance measures but does post the IRIS manual to the internet and provides the full GIS roadway information file annually via the internet. Internal business applications can integrate with the enterprise roadway information system via an attribute-based linkage. No reporting as to the percentage of records that are linked appears to occur.	not met	This a challenging project. Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance <b>(see Attachments 1 and 2)</b> .

## VEHICLE

<b>Overall Assessments</b>				
1) Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Assessment Advisory.				
2) Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Assessment Advisory.				
<b>Question rank (very important, somewhat important)</b>	<b>Question from Assessment</b>	<b>Assessor conclusion based on Illinois Responses</b>	<b>Marginally Met/Not Met</b>	
				Status Report
very important	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?	Registration documents are currently not barcoded in Illinois. No statute currently exists in Illinois that mandates a vehicle owner to carry registration information so subsequently it is not a priority to provide machine readable barcodes on those documents. SOS reported that law enforcement would be the driving force for adding barcodes to the vehicle documents. The barcode specifications would need to be compatible with electronic readers.	not met	IL State Police does not require a bar code on vehicle registration documents. Until this element is required, the Secretary of State's Office will not have bar codes on registrations.
somewhat important	Does the vehicle system have a documented definition for each data field?	Illinois supplied as evidence the field names and reference page numbers but no sample definitions to show that the data fields are indeed appropriately documented.	marginally met	While Secretary White is one of the chief traffic safety advocates in Illinois, the Office of the Secretary of State's primary responsibility is the day-to-day operations of the office to ensure the issuance of driver's license and vehicle registrations to customers in a timely manner and the enactment of required state and federal mandates. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.

somewhat important	Is there a process flow diagram describing the vehicle data system?	The response was a brief "yes". The supporting evidence was a flow chart identifying the registration and decal process. A separate flow chart for the titling process was not included. In other responses, there were indications that the titling and registration processes were separate.	marginally met	Completed  SOS has provided a process flow diagram
somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	marginally met	This a challenging project since Illinois Secretary of State (SOS) does not have a statewide tracking system. The citation data SOS includes only convicted cases.
somewhat important	Is the process flow diagram or narrative annotated to show the time required to complete each step?	Illinois does not have timeline information integrated into their flow diagrams for each step. A flow chart for the titling and registration process was provided in a previous response, but timelines were only on part of the flow chart.	not met	On-going  The Illinois Secretary of the State (SOS) has been awarded a TRCC grant to develop a Data Warehouse to integrate vehicle and driver files. Currently, Illinois does not have fully-linked driver and vehicle file.
somewhat important	Does the process flow diagram or narrative show alternative data flows and timelines?	Alternative data flows or time lines are not included in the vehicle titling flow diagram. The State does not have the process flow diagram or narrative that shows alternative data flows and timelines.	not met	On-going  It will be address in the SOS Data Warehouse project.
somewhat important	Does the process flow diagram or narrative explain the timing, conditions, and procedures for purging records from the vehicle system?	Purging title information is not a scheduled or routine event. Purging is done when space is needed and the system starts to fail. No files have been purged since 1999. The SOS tries to maintain these files to support law enforcement activities. Neither the specifics of the purge process nor a flow diagram of the process was provided as evidence.	not met	This recommendation is not a mandate and does not enhance the office's priorities; the office respectfully declines enactment or expansion of the already submitted answer at this time.
somewhat important	Are the driver and vehicle files unified in one system?	The Illinois driver and vehicle systems are not unified. Ideally strong integration or a single system would exist to accurately cross reference and maintain data integrity.	not met	There is no plan to link the driver's license and vehicles databases at any time in the near future. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already

				submitted answer at this time.
very important	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?	The vehicle and driver systems are separate data bases and no information was provided regarding similar conventions. It may be assumed the systems cannot be linked and probably do not communicate with one another. Driver and vehicle staff may access the data files. The systems remain separated because of statutory requirements.	not met	On going  It will be address in the SOS Data Warehouse project.
somewhat important	Can vehicle system data be used to verify and validate the vehicle information during initial creation of a citation or crash report?	At this time, there are no interagency agreements that permit the sharing of information between data bases. Vehicle system data cannot be used to verify or validate the vehicle information during initial creation of a citation or crash report. Ideally integration between these systems would exist to improve data quality.	not met	On going  It will be address in the SOS Data Warehouse project.
less important	When discrepancies are identified during data entry in the crash data system, are vehicle records flagged for possible updating?	Currently, there is no established process to check vehicle information appearing on a crash report. Discrepancies that are identified during data entry in the crash data system does not result in vehicle records being flagged.	not met	On-going  It will be address in the SOS Data Warehouse project.
very important	Is the vehicle system data processed in real-time?	Simple vehicle titling transactions can be completed in real-time. Hand written applications must be processed manually and checks to NMVTIS or the State Police are done through batch processing.	marginally met	Completed  It also will be address in the SOS Data Warehouse project.
very important	Are there timeliness performance measures tailored to the needs of data managers and data users?	Illinois stated that they have timeliness performance measures but the baseline values and most current values as required by the evidence requirement were not supplied. It is recommended that these values be established and documented for future use as they can help improved the overall system functionality. The response described production reporting not timeliness performance measures.	not met	On-going  Data Quality Sun-committee will address this issue.

very important	Are there accuracy performance measures tailored to the needs of data managers and data users?	The SOS has established a variety of approaches to ensure accuracy of vehicle information, but the response did not address accuracy performance measures. It is recommended that these values be established and documented for future use as they can help improved the overall system functionality.	not met	On-going  Data Quality Sun-committee will address this issue.
very important	Are there completeness performance measures tailored to the needs of data managers and data users?	The response did not address completeness performance measures. Illinois stated that they have completeness performance measures but the baseline values and most current values as required by the evidence requirement were not supplied. It is recommended that these values be established and documented for future use as they can help improved the overall system functionality.	not met	On-going  Data Quality Sun-committee will address this issue.
very important	Are there uniformity performance measures tailored to the needs of data managers and data users?	The response did not address uniformity performance measures. It is recommended that these values be established and documented for future use as they can help improved the overall system functionality.	not met	On-going  Data Quality Sun-committee will address this issue.
very important	Are there integration performance measures tailored to the needs of data managers and data users?	The response did not address integration performance measures. The response did identify relationships between some data files.	not met	On-going  Data Quality Sun-committee will address this issue.
somewhat important	Are there accessibility performance measures tailored to the needs of data managers and data users?	Accessibility performance measures were not identified	not met	On-going  Data Quality Sun-committee will address this issue.
very important	Has the State established numeric goals— performance metrics— for each performance measure?	Performance goals or metrics have not been established. Customer satisfaction and feedback are the primary measurements used by SOS.	not met	On-going  Data Quality Sun-committee will address this issue.

very important	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?	Management personnel are responsible for tracking errors, completing audits and address frequent errors and the revision of processes. The SOS does have a process to request changes in data base programs.	marginally met	On-going Data Quality Sun-committee will address this issue.
very important	Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?	Illinois, upon request, performs ad hoc queries to conduct comparative reports. The report that was provided as evidence showed summaries for given areas. It did not show comparative trends for those areas versus the same areas over a different timeframe with the corresponding +/- percentages.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is data quality feedback from key users regularly communicated to data collectors and data managers?	Illinois indicated that data quality feedback from users is rolled back to data collectors and data managers. Specifics on how the process is conducted were not provided.	marginally met	On-going There is data quality feedback from users regularly communicated to data collectors and data managers.
very important	Are data quality management reports provided to the TRCC for regular review?	Currently, data quality management reports are not being provided to the TRCC. Ideally data quality management reports would be provided to the TRCC for regular review.	not met	On-going Data Quality Sun-committee will address this issue.

## DRIVER

### Overall Assessments

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

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Marginally Met/Not Met	Status Report
very important	Can the State's DUI s data system be linked electronically to the driver system?	Each Circuit Court maintains its own DUI data system. No information was provided on how or if the DUI information is submitted to the Secretary of State for posting to the driver record.	not met	Each Circuit Court maintains its own DUI data system. No information was provided on how or if the DUI information is submitted to the Secretary of State for posting to the driver record.
less important	Does the driver system capture novice drivers' training histories, including provider names and types of education (classroom or behind-the-wheel)?	Completion of an approved driver education course is required for driver license applicants between the ages of 15 through 18. Applicants may complete an Illinois State Board of Education course or a course provided by a commercial provider. Driver education completion is recorded on the applicants driving record. The date of completion and school code appear in the record. All other information is maintained by the Illinois State Board of Education or the commercial school. Individuals under the age of 21 who wish to operate a motorcycle are required to complete an IDOT approved rider training course. The Secretary of State does not maintain information regarding completion of rider training. Completion of training for a CDL license is not maintained by the Secretary of State. Information regarding permit issuance, test taken and test scores are maintained by the Secretary of State.	marginally met	Completion of an approved driver education course is required for driver license applicants between the ages of 15 through 18. Applicants may complete an Illinois State Board of Education course or a course provided by a commercial provider. Driver education completion is recorded on the applicants driving record. The date of completion and school code appear in the record. All other information is maintained by the Illinois State Board of Education or the commercial school. Individuals under the age of 21 who wish to operate a motorcycle are required to complete an IDOT approved rider training course. The Secretary of State does not maintain information regarding completion of rider training. Completion of training for a CDL license is not maintained by the Secretary of State. Information regarding permit issuance, test taken and test scores are maintained by the Secretary of State.

less important	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)?	The Secretary of State does not collect or maintain information regarding court ordered completion of driver improvement or traffic courses. The Secretary of State does maintain completion information of driver improvement if it was required for licensure or removal of a sanction. The response did not indicate if traffic violations were captured, but in a previous response it was stated that citation and conviction information is captured on the driving record.	not met	The Secretary of State's Office does not collect provider names but does code the driving record to determine whether driver education was performed in a high school or commercial school. The information is purged from the driving record after six years because the information holds no value for the Secretary of State's Office beyond this period of time. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.
somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	marginally met	The State only receives citation dispositions from 92 of the 102 county courts.
very important	Are the contents of the driver system documented with data definitions for each field?	The Secretary of State reported that a Driver License System Data Dictionary exists. However, information as described by the evidence requirement was not provided. The respondent indicated a more complete response would require more time than allowed for this phase.	not met	The Secretary of State reported that a Driver License System Data Dictionary exists. However, information as described by the evidence requirement was not provided. The respondent indicated a more complete response would require more time than allowed for this phase.
very important	Are all valid field values—including null codes—documented in the data dictionary?	A sample of the data values from the data dictionary was not provided. The response implied many but not all the data fields have values and descriptions. The completion of such a data project is considered a "work in progress" and more time would be needed to provide a thorough response.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are there edit checks and data collection guidelines for each data element?	The Illinois system has edit checks and data requirements that are mainly documented within the COBOL/CICS/DB2 backend code. More documentation on the overall system outside of system code is suggested for the future.	not met	On-going The Illinois Secretary of the State (SOS) has been awarded a TRCC grant to develop a Data Warehouse to integrate vehicle and driver files. Currently, Illinois does not have fully-linked driver and vehicle file.

very important	Is there guidance on how and when to update the data dictionary?	At this time there is no formal documented process for updating the data dictionary. All updates are completed on an ad hoc as needed basis.	not met	On-going  The Illinois Secretary of the State (SOS) has been awarded a TRCC grant to develop a Data Warehouse to integrate vehicle and driver files. Currently, Illinois does not have fully-linked driver and vehicle file.
somewhat important	Does the custodial agency maintain accurate and up to date documentation detailing the licensing, permitting, and endorsement issuance procedures (manual and electronic, where applicable)?	Illinois indicated that the Field Operations Manual containing license/ID card procedures is maintained electronically and updated every 6 months. The response indicated that the procedures are maintained electronically and only accessible by internal staff.	not met	Some driver education training programs electronically report to the Secretary of State's Office as they are completed and they are loaded to the driving record. Some high schools report to the Secretary of State's Office manually. Electronic notification is immediately available on the driver's record when an action requiring a driver improvement course is loaded to a driver's record and electronically removed once the requirements are met and electronically or manually submitted to the Secretary of State's Office. The Secretary of State's Office does not receive any information when a class is ordered by the Court; therefore nothing is placed on the driver's record. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.
very important	Is there a process flow diagram that outlines the driver data system's key data process flows, including inputs from other data systems?	Illinois does not have a flow diagram that outlines the driver data system's key data process flows, including inputs from other data systems. It is advisable that a current flow diagram be created and maintained to streamline business processes.	not met	While Secretary White is one of the chief traffic safety advocates in Illinois, the Office of the Secretary of State's primary responsibility is the day-to-day operations of the office to ensure the issuance of driver's license and vehicle registrations to customers in a timely manner and the enactment of required state and federal mandates. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.

somewhat important	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?	Illinois appears to have at least partial documentation via flow diagrams that describe the processes and procedures for error correction and error handling. A flow diagram was supplied that only applies to licenses and permits.	marginally met	On going The Data Warehouse project will address this issue.
very important	Are there established processes to detect internal fraud by individual users or examiners?	The SOS assigns unique Operator Security Numbers to all license examiners who administer licensing tests so their work can be monitored and evaluated. Pass/fail rates are monitored to ensure quality standards are adhered to. The response did not indicate if everyone with access to the driver licensing system has a unique Operator Security Number and if all actions are monitored.	marginally met	
very important	Are the established processes to detect CDL fraud (including hazmat endorsements)?	The response described the process used for TSA's Hazmat checks and Medical Certification, but did not describe the process to prevent fraud.	not met	The Secretary of State's Office believes this recommendation has already been met. Individuals with access to the driver record database have unique sign in codes and all transactions and accesses can be tracked and monitored for quality control. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.

very important	Are there policies and procedures for maintaining appropriate system and information security?	It is unclear as to whether or not there are appropriate policies and procedures for maintaining appropriate system and information security in Illinois. Copies of the relevant policies and procedure manuals were requested but not received.	not met	
very important	Are there procedures in place to ensure that driver system custodians track access and release of driver information adequately?	The response did not describe the processes and procedures that are in place to ensure approved access and distribution of driver information. According to the response all access is controlled by domain custodians and Driver Services policies. Additional time would be needed to research this information for a more complete response.	not met	
very important	Can the State's crash system be linked to the driver system electronically?	The Illinois crash system is not linked to the driver system electronically. The Illinois Department of Transportation (IDOT) is responsible for tracking crash reports. IDOT transmits crash information to the SOS for inclusion on the driving record. However, it is unclear if crash data is routinely posted to the driver record by SOS once the data is received.	not met	At this time, the crash system and driver system are controlled by two separate agencies with oversight by two separate constitutional officers. There is no plan to link these two databases at this time. The Secretary of State's Office does not need access to the crash system database for its day-to-day operations. Accident/Crash report numbers are loaded to the individual driving records for reference. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.
very important	Can the State's citation system be linked to the driver system electronically?	Illinois does not have a statewide citation system. SOS is not responsible for tracking citations. SOS only tracks dispositions after the citation is adjudicated.	not met	At this time, the citation system and driver system are controlled by two separate agencies with oversight by two separate branches of government. There is no plan to link these two databases at this time. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.

very important	Can the State's adjudication system be linked to the driver system electronically?	At this time, Illinois does not have a statewide adjudication system. Courts send dispositions to the SOS. Some may be electronically transmitted while most are processed manually	not met	The Secretary of State's Office currently interfaces with PDPS, CDLIS, SSOLV and SAVE as part of the driver's license issuance process.
very important	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?	It appears from the response that the interface/process in place for extended system validation in Illinois is manual. Programmatic interfaces in the future would be ideal to reduce workload and increase accuracy.	marginally met	On-going The Data Warehouse project will address this issue.
very important	Is there a formal, comprehensive data quality management program for the driver system?	It is unclear if there is a formal, comprehensive data quality management program for the driver system. If the process exists SOS suggests it is administered by the Database Administrator. A detailed narrative description of the driver system's data quality management programs and any reports that might be available were requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
very important	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?	It is unclear if there are automated edit checks and validation rules applied to the data to ensure the data falls within a range of acceptable values. A description of how the edit checks are applied to the data was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are there timeliness performance measures tailored to the needs of data managers and data users?	There are production timeline guidelines for processing various aspects of the licensing process. However, these are production measures and not performance measures.	not met	On-going Data Quality Sun-committee will address this issue.

very important	Are there accuracy performance measures tailored to the needs of data managers and data users?	It is unclear if there accuracy performance measures tailored to the needs of data managers and data users. A complete list of driver system accuracy measures the State uses, including the most current baseline and actual values for each were requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are there completeness performance measures tailored to the needs of data managers and data users?	It is unclear if there are completeness performance measures tailored to the needs of data managers and data users. A complete list of driver system completeness measures the State uses, including the most current baseline and actual values for each was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are there uniformity performance measures tailored to the needs of data managers and data users?	It is unclear if there are uniformity performance measures tailored to the needs of data managers and data users. A complete list of driver system uniformity measures the State uses, including the most current baseline and actual values for each was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are there integration performance measures tailored to the needs of data managers and data users?	It is unclear if there are integration performance measures tailored to the needs of data managers and data users. A complete list of driver system integration measures the State uses, including the most current baseline and actual values for each was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Are there accessibility performance measures tailored to the needs of data managers and data users?	It is unclear if there are accessibility performance measures tailored to the needs of data managers and data users. A complete list of driver system accessibility measures the State uses, including the most current baseline and actual values for each was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Has the state established numeric goals—performance metrics—for each performance measure?	It is unclear if Illinois has established numeric goals—performance metrics—for each performance measure. The specific, State-determined numeric goals associated with each performance measure in use was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.

very important	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?	It is unclear if Illinois has processes in place to detect high frequency errors and use those measures to improve training content, manuals, etc. The response indicated there might be some triggers but no details were provided.	not met	The Secretary of State's Office has internal controls for detecting errors. Additional training of personnel and updates to the Field Operations Manual trigger these updates. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.
somewhat important	Are independent sample-based audits conducted periodically for the driver reports and related database contents for that record?	It is unclear if Illinois conducts periodic independent sample-based audits for the driver reports and related database contents. The formal audit methodology and a sample report were requested but not provided.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?	It is unclear if Illinois has periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions. A description of the analyses and a sample report was requested but not received.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is data quality feedback from key users regularly communicated to data collectors and data managers?	It is unclear if Illinois data quality feedback from key users is regularly communicated to data collectors and data managers.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Are data quality management reports provided to the TRCC for regular review?	Data quality reports are not provided to the TRCC for regular review.	not met	On-going Data Quality Sun-committee will address this issue.

## CITATION ADJUDICATION

<b>Overall Assessments</b>				
1) Improve the applicable guidelines for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.				
2) Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.				
3) Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.				
<b>Question rank (very important, somewhat important)</b>	<b>Question from Assessment</b>	<b>Assessor conclusion based on Illinois Responses</b>	<b>Marginally Met/Not Met</b>	
				Status Report
very important	Is there a statewide system that provides real-time information on individuals' driving and criminal histories?	The State employs multiple systems to provide driving and criminal history information. Ninety-two of the one hundred two counties contribute data to the Illinois data systems (LEADS) on a weekly basis.	marginally met	There is no statewide citation tracking system in Illinois
very important	Is there a statewide authority that assigns unique citation numbers?	The State indicated that there is not a statewide authority in place to assign unique citation numbers. The State courts appear to assign unique numbers to each response received by the clerk of the court. There is no indication that the numbers assigned to citations are separate and distinct from other pleadings.	not met	There is no statewide citation tracking system in Illinois
somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	marginally met	There is no statewide citation tracking system in Illinois

somewhat important	Are final dispositions (up to and including the resolution of any appeals) posted to the driver data system?	The State indicates that dispositions are reported to the respective State agencies, including the Secretary of State as the primary data keeper. However, the State's response does not reflect how dispositions are posted to driver files. The State was also unable to provide evidence or the process to support how dispositions are ultimately reported.	not met	There is no statewide citation tracking system in Illinois
very important	Are the courts' case management systems interoperable among all jurisdictions within the State (including local, municipal and State)?	The State of Illinois does not maintain a unified case management system within its judicial system.	not met	There is no statewide citation tracking system in Illinois
very important	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?	The State does not utilize citation and adjudication data for traffic safety analysis to identify problem locations, areas, problem drivers, or issues related to the issuance of citations, prosecution of offenders, or adjudication of cases by courts.	not met	The Secretary of State does not use adjudication data to identify problem drivers. Because this recommendation is not a mandate and does not enhance the office's priorities, the office respectfully declines enactment or expansion of the already submitted answer at this time.
somewhat important	Do the appropriate portions of the citation and adjudication systems adhere to the Uniform Crime Reporting (UCR) Program guidelines?	The State does not apply UCR guidelines to its citation and adjudication systems. The State indicated that there are "similarities" between UCR and its ADR data sets although the evidence submitted is a data set with no indication of how this meets or is similar to UCR. There is no clear correlation, based on the State's response that the applied ADR guidelines are actually comparable to UCR.	not met	There is no statewide citation tracking system in Illinois

somewhat important	Do the appropriate portions of the citation and adjudication systems adhere to the National Incident-Based Reporting System (NIBRS) guidelines?	The State's citation and adjudication systems do not conform to National Incident-Based Reporting System (NIBRS) guidelines.	not met	There is no statewide citation tracking system in Illinois
somewhat important	Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Telecommunications System (NLETS) guidelines?	The State's citation and adjudication systems do not adhere to the National Law Enforcement Telecommunications System (NLETS) guidelines.	not met	There is no statewide citation tracking system in Illinois
somewhat important	Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Information Network (LEIN) guidelines?	LEIN is Michigan based and is not used or implemented anywhere else in the Country. Since the question specifically asks about the LEIN compliance, the State does not meet the Advisory ideal.	not met	There is no statewide citation tracking system in Illinois
somewhat important	Do the appropriate portions of the citation and adjudication systems adhere to the Functional Requirement Standards for Traffic Court Case Management?	The State's response indicates that Illinois applies record guidelines established by the Supreme Court. The State submits, as evidence, its manual on recordkeeping which establishes criteria for maintenance of its court records. The State does not utilize a statewide centralized CMS for its entire court system but relies on several different and distinct systems.	marginally met	Illinois applies record guidelines established by the Supreme Court. The State submits, as evidence, its manual on recordkeeping which establishes criteria for maintenance of its court records.
somewhat important	Do the appropriate portions of the citation and adjudication systems adhere to the NIEM Justice domain guidelines?	The State does not currently adhere to NIEM guidelines. The State maintains multiple case management systems which are unique to each court. The State did not provide evidence that any one of those systems meet NIEM Justice domain guidelines.	not met	There is no statewide citation tracking system in Illinois.

somewhat important	Does the State use the National Center for State Courts guidelines for court records?	The counties in the State authorized to participate in electronic filing are following standards adopted by the Illinois Supreme Court. These standards include some guidelines from the National Center for State Courts guidelines for court reports.	marginally met	All the counties in the state participate in electronic filing are following standards adopted by the Illinois Supreme Court.
somewhat important	Does the State use the Global Justice Reference Architecture (GRA)?	There is no indication that either Global Justice Reference Architecture or a similar guideline is being used in Illinois.	not met	There is no statewide citation tracking system in Illinois.
somewhat important	Does the State have an impaired driving data tracking system that meets the specifications of NHTSA's Model Impaired Driving Records Information System (MIDRIS)?	The State does not have an impaired driving data tracking system.	not met	There is no statewide citation tracking system in Illinois.
very important	Does the citation system have a data dictionary?	The State does not have a statewide citation system. The State does have a citation data dictionary for those jurisdictions authorized to issue electronic citations.	marginally met	There is no statewide citation tracking system in Illinois.
very important	Do the citation data dictionaries indicate the data fields that are populated through interface linkages with other traffic records system components?	The State was unable to provide supporting documentation that would illustrate if the citation data dictionaries show the data fields populated through interface linkages with other traffic records system components.	not met	There is no statewide citation tracking system in Illinois.
very important	Do the courts' case management system data dictionaries provide a definition for each data field?	The State was able to provide a list of Case Management Systems used within the State although they were not able to provide a data dictionary for each system.	not met	There is no statewide citation tracking system in Illinois.
somewhat important	Do the courts' case management system data dictionaries clearly define all data fields?	The State was unable to provide the case management system data dictionaries.	not met	There is no statewide citation tracking system in Illinois.

somewhat important	Do the courts' case management system data dictionaries indicate the data fields populated through interface linkages with other traffic records system components?	The State does not have a standard data dictionary for case management through all of the courts. The State has indicated that several different case management systems are in place but do not demonstrate how any of these may integrate with traffic record components.	not met	There is no statewide citation tracking system in Illinois.
somewhat important	Do the prosecutors' information systems have data dictionaries?	The State was unable to provide any data dictionaries utilized by prosecutors' information systems.	not met	There is no statewide citation tracking system in Illinois.
very important	Can the State track citations from point of issuance to posting on the driver file?	The State does not track citation data over its life cycle. Each agency in the State is responsible for tracking its own citation data.	not met	There is no statewide citation tracking system in Illinois.
somewhat important	Does the State measure compliance with the process outlined in the citation lifecycle flow chart?	The State does not measure compliance with the process outlined in the citation lifecycle flow chart.	not met	There is no statewide citation tracking system in Illinois.
very important	Does the State have a system for tracking administrative driver penalties and sanctions?	The State does not have a system for tracking administrative driver penalties although they can track sanctions and ensure the accuracy of submitted documents.	marginally met	There is no statewide citation tracking system in Illinois.
very important	Does the State have a system for tracking traffic citations for juvenile offenders?	The State does not have specific system/criteria for tracking traffic citations for juvenile offenders.	not met	There is no statewide citation tracking system in Illinois.
somewhat important	Does the State track deferral and dismissal of citations?	The State does not track the deferral or dismissal of citations.	not met	There is no statewide citation tracking system in Illinois.
somewhat important	Are there State and/or local criteria for deferring or dismissing traffic citations and charges?	The State does not have any State or local criteria for deferring or dismissing traffic citations and charges. The decision of whether to defer or dismiss is made at the local court level.	not met	There is no statewide citation tracking system in Illinois.

very important	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?	The State has not linked citation data with the driver system to collect driver information, to carry out administrative actions, or to determine the applicable charges.	not met	
very important	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?	The State has not linked the adjudication data with the driver system to collect certified driver records and administrative actions, to determine the applicable charges, or to post the dispositions to the driver file.	not met	On-going  Data Quality Sun-committee will address this issue.
somewhat important	Is citation data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock)?	The State has not linked citation data with the vehicle file to collect vehicle information and carry out administrative actions.	not met	On-going  Data Quality Sun-committee will address this issue.
somewhat important	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	The State has not linked adjudication data with the vehicle file to collect vehicle information and carry out administrative actions.	not met	On-going  Data Quality Sun-committee will address this issue.

	supervision)?			
somewhat important	Is citation data linked with the crash file to document violations and charges related to the crash?	The State has not linked citation data with the crash file to document violations and charges related to any crashes.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is adjudication data linked with the crash file to document violations and charges related to the crash?	The State has not linked adjudication data with the crash file to document violations and charges related to crashes.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is there a set of established performance measures for the timeliness of the citation systems?	The State has not established timeliness performance measures for the citation systems. However, final dispositions are tracked to ensure they are reported to the Secretary of State within a five day timeline after disposition.	not met	Data Quality Sun-committee will address this issue.
very important	Is there a set of established performance measures for the accuracy of the citation systems?	The State has not established performance measures for the accuracy of the citation systems.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is there a set of established performance measures for the completeness of the citation systems?	The State has not established performance measures for the completeness of the citation systems.	not met	
somewhat important	Is there a set of established performance measures for the uniformity of the citation systems?	The State has not established performance measures for the uniformity of the citation systems.	not met	On-going Data Quality Sun-committee will address this issue.

somewhat important	Is there a set of established performance measures for the integration of the citation systems?	The State has not established performance measures for the integration of the citation systems.	not met	On-going Data Quality Sun-committee will address this issue.
less important	Is there a set of established performance measures for the accessibility of the citation systems?	The State has not established performance measures for the accessibility of the citation systems.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is there a set of established performance measures for the timeliness of the adjudication systems?	The State has not established performance measures for the timeliness of the adjudication systems.	not met	On-going Data Quality Sun-committee will address this issue.
very important	Is there a set of established performance measures for the accuracy of the adjudication systems?	The State has not established performance measures for the accuracy of the adjudication systems.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is there a set of established performance measures for the completeness of the adjudication systems?	The State has not established performance measures for the completeness of the adjudication systems.	not met	On-going Data Quality Sun-committee will address this issue.
somewhat important	Is there a set of established performance measures for the integration of the adjudication systems?	The State has not established performance measures for integration of the adjudication system.	not met	On-going Data Quality Sun-committee will address this issue.
very important	In States that have an agency responsible for issuing unique citation numbers, is information on intermediate dispositions (e.g.,	The State does not have a specific agency that issues citation numbers therefore the information on intermediate dispositions is not captured.	not met	On-going Data Quality Sun-committee will address this issue.

	deferrals, dismissals) captured?			
somewhat important	Do the State's DUI tracking systems have additional quality control procedures to ensure the accuracy and timeliness of the data?	The State has no established quality control measures to ensure accurate and timely DUI data.	not met	On-going Data Quality Sun-committee will address this issue.

### EMS & INJURY SURVEILLANCE

#### Overall Assessments

- 1) Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Assessment Advisory.
- 2) Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Assessment Advisory.

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Marginally Met/Not Met	Status Report
very important	Does the injury surveillance system include EMS data?	The response states that EMS has not been reviewed as part of the ISS.	not met	We would defer to Dan Lee, but he has noted that the online EMS data system includes a "dashboard" of reports for EMS coordinators.
very important	Does the injury surveillance system include hospital discharge data?	The State cites its participation in the State Injury Indicators Report through the CDC's National Center for Injury Prevention and Control. Hospital discharge data is analyzed for unintentional and intentional injuries, including injuries as a result of motor vehicle crashes. However, no sample report or other documentation was provided.	marginally met	Although not restricted to only MVC victims, EMSC prepares a report annually using inpatient data to evaluate effectiveness of EMSC's "facility recognition" program in pediatric cate. It shows a decline in mortality rate for hospitalized injury victims after recognition relative to before. The report is available online at

				<a href="http://ssom.luc.edu/media/stritchschoolofmedicine/emergencymedicine/emsforchildren/documents/facilityrecognition/introductoryfacilityrecognitionmaterials/Measures_effectiveness_pre_post_EDAP.pdf">http://ssom.luc.edu/media/stritchschoolofmedicine/emergencymedicine/emsforchildren/documents/facilityrecognition/introductoryfacilityrecognitionmaterials/Measures_effectiveness_pre_post_EDAP.pdf</a>
very important	Does the injury surveillance system include rehabilitation data?	The Illinois ISS does not include an independent rehabilitation data set; however some related variables may be taken from the trauma registry.	not met	Not at this tome
somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	not met	I have not seen this report, but IDPH reports on leading causes of death include MVC among the causes, available online at <a href="http://www.dph.illinois.gov/data-statistics/vital-statistics/death-statistics/more-statistics">http://www.dph.illinois.gov/data-statistics/vital-statistics/death-statistics/more-statistics</a>
very important	Does the injury surveillance system include other data?	The State also utilizes the Illinois Violent Death Reporting System (IVDRS) which includes several traffic records systems in addition to crime lab reports.	marginally met	Yes it does
very important	Does the vital records data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	The State indicates that the vital records data system tracks all traffic-related deaths and contains information about the cause and manner of death. The rating reflects the lack of evidence to support the response.	marginally met	If the response only concerns lack of reports, I'd use the same reference as q261 above ( <a href="http://www.dph.illinois.gov/data-statistics/vital-statistics/death-statistics/more-statistics">http://www.dph.illinois.gov/data-statistics/vital-statistics/death-statistics/more-statistics</a> )
very important	Is the EMS data available for analysis and used to identify problems, evaluate programs, and allocate resources?	From 2005-2013, prehospital data was shared with IDOT for program planning and evaluation. Those agreements have lapsed and data is not currently being shared or utilized by traffic safety partners to identify problems, evaluate programs, and allocate resources. There are future plans to reconstitute the CODES program with a new analyst, which would include renewing this data use agreement.	not met	Illinois Department of Public Health can provide any report we request. Frequency, std deviation etc...

very important	Is the emergency department data available for analysis and used to identify problems, evaluate programs, and allocate resources?	Emergency department data has been made available to IDOT for traffic program planning and evaluation efforts. The rating reflects the fact that the State did not describe nor attach any of the highway safety project reports for which the ED data was used.	marginally met	This ED question and q270 below (for inpatients) are similar, and we talked about it on our call on 10/4/16. It would be helpful to see an example report from another state that only used ED and/or hospital data, not linked data. Also, one thought was to examine ED and inpatient records by race/ethnicity.
very important	Is the hospital discharge data available for analysis and used to identify problems, evaluate programs, and allocate resources?	Hospital inpatient discharge data has been made available to IDOT for traffic program planning and evaluation efforts. The rating reflects the fact that the State did not describe nor attach any current highway safety project reports for which the hospital discharge data was used.	marginally met	This ED question and q270 below (for inpatients) are similar, and we talked about it on our call on 10/4/16. It would be helpful to see an example report from another state that only used ED and/or hospital data, not linked data. Also, one thought was to examine ED and inpatient records by race/ethnicity.
very important	Is the vital records data available for analysis and used to identify problems, evaluate programs, and allocate resources?	Vital records information is provided to IDOT to confirm traffic fatalities in a database, but it has not been used specifically to plan or evaluate programs. However, the inclusion of IDPH data in the IDOT database illustrates the availability of the data.	marginally met	This is similar to the two questions above it. It might be addressed similarly using mortality data.
somewhat important	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?	Neither the Abbreviated Injury Scale (AIS) nor the Injury Severity Scores (ISS) are derived from the State's emergency department and hospital discharge data for motor vehicle crash patients.	not met	IDPH does not use ICDMAP90 or any other software to generate these scores.

very important	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?	The State maintains formal documentation for the emergency department data. The data dictionary provides a summary dataset—characteristics, values, limitations and exceptions and the State's legislation (rules and regulations) describe the collection, management and maintenance of the data. The Partially Meets rating reflects the lack of narrative or supporting documentation pointing to the specific rules and regulations for the general management of the data.	marginally met	The Illinois Hospital Association (IHA) COMPdata manual may help with this.
very important	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?	The State does not maintain formal documentation about the collection, characteristics, and management of the hospital discharge data. It is unclear if such documentation may be maintained by the Illinois Hospital Association, the entity responsible for the collection of hospital discharge data.	not met	The IHA COMPdata manual may help with this.
very important	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?	The State indicated that the collection, characteristics, and management of the trauma registry data are contained within its data dictionary. The data dictionary nor any additional documentation was provided in response to this question. A URL was provided but is not acceptable as evidence.	not met	The Illinois Trauma Registry (ITR) online system may have many specs available for the user to view during data entry, but we have not seen a freestanding document like the IHA data coordinator manual. If IDOT grant funding is sought to upgrade the ITR, perhaps the RFP specs could require complete documentation (data dictionary, "summary dataset", data-flow diagram, built-in performance measure reports, etc.)

very important	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?	The State conforms to the NCHS data layout, but does not maintain comprehensive documentation related to rules and processes for collecting, managing, and maintaining (including sharing/release policies) of the death records data system independent of its use in traffic safety.	not met	Over the past year we have been working to obtain mortality data. First we corresponded with Mohammed Shahidullah, state demographer, and then he directed us to Bill Dart (Bill.Dart@illinois.gov) and John Tharp (John.Tharp@illinois.gov). It took a while, but we got what we needed. Maybe Bill and John could be helpful about documentation in this area.
very important	Is there a process flow diagram that outlines the trauma registry's key data process flows, including inputs from other systems?	Data from other systems, to include all cases that meet trauma criteria, are submitted to the web-based Illinois Trauma Registry electronically. Documentation of these processes is not available.	marginally met	Relates to above question.
very important	Is there an interface among the EMS data and emergency department and hospital discharge data?	There is no interface between the EMS and hospital (emergency department or hospital discharge) data systems.	not met	Need commitment from Emergency Department and Hospital discharge
very important	Is there an interface between the EMS data and the trauma registry data?	There is no interface between the EMS and trauma registry data systems.	not met	Not at this time
somewhat important	Is there an interface between the vital statistics and hospital discharge data?	There is no interface between the vital statistics system and the hospital discharge system.	not met	Not at this time

somewhat important	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?	There is no State-level correction authority for EMS records, all corrections must be made by the submitting agency. Limited State-level correction authority may be helpful to reduce the time necessary to finalize a dataset if it is an obvious or inferred error that wouldn't require agency correction (i.e. incorrect gender - pregnant male).	not met	Data Quality Sun-committee will address this issue.
very important	Are there timeliness performance measures tailored to the needs of EMS system managers and data users?	Mandated guidelines are not performance measures. Performance measures include a baseline and goal over a period of time (i.e. to increase the % of records received within 30 days of the close of the quarter from 90% in 2016 to 95% in 2020).	not met	Data Quality Sun-committee will address this issue.
very important	Are there accuracy performance measures tailored to the needs of EMS system managers and data users?	Edit and validation checks are not performance measures. Performance measures include a baseline and goal over a period of time (i.e. to increase the % of records with the correct date of birth from 90% in 2016 to 95% in 2020). Such variables may satisfy the automated checks but still be inaccurate.	not met	Data Quality Sun-committee will address this issue.
very important	Are there completeness performance measures tailored to the needs of EMS system managers and data users?	Frequency reporting is not a performance measure. Performance measures include a baseline and goal over a period of time (i.e. to increase the % of records with a non-missing value in the eight important data element fields from 90% in 2016 to 95% in 2020).	not met	Data Quality Sun-committee will address this issue.
very important	Are there uniformity performance measures tailored to the needs of EMS system managers and data users?	System infrastructure compliance with NEMSIS is not a performance measure, uniformity also applies to all records within the system and if the providers are uniform in their interpretation and understanding of the elements (please refer to the Advisory for more information). Performance measures include a baseline and goal over a period of time. Also, webpage addresses are not acceptable documentation.	not met	Data Quality Sun-committee will address this issue.

very important	Are there integration performance measures tailored to the needs of EMS system managers and data users?	There are no integration measures in place for the EMS data.	not met	Data Quality Sun-committee will address this issue.
very important	Are there accessibility performance measures tailored to the needs of EMS system managers and data users?	Existence of a website is not a performance measure. Performance measures include a baseline and goal over a period of time (i.e. to increase the # of EMS agencies accessing data analysis tools from 28 in 2016 to 65 in 2020). The State indicates that it is working to develop performance measures as described in the Advisory.	not met	Data Quality Sun-committee will address this issue.
very important	Is there performance reporting for the EMS system that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	There is performance reporting for the EMS system that provides specific accuracy and completeness feedback to each submitting entity. The Partially Meets rating reflects the lack of timeliness reporting. Timeliness can measure the time from when the custodial agency receives the data to the point when the data is available for analysis. Timely data is important as data-driven decisions are made in highway safety.	marginally met	Data Quality Sun-committee will address this issue.
very important	Are high frequency errors used to update EMS system training content, data collection manuals, and validation rules?	There is no formal or documented process, but feedback from field personnel is incorporated in training manual and edit check revisions.	marginally met	Data Quality Sun-committee will address this issue.
somewhat important	Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the EMS system?	There is no formal, regular quality control review process for the EMS data system. Errors identified during other analytical efforts are taken under advisement.	not met	Data Quality Sun-committee will address this issue.

somewhat important	Is data quality feedback from key users regularly communicated to EMS data collectors and data managers?	There is a process for receiving data quality feedback from key users. If a data user were to find a data issue, that person would report the issue directly to the EMS program administrator, but it is not clear how the issue is communicated to EMS data collectors and managers or whether such feedback has influenced a system change.	marginally met	Data Quality Sun-committee will address this issue.
somewhat important	Are EMS data quality management reports produced regularly and made available to the State TRCC?	EMS data quality management reports are available to the State TRCC upon request. The reports address the completeness of eight data elements ("real values" versus missing or "NOT" valued). The Partially Meets rating reflects the limited information available in the reports (e.g., does not address accuracy, no focus on records with injury due to motor vehicle crash) and that the reports are available upon request. As a State that has produced data linkages among crash, EMS, and hospital data, data quality reports would help identify the quality of the data in general, but also the data elements that aid in linkage (person, place, time identifiers). Ideally, reports would be generated and provided to the committee as a standard course of business.	marginally met	Data Quality Sun-committee will address this issue.
somewhat important	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?	There is no limited state-level correction authority granted to quality control staff working with the statewide emergency department and hospital discharge databases.	not met	Data Quality Sun-committee will address this issue.

very important	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?	COMPdata maintains a proprietary data user manual for use by submitting facilities. Records are validated upon submission; rejected records generate an edit error report containing record key values, the data value in error and reason for the error. Each facility is expected to make necessary corrections and resubmit the record prior to quarter closing. There are no formally documented procedures for tracking records to correction and resubmission.	marginally met	Data Quality Sun-committee will address this issue.
very important	Are there timeliness performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	The State does not employ timeliness performance measures. There is a requirement that the data be submitted within 65 days of the close of the quarter; this does not constitute a performance measure. Performance measures include a baseline and goal over a period of time.	not met	Data Quality Sun-committee will address this issue.
very important	Are there accuracy performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	The State does not employ accuracy performance measures for the emergency department and hospital discharge data. Rather, it relies on the individual facilities to evaluate the content of the data.	not met	EMSC conducted an ad hoc report of accuracy for critical data elements in 2015, but it was not an ongoing performance measure.
very important	Are there completeness performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	There are no completeness performance measures. Performance measures include a baseline and goal over a period of time.	not met	EMSC conducted an ad hoc report of completeness for critical data elements in 2015, but it was not an ongoing performance measure.

very important	Are there uniformity performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	The State does not employ uniformity performance measures for the emergency department and hospital discharge data.	not met	Not at this time
very important	Are there integration performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	There are no integration performance measures. Performance measures include a baseline and goal over a period of time.	not met	On-going  Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.
very important	Are there accessibility performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	The State does not employ accessibility performance measures tailored to the needs of emergency department and hospital discharge database managers and data users.	not met	Data Quality Sun-committee will address this issue.
somewhat important	Has the State established numeric goals—performance metrics—for each emergency department and hospital discharge database performance measure?	Without clearly established performance measures, there are no associated metrics.	not met	Data Quality Sun-committee will address this issue.

very important	Is there performance reporting for the emergency department and hospital discharge databases that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	Data quality summaries are generated for each facility as data is submitted. However, it is unclear if these reports address specific timeliness, accuracy, and completeness feedback. The requested evidence was not provided.	marginally met	They can provide ad hoc reports
very important	Are high frequency errors used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules?	High frequency errors are not used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules.	not met	Data Quality Sun-committee will address this issue.
somewhat important	Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the emergency department and hospital discharge databases?	Quality control reviews are conducted on critical elements and notices are provided to facilities when necessary. Such an instance may be when any category of data (inpatient, outpatient, etc.) is less than 98% error-free. A sample report was not available for review.	marginally met	The IHA COMPdata manual has example error reports on pp105-106.
less important	Are periodic comparative and trend analyses used to identify unexplained differences in the emergency department and hospital discharge data across years and agencies?	Trend analyses are not conducted to identify unexpected changes between agencies or over time. The State may want to consider developing periodic comparative and trend analyses that can be used for problem identification and unexplained differences in the data across years and submitting hospitals.	not met	They have capability to produce these reports.

somewhat important	Is data quality feedback from key users regularly communicated to emergency department and hospital discharge data collectors and data managers?	Data quality feedback from key users is not communicated back to emergency department and hospital discharge data collectors and data managers.	not met	The IHA COMPdata manual has example error reports on pp105-106.
somewhat important	Are emergency department and hospital discharge data quality management reports produced regularly and made available to the State TRCC?	Data quality management reports for the emergency department and hospital discharge data are not produced regularly and made available to the State TRCC.	not met	IHA prepares quarterly statewide "Data Quality Summary and Verification Reports". However, the reports are not publicly available.
very important	Are there formally documented processes for returning rejected data to the collecting entity and tracking resubmission to the statewide trauma registry?	No process or procedure is required for the rejection, correction, and resubmission of trauma data to the Statewide repository. Trauma data entered into the data collection software must be complete and accurate as it is entered. Information about the holding and correction of records with errors is not provided.	marginally met	Data Quality Sun-committee will address this issue.
very important	Are there timeliness performance measures tailored to the needs of trauma registry managers and data users?	Mandated submission guidelines are not performance measures. Performance measures include a baseline and goal over a period of time (i.e. to increase the % of trauma records received within 10 days of the deadline from xx% in 2016 to xx% in 2020).	not met	Data Quality Sun-committee will address this issue.
very important	Are there accuracy performance measures tailored to the needs of trauma registry managers and data users?	There are no accuracy performance measures. Performance measures include a baseline and goal over a period of time.	not met	EMSC conducted an ad hoc report of accuracy for critical data elements in 2015, but it was not an ongoing performance measure.

very important	Are there completeness performance measures tailored to the needs of trauma registry managers and data users?	The State does not employ completeness performance measures tailored to the needs of trauma registry managers and data users.	not met	EMSC conducted an ad hoc report of completeness for critical data elements in 2015, but it was not an ongoing performance measure.
very important	Are there uniformity performance measures tailored to the needs of trauma registry managers and data users?	There are no uniformity performance measures. Performance measures include a baseline and goal over a period of time.	not met	Data Quality Sun-committee will address this issue.
very important	Are there integration performance measures tailored to the needs of trauma registry managers and data users?	The State does not employ integration performance measures tailored to the needs of trauma registry managers and data users.	not met	Data Quality Sun-committee will address this issue.
very important	Are there accessibility performance measures tailored to the needs of trauma registry managers and data users?	There are no accessibility performance measures. Performance measures include a baseline and goal over a period of time.	not met	Data Quality Sun-committee will address this issue.

somewhat important	Has the State established numeric goals—performance metrics—for each trauma registry performance measure?	The State has not established numeric goals—performance metrics—for each trauma registry performance measure. The State has an opportunity to use the data quality requirements as goals and create a baseline by which to measure the health and progress of the data going forward. The State should consider developing and instituting formal performance measures that can be used to improve data quality, inform validation rules, training content, and other data system documentation. 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 several examples of performance measures not only for the injury surveillance data systems, but all six components that make up a traffic records system.	not met	Data Quality Sun-committee will address this issue.
very important	Is there performance reporting for the trauma registry that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	There is no performance reporting for the trauma registry, but it would seem that the system has the capability of producing such reports.	not met	Data Quality Sun-committee will address this issue.
very important	Are high frequency errors used to update trauma registry training content, data collection manuals, and validation rules?	High frequency errors are not identified or incorporated into training manual or validation check revisions.	not met	Data Quality Sun-committee will address this issue.

somewhat important	Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the trauma registry?	A comprehensive quality review was conducted by the EMSC in 2015 to review and update completeness and accuracy metrics, but this is not a regularly created report. The State should consider using that study as a starting point to develop and institute a formal quality review process that can be used to improve data quality, inform validation rules, training content, and other data system documentation.	marginally met	Data Quality Sun-committee will address this issue.
less important	Are periodic comparative and trend analyses used to identify unexplained differences in the trauma registry data across years and agencies?	Trend analyses are not regularly conducted to identify data abnormalities across agencies or over time.	not met	Data Quality Sun-committee will address this issue.
somewhat important	Is data quality feedback from key users regularly communicated to trauma registry data collectors and data managers?	Data quality feedback from key users is not communicated to trauma registry data collectors and data managers.	not met	Data Quality Sun-committee will address this issue.
somewhat important	Are trauma registry data quality management reports produced regularly and made available to the State TRCC?	Data quality management reports for the trauma registry data are not produced regularly and made available to the State TRCC. A representative from the trauma registry attends the State TRCC meetings.	not met	Data Quality Sun-committee will address this issue.
very important	Are there timeliness performance measures tailored to the needs of vital records managers and data users?	Several timeliness reports may be run, but there is no formal performance measure. Performance measures include a baseline and goal to be achieved over a stated period of time.	not met	Data Quality Sun-committee will address this issue.

very important	Are there accuracy performance measures tailored to the needs of vital records managers and data users?	This refers to accuracy of records in the State vital records death file as defined in the Advisory. Performance measures include a baseline and goal to be achieved over a stated period of time.	not met	Data Quality Sun-committee will address this issue.
very important	Are there completeness performance measures tailored to the needs of vital records managers and data users?	State law requires that all records be complete, but there is no formal performance measure. Performance measures include a baseline and goal to be achieved over a stated period of time. The existence of a law does not ensure that compliance is 100%, some records may be submitted incomplete initially and require additional information.	not met	Data Quality Sun-committee will address this issue.
very important	Are there uniformity performance measures tailored to the needs of vital records managers and data users?	The State record follows the federal standard, but there is no formal performance measure. Performance measures include a baseline and goal to be achieved over a stated period of time. As standards change, so may compliance. One may also measure uniformity of elements not contained within the federal standard but are utilized in the State.	not met	Data Quality Sun-committee will address this issue.
very important	Are there integration performance measures tailored to the needs of vital records managers and data users?	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 State does not employ integration performance measures for the vital records data.	not met	Data Quality Sun-committee will address this issue.
very important	Are there accessibility performance measures tailored to the needs of vital records managers and data users?	This refers to the accessibility, by the research community or public, of the State vital records death file and there is no formal performance measure.	not met	Data Quality Sun-committee will address this issue.
somewhat important	Has the State established numeric goals—performance metrics—for each vital records performance measure?	The State has not established numeric goals—performance metrics—for each vital records performance measure.	not met	Data Quality Sun-committee will address this issue.

very important	Is there performance reporting for vital records that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	IDPH does run data quality queries and communicates with the submitting agencies about how to correct records within the allowable timeframe. But it does not seem to be a data report that includes metrics for timeliness, accuracy, or completeness. The State does provide feedback by memo or informational bulletin to the vital records entities. An informational bulletin was submitted as supporting documentation.	marginally met	Data Quality Sun-committee will address this issue.
somewhat important	Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the vital records?	There is a new staff member tasked to perform data quality reviews, but there are no current efforts happening while that person is being trained.	not met	Data Quality Sun-committee will address this issue.
less important	Are periodic comparative and trend analyses used to identify unexplained differences in the vital records data across years and agencies?	Comparative and trend analyses are conducted by NCHS and the Illinois Center for Health Statistics. While these agencies are not the data owners, analytical results are shared with the DVR.	marginally met	Data Quality Sun-committee will address this issue.
somewhat important	Are vital records data quality management reports produced regularly and made available to the State TRCC?	Data quality management reports for the vital records death data are not produced regularly and made available to the State TRCC.	not met	Data Quality Sun-committee will address this issue.

## DATA USE & INTEGRATION

### Overall Assessments

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Marginally Met/Not Met	Status Report
somewhat important	Does the State have a data governance process?	The State does not have a set of documented processes, policies and procedures which document data definitions, content, and management of data sources. The State described its implementation of the CODES data linkage model and provided an example of traffic safety analyses that are enabled by CODES data. However, data governance is a more general management of ALL data assets, including formal processes, policies and procedures that document data definitions and the management of data resources. Data governance also addresses which entities are the custodians of each data resource and the policies and rules governing access to and use of the data resources. The State is encouraged to begin, even if only modestly, to formalize the process of managing the State's traffic records data. For example, the State could identify and document the data linkage mechanisms that are used, the expected level of validation and preparation/cleanup, etc.	not met	<p>On-going</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (see Attachment 2).</p>

very important

Does the State have a formal traffic records system inventory that identifies linkages useful to the State and data access policies?

The State has a set of documents which each describe in detail available data systems; traffic crash records, hospital patient records, citation data, driver data systems, vehicle and title data systems, and roadway data. The State also has a description of a process linking FARS records to trauma registry records and the State provided a narrative description of its CODES linkage methodology. However, the State does not a traffic records inventory that a) addresses ALL the traffic records systems (including crash, roadway, driver, vehicle, citation and adjudication, and injury surveillance), or b) consolidates the linkage information in a single document. The inventory of traffic records systems might also indicate which systems could be usefully be linked, how they might be or are linked, and describe any data access policies that permit or impede linkages for traffic safety analyses. The State is encouraged to consolidate, into a single document that can be shared amongst the various TRCC parties, the available information regarding the "traffic records data sources, system custodians, data elements and attributes, linkage variables, linkages useful to the States, and data access policies."

marginally met

On-going

Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (see Attachment 2).

<p>somewhat important</p>	<p>Does the TRCC promote data integration by aiding in the development of data governance, access, and security policies for integrated data?</p>	<p>In Illinois, the CODES project has been a solid example of data integration - to illustrate both how it can be done, and what benefits it provides - of traffic records in Illinois. The CODES project staff provides regular project updates and presentations to the TRCC to highlight the advantages of data integration and to encourage integration of other traffic records systems. At the joint CODES/TRCC meetings, discussions cover the results of data linkages, policies, and how to access the linked data. A document covering data linkage (CODES 2010) provides technical information regarding the linkage of crash and injury surveillance data. While there is coordination and encouragement on at least an informal basis. The TRCC does not play an active role in the development of data governance, data access, and security policies that might facilitate other record linkages among all the traffic safety-related data systems. Future integration projects (such as linking driver database to vehicle database) are already envisaged, and could benefit from such policies and governance direction. The State is encouraged to expand the scope of these discussions and support documentation to cover the wider question of integration across all six traffic records systems, and to begin developing more formal basic data governance processes and policies.</p>	<p>On-going</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance (<b>see Attachment 2</b>).</p> <p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
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very important	Is driver data integrated with crash data for specific analytical purposes?	At this time, there is no formal data linkage between crash data and driver data. However, it should be noted that crash data analysts do try to verify the driver licenses of the drivers who were involved in crashes by accessing the driver file. Correcting the driver license data in the crash file goes a long way towards better integrating the crash and driver data. The State is encouraged to pursue such integration, as it can help with the work around the financial responsibility provisions, improving the driver information in the crash data, and allow for sophisticated studies between crash and driver data.	not met	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
somewhat important	Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	The State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.	not met	There is no statewide citation database.
very important	Is citation and adjudication data integrated with crash data for specific analytical purposes?	The State does not integrate citation and adjudication records with crash data. Currently citation records are only locally available within each court and law enforcement jurisdiction. The State is encouraged to push for the ability to link crash and citation data as jurisdictions move to electronic citations. For example, with the City of Chicago initiative, it would be ideal to have the citations be geo-located rather than free text. (The time and date field should also be compatible with crash data.) This would go a long way to facilitate the integration between crash and citations in the future.	not met	There is no statewide citation database.

<p>very important</p>	<p>Is injury surveillance data integrated with crash data for specific analytical purposes?</p>	<p>Illinois has linked hospital discharge data to crash reports in the past, using the probabilistic methodology facilitated by the CODES2000 software product. However, it has been a few years since this was done and the methodology was not documented. Nonetheless, the State has used the available integrated data to analyze motorcycle safety issues and consequences. Illinois has linked crash reports to ED records for 2009-2011. The State has linked trauma registry records to hospital discharge records. The State has developed a system to enhance FARS reports with information extracted from trauma registry records, especially BAC measures, but it is not been able to routinely utilize that capability. The State is encouraged to "productize" on a permanent basis what has been done in the past and what is currently done on an ad-hoc basis. The resolution of the State budget issues to fund the linkage could also fund the "productization" effort.</p>	<p>marginally met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
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<p>somewhat important</p>	<p>Are there examples of data integration among crash and two or more of the other component systems?</p>	<p>The objective of this particular question is to identify integration between the Crash and at least two other different systems. An example would be integration between Crash AND Injury Surveillance AND citations. The State has several examples of linking crash data and multiple datasets WITHIN the injury surveillance system (such as Trauma Registry and Hospital inpatient data), but those do not meet the criteria for this particular assessment question, since they are within the Injury surveillance traffic records system. The State is pursuing "triple linkages" that would meet the criteria of integrating "crash and two or more other component systems." Once the vehicle and driver files linked, the State will be able to achieve two triple matches of crash/vehicle/hospital discharge data; and crash/driver/hospital discharge data. These two examples would meet the advisory ideal for this question.</p>	<p>not met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
<p>somewhat important</p>	<p>Is data from traffic records component systems—excluding crash—integrated for specific analytical purposes?</p>	<p>The State performs linkage between Trauma Registry and Hospital Inpatient data in order to augment the hospital discharge data with additional E-codes. The State has also developed a linkage procedure between FARS cases and hospital trauma registry records. However, these linkages do not meet the criteria of this particular assessment question: The former is between two data sets that are both WITHIN the injury surveillance Traffic Records system, and the latter includes FARS, which is part of the Crash records system. An example of a linkage that would meet the criteria would be between injury surveillance and citation/adjudication.</p>	<p>not met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>

<p>somewhat important</p>	<p>Do decision-makers have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?</p>	<p>The State has shown ample evidence of access to qualified personnel via the Research and Evaluation Unit at IDOT, and provided examples of several comprehensive reports (such as Problem ID and others). Also, the State is prepared to provide all reports and aggregate level integrated data to interested parties (highway safety professional as well as state legislators). However, the reports are not currently available online (though the state is working to add the reports to the IDOT web site.) The State is encouraged to a) make both the reports and the aggregate level integrated data available on-line, and b) pursue providing decision-makers with direct access to the underlying (even if redacted) data via appropriate analysis tools that would enable quick analysis around various ideas.</p>	<p>marginally met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>
<p>somewhat important</p>	<p>Does the public have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?</p>	<p>The State provides publications such as Fact Sheets, etc. that include linked data aggregated at a statewide level, and public may request ad-hoc studies or data exports via the web (<a href="http://www.idot.illinois.gov/about-idot/contact-us/index">http://www.idot.illinois.gov/about-idot/contact-us/index</a>). However, the reports are not currently available online (though the State is working to add the reports to the IDOT web site). Nor does the public have access to easy-to-use tools or the underlying data (even at the aggregated level) mainly out of concern for confidentiality. The State is encouraged to a) make both the reports and the aggregate level integrated data available on-line, and b) pursue providing decision-makers with direct access to the underlying (even if redacted) data via appropriate analysis tools that would enable quick analysis around various safety scenarios.</p>	<p>marginally met</p>	<p>On-going</p> <p>Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. WE are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data linkage methodologies.</p>



## **APPENDIX 1**

**A List of Traffic Records Assessment Items Illinois  
Received High Mark (Met the Advisory Standard) Based  
on the Assessment Team's Conclusion and No Further  
Actions Are Required**

## ITRCC & STRATEGIC PLAN

### Overall Assessments

None

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Status Report
Very Important	Does the State have both an executive and a technical TRCC?	The State has both Technical and Executive level TRCCs as well as Data Quality, Engineering Factors, and Planning subcommittees.	No Action is Required
Very Important	Do the executive TRCC members have the power to direct the agencies' resources for their respective areas of responsibility?	The executive committee of the State Comprehensive Highway Safety Plan also serves as the executive committee of the Traffic Records Coordinating Committee. The members serve at the discretion of their department directors and have the authority to authorize agency support to the TRCC.	No Action is Required
Very Important	Does the TRCC include representation from the core data systems at both the executive and technical levels?	The TRCC include representation from the core data systems at both the executive and technical levels. Membership for all committees was provided.	No Action is Required
Somewhat Important	Does the TRCC consult with the appropriate State IT agency or offices when planning and implementing technology projects?	The TRCC consults with the appropriate State IT agency or offices when planning and implementing technology projects. As an example, when IDOT implemented an external online Safety Data Mart, an interactive query tool for users, members, had to get the Bureau of Information Processing (IT department at IDOT) to plan, design, and maintain the system. The Safety Data Mart is an interactive query tool that provides users with the ability to generate their own statistics and maps using a series of drop down menu selections. Data may be queried at the crash, person, and vehicle level.	No Action is Required
Very Important	Is there a formal document authorizing the TRCC?	There is a formal document authorizing the TRCC. The State provided the 2016 Illinois TRA Charter and MOU.	No Action is Required

Very Important	Does the TRCC provide the leadership and coordination necessary to develop, implement, and monitor the TRCC strategic plan?	The Illinois Traffic Records Coordinating Committee has a large and diverse membership, and has two tiers, both executive and working level groups. The TRCC committee provides leadership and coordination required to develop, and implement a strategic plan. (Filename: 2016 Illinois TRA Updated Strategic Plan (New)). However, since February, 2015, Illinois has not had a full time traffic records coordinator to ensure continued and regular coordination and communication among the various components of the traffic records systems.	No Action is Required
Somewhat Important	Does the TRCC influence policy decisions that impact the State's traffic records system?	The TRCC influences policy decisions that impact the State's traffic records system. During the TRCC quarterly meetings, all the TRCC grantees as well as other members of the committee discuss their projects or any other relevant traffic related issues. For example, under a TRCC grant the State funded a project to link FARS data to Trauma Registry data in order to augment missing BAC data items using a deterministic linkage methodology. Reportedly, local or State police agencies do not report BAC levels and do not contact the trauma centers to get the missing data elements. The result of the linked data enables the State to add all the missing BAC values to FARS data. In addition, the results of this project were shared with their training staff who regularly trained the officers on how to complete crash forms accurately. A copy of the linked FARS and Trauma Registry study was provided under (File Name: 2016 Illinois TRA A Summary Report on FARS and Trauma Registry)	No Action is Required
Very Important	Does the TRCC allocate federal traffic records improvement grant funds?	The TRCC allocates federal traffic records improvement grant funds. The current 408 and 405c are used to fund several traffic safety related projects: (File Name: 2016 TRA Traffic Records Projects). During the last project selection period, the Plan focused on the six data quality components (timeliness, accuracy, uniformity, completeness, accessibility, and data integration), identified traffic safety related projects and solicited applications from the State and local agencies.	No Action is Required

Somewhat Important	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?	The State does have meaningful coordination among stakeholders and serve as a forum for the discussion of the State's traffic records programs, challenges, and investments. During quarterly meetings, the committee discusses traffic records issues, challenges and progress that they have made in achieving high quality traffic safety data.	No Action is Required
Very Important	Does the technical TRCC have a designated chair?	The State has been using an employee who has another full time position to act as chair to the TRCC. The position provides leadership for the traffic records committee, develops the traffic records strategic plan, and chairs the TRCC meetings. A position description is in place to support a full time traffic records coordinator, but the position remains vacant because of a hiring freeze.	No Action is Required
Somewhat Important	Does the technical TRCC meet at least quarterly?	The technical TRCC meets quarterly. In addition to the quarterly meetings the technical committee includes subcommittees of data quality, planning, and engineering. These subcommittees meet on an as needed basis.	No Action is Required
Very Important	Does the TRCC oversee quality control and quality improvement programs impacting the core data systems?	The TRCC oversee quality control and quality improvement programs impacting the core data systems. During the quarterly meeting, the committee discusses all the data issues including traffic records related projects that were funded through 408 and 405C. Meeting minutes were provided supporting these discussions as well a subcommittee minutes regarding data quality control issues and details.	No Action is Required

Somewhat Important	Does the TRCC address technical assistance and training needs?	The TRCC addresses technical assistance and training needs. The Technical Chair and acting Coordinator has made several presentations on issues including data quality and performance measures. (File Name: 2016 Illinois TRA Example of Performance Measures). Also as evidence the State provided: Document TRCC discussion of technical assistance and training needs with meeting agendas or minutes. During the quarterly meeting, they have provided several presentations on data quality. During the past 12 months, They have several aspects of data quality issues by providing presentations and sharing several documents with the TRCC members (File Name: 2016 Illinois TRA Example of Data Quality Report). Also, table maps of the injury severities levels, based on crash data against the injuries (MAIS-scores) based on hospital discharge data, have been developed. This table shows the majority of the "An" injuries under the KABCO are mild and moderate injuries under the MAIS scores. This table was generated through linking the Illinois crash data to hospital discharge data, using 2011 crash and hospital data.	No Action is Required
Very Important	Does the TRCC use a variety of federal funds to strategically allocate resources for traffic records improvement projects?	The State allocates the federal traffic records improvement dollars (408/405c) to the projects as well as State and other federal funding such as HSIP and CDIP.	No Action is Required
Very Important	Does the TRCC develop the TRCC strategic plan?	The State's TRCC strategic plan was last revised in August 2014 to reflect the most current State assessment. The State uses a separate update document to track yearly updates, including the projects, status updates, and prioritization. Both the TRCC and the Executive Committee approve the yearly update document.	No Action is Required
Very Important	Does the TRCC strategic plan address existing data and data systems deficiencies and document how these deficiencies are identified?	The TRCC strategic plan includes the deficiencies identified in the last traffic records assessment and the planned mitigating strategies for each of the core performance areas. Each core performance area contains at least one improvement area (i.e. timeliness, accuracy, completeness, integration, uniformity, accessibility).	No Action is Required

Very Important	Does the TRCC strategic plan identify strategies that address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems?	The strategies and projects listed in the plan will all help to improve data quality. All core systems are represented. The revised update now also indicates which area of improvement is targeted by the strategies. The State would be well served to include performance measures associated with them indicating the metric, baseline measurement, goal, and progress over time.	No Action is Required
Very Important	Does the TRCC have a process for prioritizing traffic records improvement projects in the TRCC strategic plan?	The State has a project submission and review process conducted by the technical committee. The technical committee ranks the applications, then votes and approves top ranking applicants. A finalized list of recommended projects is sent to the Governor's Highway Safety Representative (GR) for review and approval.	No Action is Required
Somewhat Important	Does the TRCC have a process for leveraging federal funds and assistance programs in the TRCC strategic plan?	The TRCC leverages the federal traffic records improvement funds to implement the strategic plan. The State acknowledges they could improve upon their process in order to more fully take advantage of funding opportunities.	No Action is Required
Very Important	Does the TRCC have a process for establishing timelines and responsibilities for projects in the TRCC strategic plan?	The State uses a detailed project description and application form that includes responsibilities and timelines as well as quality improvement measures. The form is very well done.	No Action is Required
Very Important	Does the TRCC have a process for integrating State and local data needs and goals into the TRCC strategic plan?	The TRCC conducted a gap analysis by asking all the stakeholders as well as the data users to review the recommended items from the last assessment and add additional items that were not included in the assessment. The results were used in the development of the strategic plan. The TRCC may also want to poll the State and local agencies regarding their needs and goals. For example a law enforcement agency may need computers to enter crash reports and citations electronically or the EMS community may need training developed that could be completed online for improving the quality of ambulance run data.	No Action is Required
Somewhat Important	Does the TRCC consider the use of new technology when developing and managing traffic records projects in the strategic plan?	The TRCC members consider technological solutions in many areas, particularly data collection and data accessibility.	No Action is Required

Somewhat Important	Does the TRCC consider lifecycle costs in implementing improvement projects?	The TRCC considers overall project cost, including lifecycle costs when determining the level of effort. This ranking includes costs as well as work involved but the process to determine the ranking is not clear. The State may want to consider a section that explains what the rankings mean and how they are derived.	No Action is Required
Somewhat Important	Is the strategic plan responsive to the needs of all stakeholders, including local users?	The TRCC developed a draft copy of the strategic plan, then conducted a gap analysis by sending the plan to all stakeholders and data users for review and comment. All the comments and suggested new traffic records items were incorporated into the strategic plan document for further review and approval of technical and executive committees. The TRCC may want to consider polling local users regarding their needs.	No Action is Required
Somewhat Important	Does the strategic plan make provisions for coordination with key federal traffic records data systems?	The Federal Highway Administration (FHWA) Division office, the NHTSA regional office, and Federal Motor Carrier Administration (FMCSA) Division office are involved in the TRCC and data is made available for the federal traffic records data systems.	No Action is Required
Very Important	Does the TRCC have a process for identifying and addressing impediments to coordination with key Federal traffic records data systems?	The TRCC technical committee includes representatives from all three Federal Agencies (NHTSA, FHWA, and FMCSA). A good example of coordinating federal data issues is in reporting crash data to SafetyNet. Since 2011, the State uses an integrated system that allows them to transfer data electronically to the SafetyNet system.	No Action is Required
Very Important	Is the TRCC's strategic plan reviewed and updated annually?	The strategic plan is updated annually using input from technical committee members and grantees. Members provide input, comment, and approval of the annual plan update.	No Action is Required

**CRASH**

**Overall Assessments**

1) Improve the applicable guidelines for the Crash data system to reflect best practices identified in the Traffic Records Assessment Advisory.

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Status Report
Somewhat Important	Is statewide crash data consolidated into one database?	The crash data is consolidated into one system, the Crash Information System. All paper files are scanned into this system; electronic files are submitted into the system as well. FARS and CMV crashes are extracted.	No Action is Required
Very Important	Is the statewide crash system's organizational custodian clearly defined?	The Illinois State Code provides for the responsibility and custodian of the statewide crash system.	No Action is Required
Very Important	Does the State have criteria requiring the submission of fatal crashes to the statewide crash system?	Illinois follows the ANSI Manual for fatal crash criteria. Each of the criteria must be met in order to define the crash as a fatal.	No Action is Required
Very Important	Does the State have criteria requiring the submission of injury crashes to the statewide crash system?	The definitions of injury levels used by the State were provided.	No Action is Required
Very Important	Does the State have criteria requiring the submission of PDO crashes to the statewide crash system?	The State of Illinois includes separate property damage crash reporting thresholds for insured drivers and uninsured drivers. It is not clear if this separate criteria impact crash reporting uniformity.	No Action is Required

Somewhat Important	Does the statewide crash system record crashes occurring in non-traffic way areas (e.g., parking lots, driveways)?	Crashes occurring in non-traffic ways are included in the statewide system. They are not regularly included in statistical reports.	No Action is Required
Very Important	Is data from the crash system used to identify crash risk factors?	Illinois does well to incorporate the data from the crash system in several facets of strategic planning. It is used as part of the development process in the State's Highway Safety Plan and also their Strategic Highway Safety Plan. Motor vehicle crash data as reported in the EMS is also used as a tool to research risk factors.	No Action is Required
Very Important	Is data from the crash system used to guide engineering and construction projects?	The data from the crash system is analyzed by state and local engineering to identify and evaluate potential safety improvements.	No Action is Required
Very Important	Is data from the crash system regularly used to prioritize law enforcement activity?	Crash data is used statewide to determine law enforcement activity in efforts to reduce crashes and is also a key component in determining the location for automated traffic enforcement devices. DDACTS is not quite linked yet, although there is a project underway.	No Action is Required
Very Important	Is data from the crash system used to evaluate safety countermeasure programs?	The crash data in Illinois is used to evaluate many programs across the traffic records community, from roadway to EMS to the Highway Safety Plan itself. The crash data is used as an evaluation tool for many program areas within the Highway Safety Plan to determine progress during the program year.	No Action is Required
Very Important	Is MMUCC a primary source for identifying what crash data elements and attributes the State collects?	MMUCC and ANSI D16 were used to revise the form in 2013 and will be used for periodic updates in the future. The State is currently 76.6% compliant.	No Action is Required
Very Important	Does the data dictionary provide a definition for each data element and define that data element's allowable values?	The data dictionary provides a definition of each of the data elements. Additionally, the elements are noted if tied to FARS. There was also a reference to the law enforcement manual by page for each definition.	No Action is Required

Somewhat Important	Does the data dictionary document the system edit checks and validation rules?	The edit checks and validation rules are not located within the data dictionary. However, the State has developed a detailed xml guide providing the vendors the necessary directions to become certified within the State to provide crash reporting service. Additionally the edit check and validations are provided in this guide and are clear and easy to understand for the user and vendor.	No Action is Required
Very Important	Is the data dictionary up to date and consistent with the field data collection manual, coding manual, crash report, and any training materials?	The crash report was last updated in 2013. The crash report, manual, templates and other supporting documents are consistent with this date. In the case of an amendment during a non-update year, all other documents are reviewed and amended as well.	No Action is Required
Very Important	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?	Edit checks and validation rules are applied at the front end, prior to submission to the State system. All vendors producing systems for electronic submission must be approved by IDOT. XML Guide lists procedures that must be followed.	No Action is Required
Very Important	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?	Illinois has documentation that governs the flow and process of the data as it is entered from the source to submission to the statewide database. The process flow diagram demonstrates how data are extracted and provided to FARS and to SafetyNet.	No Action is Required
Very Important	Are the processes for managing errors and incomplete data documented?	The Safety Portal allows law enforcement agencies to view the common errors found in crash reporting. These errors are given in an overall system level, as well as, by individual agency. In addition, the portal includes instructions on how agencies should submit complete and accurate crash reports.	No Action is Required

Somewhat Important	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?	The retention schedule is sufficient for long term analysis.	No Action is Required
Somewhat Important	Does the crash system interface with the driver system?	LEADS (Law Enforcement Agencies Data System), owned and operated by the Illinois State Police, is utilized by owners of the Crash Information System. Driver, tag and criminal information is pulled from LEADS and entered into the Crash System.	No Action is Required
Somewhat Important	Does the crash system interface with the vehicle system?	LEADS (Law Enforcement Agencies Data System), owned and operated by the Illinois State Police, is utilized by owners of the Crash Information System. Driver, tag and criminal information is pulled from this system and entered into the Crash System.	No Action is Required
Somewhat Important	Does the crash system interface with the roadway system?	Crash records that have a location information receive Roadway identifiers that allow them to be "attached" to Highway Information System. However there are some difficulties with this process. The process has been reported as hard to use due to the amount of data required to provide an accurate location.	No Action is Required
Somewhat Important	Does the crash system interface with the injury surveillance system?	CODES projects use probabilistic linkage between data to build interfaces between systems. Illinois has continued to fund these projects to conduct research projects such as relating FARS data to EMS data.	No Action is Required
Very Important	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?	Edit checks and validations are built into the XML specification. Incorrect data is not allowed to be submitted to the State crash system.	No Action is Required
Somewhat Important	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?	State level staff members have the ability correct errors of omission and incorrect data elements. Methods are in place to document the original officer submitted data and the correction made by quality control staff.	No Action is Required

Very Important	Are there formally documented processes for returning rejected crash reports to the originating officer and tracking resubmission of the report in place?	Illinois has a formal process of rejecting crash reports. Reports submitted electronically are not accepted until all critical edits are passed. For scanned or paper submitted reports, the submitting agency is contacted and a corrected report is requested. Quality control staff is specifically trained to manage the process of requesting corrected crash reports, identifying missing reports, and the need for additional information. Paper crash reports are reviewed for the possible duplicate reports and if duplicated, checked for possible supplemental or additional information.	No Action is Required
Very Important	Are there timeliness performance measures tailored to the needs of data managers and data users?	Performance measures for the crash data from 2013 through 2016 were provided. Each of the five data quality improvement areas have a performance measure and are measured and tracked.	No Action is Required
Very Important	Are there accuracy performance measures tailored to the needs of data managers and data users?	Performance measures for the crash data from 2013 through 2016 were provided. Each of the five data quality improvement areas have a performance measure and are measured and tracked.	No Action is Required
Very Important	Are there completeness performance measures tailored to the needs of data managers and data users?	Performance measures for the crash data from 2013 through 2016 were provided. Each of the five data quality improvement areas have a performance measure and are measured and tracked.	No Action is Required
Very Important	Are there uniformity performance measures tailored to the needs of data managers and data users?	Performance measures for the crash data from 2013 through 2016 were provided. Uniformity was listed as one of the data quality measures.	No Action is Required
Very Important	Are there integration performance measures tailored to the needs of data managers and data users?	The State has performance measures which specify which files are being linked and the number of years of data that are projected to be linked.	No Action is Required
Very Important	Has the state established numeric goals—performance metrics—for each performance measure?	The documentation provided to show the performance measures also shows the projected goals for each data quality program areas, except accessibility.	No Action is Required

Very Important	Is there performance reporting that provides specific timeliness, accuracy, and completeness feedback to each law enforcement agency?	Law enforcement agencies can access their data once its posted in the statewide Safety Portal through an "underreporting dashboard". The State also contacts agencies that are underreporting throughout the year. The Safety Portal's administrative view of the dashboard allows State staff to easily identify which agencies are underreporting.	No Action is Required
Very Important	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?	The Agency has a process in place for identifying frequent errors through its XML system and does make these known to law enforcement agencies through the Safety Portal. Changes to the manual often stem from specific issues with data elements. Typically changes to the manual are usually done according to MMUCC or legislative releases.	No Action is Required
Very Important	Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?	Yearly trend publications are conducted that compare each agency with their 5 year average. Additionally, graphs show the monthly reporting for each agency. This provides the State as well as the agency with under reporting data.	No Action is Required
Somewhat Important	Is data quality feedback from key users regularly communicated to data collectors and data managers?	The Agency can receive feedback through the Collaboration Forum within the Safety Portal. It also can inform users through the same system. Key users are also informed of any issues or discrepancies with their data via Announcements in the Safety Portal. All law enforcement agencies in Illinois have been notified of the Safety Portal and informed as to the features that the System provides.	No Action is Required
Very Important	Are data quality management reports provided to the TRCC for regular review?	Illinois TRCC has a Data Quality Subcommittee which provides updates quarterly. One of their goals is to decrease blanks and unknowns in crash reports. The Goals document also references the Safety Portal's capability of producing error reports. But there is no documentation of regular reporting to or review by the ITRCC of quality management reports.	No Action is Required

## ROADWAY

### Overall Assessments

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Status Report
Very Important	Are all public roadways within the State located using a compatible location referencing system?	The State has a compatible location referencing system for the entire network of public roadways and maintains the geographical coverage for the entirety of the network. The data attributes are contained within a state-maintained database and these are integrated with the geographic coverage. Approximately 11 per cent of the roadways are State maintained.	No Action is Required
Very Important	Are the roadway and traffic data elements located using a compatible location referencing system (e.g., LRS, GIS)?	State maintains the entire network within a database and web-based application which contains both the road elements and the traffic data elements using a compatible location referencing system.	No Action is Required
Very Important	Is there an enterprise roadway information system containing roadway and traffic data elements for all public roads?	The State has an enterprise roadway information system through which the roadway and traffic elements are stored and maintained. This system involves an integrated set of both geographic features and attributes.	No Action is Required
Very Important	Does the State have the ability to identify crash locations using a referencing system compatible with the one(s) used for roadways?	The State has the ability to identify, display, and link the crash locations and data with the roadway information system, both spatially and attribute-based. The State provided an excellent example of the maps that is generated using data integration processes.	No Action is Required

Very Important	Is crash data incorporated into the enterprise roadway information system for safety analysis and management use?	The State crash data and roadway data are integrated both through data attributes (location code) and geographic/spatial proximity (latitude/longitude coordinates). The data integration allows the State to display crash data with roadway data and determine frequencies of crashes per roadway segment, which can then be displayed via maps.	No Action is Required
Somewhat Important	Are all the MIRE Fundamental Data Elements collected for all public roads?	The State enterprise roadway information system contains all the MIRE Fundamental Data Elements (FDEs) for all public roads and the State provided a listing of these and their collection on both State and local networks.	No Action is Required
Somewhat Important	Do all additional collected data elements for any public roads conform to the data elements included in MIRE?	The State roadway information system contains the MIRE Fundamental Data Elements (FDEs) but not all of the MIRE data elements. The additional, non-FDE MIRE elements have primarily been collected for Safety Performance Function (SPF) calibration or for specific analyses. As a consequence, the additional collection is specific to these needs and coverage is incomplete.	No Action is Required
Somewhat Important	Are all the MIRE Fundamental Data Elements for all public roads documented in the enterprise system's data dictionary?	The State's enterprise roadway system data dictionary contains the MIRE Fundamental Data Elements (FDEs) for all public roads.	No Action is Required
Somewhat Important	Are all additional (non-Fundamental Data Element) MIRE data elements for all public roads documented in the data dictionary?	The State enterprise roadway information system manual contains information related to those fields in the database related to additional MIRE data elements collected by the State.	No Action is Required
Very Important	Does roadway data imported from local or municipal sources comply with the data dictionary?	The State maintains the data on all public roadways and does not import data from local or municipal sources; therefore, there is no need to determine if it meets the data dictionary standards.	No Action is Required

Very Important	Is there guidance on how and when to update the data dictionary?	The State roadway data dictionary update process is well-defined per the provided narrative. Changes, both implemented and pending, are reviewed during an annual meeting which includes the impacted parties.	No Action is Required
Very Important	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?	The State procedures for incorporation of new roadway information system elements are explained well within the response narrative with the responsible parties identified. An annual meeting which includes the impacted parties reviews the changes and pending changes to the database.	No Action is Required
Very Important	Are the steps for updating roadway information documented to show the flow of information?	The State has a well-defined process with identification of responsible parties for the updating of roadway information. This process is explained within the response narrative. An annual meeting to review annual changes as well as pending changes involves impacted parties.	No Action is Required
Somewhat Important	Are the steps for archiving and accessing historical roadway inventory documented?	The State has documented steps related to archival storage and availability of the roadway database with annual GIS files available back to 1996. The responsible parties for each step are identified within the response narrative.	No Action is Required
Somewhat Important	Are the procedures that local agencies (e.g., county, MPO, municipality) use to collect, manage, and submit roadway data to the statewide inventory documented?	The State does not rely on local agencies to collect, manage, or submit roadway data but instead collects the data for all public roads; therefore, it is not necessary to create procedures for them.	No Action is Required
Very Important	Are local agency procedures for collecting and managing the roadway data compatible with the State's enterprise roadway inventory?	The State does not rely on local agencies to collect, manage, or submit roadway data but instead collects the data for all public roads; therefore, there is no need to ensure compatibility.	No Action is Required
Very Important	Are there guidelines for collection of data elements as they are described in the State roadway inventory data dictionary?	The State has guidelines within the enterprise roadway information system manual.	No Action is Required

Very Important	Are the location coding methodologies for all State roadway information systems compatible?	The State enterprise roadway information system contains information related to all public roadways and maintains the information within one database; therefore, there is no need for compatibility. The roadway information system is integrated using the related GIS feature.	No Action is Required
Very Important	Are there interface linkages connecting the State's discrete roadway information systems?	The State roadway information system contains the attributes for all public roadways and, thus, no linkages are required.	No Action is Required
Somewhat Important	Are the location coding methodologies for all regional and local roadway systems compatible?	The State roadway information system contains data for all public roads and, thus, only one location coding methodology exists.	No Action is Required
Somewhat Important	Do roadway data systems maintained by regional and local custodians (e.g., MPOs, municipalities) interface with the State enterprise roadway information system?	The State maintains the roadway data for all public roads and, thus, no interface of regional or local data systems with the State system is needed. The data files developed by the State are available via the State website and are thus available to the local and regional agencies as well as the public.	No Action is Required
Very Important	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?	The State roadway information system has edit checks during the data entry process. The procedure was briefly explained and a screen shot was provided showing a drop down box that only allows for those values to be entered into the system.	No Action is Required
Very Important	Are there procedures for sharing quality control information with data collectors through individual and agency-level feedback and training?	The State convenes an annual road inventory meeting which includes central office and district staff. Data quality topics are included.	No Action is Required
Somewhat Important	Is there a set of established performance measures for the timeliness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	The State maintains the data for all public roadways and, thus, there exists no need to track timeliness for data maintained by regional or local custodians.	No Action is Required

Somewhat Important	Is there a set of established performance measures for the accuracy of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	The State maintains the data for all public roadways and, thus, there exists no need to track accuracy for data maintained by regional or local custodians.	No Action is Required
Somewhat Important	Is there a set of established performance measures for the completeness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	The State maintains the data for all public roadways and, thus, there exists no need to track completeness for data maintained by regional or local custodians.	No Action is Required
Somewhat Important	Is there a set of established performance measures for the uniformity of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	The State maintains the data for all public roadways and, thus, there exists no need to track uniformity for data maintained by regional or local custodians.	No Action is Required
Somewhat Important	Is there a set of established performance measures for the accessibility of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	The State maintains the data for all public roadways and, thus, there exists no need to track accessibility for data maintained by regional or local custodians. The State provides an annual roadway file via the internet.	No Action is Required

## VEHICLE

<b>Overall Assessments</b>			
1) Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Assessment Advisory.			
2) Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Assessment Advisory.			
<b>Question rank (very important, somewhat important)</b>	<b>Question from Assessment</b>	<b>Assessor conclusion based on Illinois Responses</b>	<b>Status Report</b>
Somewhat Important	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?	Custodial responsibility of the identification and ownership of vehicles registered in Illinois resides under the Illinois Secretary of State's Office (SOS). The two main systems include the vehicle title ownership data base and the vehicle registration (license plate) database.	No Action is Required
Less Important	Does the State or its agents validate every VIN with a verification software application?	The State uses the industry standard VIN decoding solution provided by RL Polk. This software decodes 17 digit VINs for vehicles manufactured after 1981.	No Action is Required
Somewhat Important	Does the vehicle system provide title information data to the National Motor Vehicle Title Information System (NMVTIS) at least daily?	SOS submits vehicle title and brand information to the NMVTIS on a daily basis Monday through Friday. These submissions are done by batch files through a secure FTP transfer.	No Action is Required
Very Important	Does the vehicle system query the National Motor Vehicle Title Information System (NMVTIS) before issuing new titles?	SOS verifies VINs through batch queries to the NMVTIS before a title record is created. SOS claims the AAMVA is satisfied with SOS VIN verification process.	No Action is Required

Very Important	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?	SOS only recognizes four vehicle brands established by Illinois statute: Junk, Rebuilt, Flood, and Salvage. SOS relies on the AAMVA NMVTIS to verify vehicle brand history. Other AAMVA brand codes are not stored within the Illinois system.	No Action is Required
Very Important	Does the State participate in the Performance and Registration Information Systems Management (PRISM) program?	Illinois participates in PRISM and provided a screen shot of what appears on the computer screens. Illinois can do both online (real-time) and batch file checks.	No Action is Required
Somewhat Important	Does the vehicle system include edit check and data collection guidelines that correspond to the data definitions?	The response indicated that data checks and edits are conducted depending on the transaction being completed. A copy of the online CRT correction process was included as evidence.	No Action is Required
Very Important	Are the collection, reporting, and posting procedures for registration, title, and title brand information formally documented?	The SOS provided the list of recorded title brands and the statutes that define the brands. The conditions by which the brands are applied within the systems was not readily apparent and no further clarification was provided. The Motor Vehicle Services Department use NMVTIS to collect vehicle brand information.	No Action is Required
Very Important	Does the vehicle system flag or identify vehicles reported as stolen to law enforcement authorities?	Vehicle title applications are checked against the Illinois State Police stolen vehicle records through LEADS. If a stolen vehicle is identified, the titling transaction is stopped. Supporting information of the process was provided.	No Action is Required
Very Important	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?	SOS may not process a vehicle title until the Illinois State Police releases any stolen vehicle indicators or flags. A copy of the operation manual section dealing with processing a stolen vehicle was provided.	No Action is Required

Very Important	Are the steps from initial event (titling, registration) to final entry into the statewide vehicle system documented in a process flow diagram?	The response was brief - "yes", but supporting information was provided that describes the title and registration flows.	No Action is Required
Somewhat Important	Does the process flow diagram or narrative include processes for error correction and error handling?	The response was brief - "yes". The four page diagram seems to identify error corrections. The diagram was difficult to follow without more description.	No Action is Required
Very Important	Are VIN, title number, and license plate number the key variables used to retrieve vehicle records?	SOS can use VIN, application document number and registration plate numbers to retrieve vehicle information. A driver's license number may not be used to retrieve vehicle information.	No Action is Required
Very Important	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?	Data verification and checks are typically done automatically as the transaction is processed. Information done through batch files is also checked and verified. Errors are sent to the Vehicle Services Department for Manual correction. Illinois has an edit check definition manual that was provided as evidence.	No Action is Required
Somewhat Important	Is limited state-level correction authority granted to quality control staff working with the statewide vehicle system to amend obvious errors and omissions?	Illinois has the capability at the user level to make limited changes in vehicle records. A link to statute (625 ILCS 5/) of the Illinois Vehicle Code was provided as evidence. Only designated staff may correct or access vehicle information. Staff have authority to correct a limited number of vehicle data elements.	No Action is Required
Somewhat Important	Are independent sample-based audits conducted periodically for vehicle reports and related database contents for that record?	Illinois conducts yearly internal and external audits. External audits are conducted via an independent vendor, thus using their own methodology to ascertain compliance with established procedures, best practices, and Illinois statute. As proof of these audits, the cover page of a 2015 audit was submitted as evidence.	No Action is Required

## DRIVER

### Overall Assessments

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

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Status Report
Very Important	Does custodial responsibility for the driver system—including commercially-licensed drivers—reside in a single location?	The Illinois Secretary of State has custodial responsibility for issuing licenses and maintain driving records. This includes CDL license information and any sanctions and actions taken against a license.	No Action is Required
Very Important	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)?	The Secretary of State uses the AAMVA's Driver License Information System to check the Problem Driver Pointer System (PDPS) and the Commercial Driver License Information System (CDLIS). No sample reports were provided as supporting documentation.	No Action is Required
Somewhat Important	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)?	The Secretary of State only records disposition of citations not the number of citations issued. Over 80% of the dispositions are received electronically. Dispositions are not removed from a driving record until they meet Federal and State purging criteria.	No Action is Required
Somewhat Important	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)?	The provided narrative described the process for revoking or canceling a driver's license. Based on the description most of the process is done manually, but there are review and correction processes in place.	No Action is Required

Somewhat Important	Are there processes and procedures for purging data from the driver system documented?	Actions on a driving record are purged automatically twice per year when the criteria for purging has been met. Actions can also be removed manually after being reviewed by designated and authorized staff. SOS's response identified typical purge timelines for specific dispositions. Actions related to alcohol, driving while suspended or revoked and actions for disqualification are never purged from the record.	No Action is Required
Somewhat Important	In States that have the administrative authority to suspend licenses based on a DUI arrest independent of adjudication, are these processes documented?	DUI Sworn Reports are received by SOS, technicians review the reports for accuracy and completeness. After the review, the action is entered on to the driving record which automatically generates the notice of suspension. Three copies of the notice are issued - one to the driver, one to the court and one is placed in the SOS department's file. DUIs are monitored by SOS and remain on the driving record for life. A driver license is revoked for life when 5 DUI convictions occur.	No Action is Required
Very Important	Are there established processes to detect false identity licensure fraud?	Facial recognition software is used to verify images. Images that are identified with possible problems are reviewed by trained technicians. All supporting identification documents are also reviewed at this time. If fraud is suspected, the license or ID card is cancelled and a report is submitted to law enforcement. Law enforcement completes an investigation to determine identity. The law enforcement report is sent to the Secretary of State Fraud Section for appropriate action.	No Action is Required
Very Important	Does the custodial agency have the capability to grant authorized law enforcement personnel access to information in the driver system?	Illinois Law enforcement has access to driver information through the Law Enforcement Agencies Data System (LEADS). LEADS is administered by the Illinois State Police who manages access to the system.	No Action is Required
Very Important	Does the custodial agency have the capability to grant authorized court personnel access to information in the driver system?	SOS has established a process for court personnel to access driver information through an access agreement. The courts and other agencies seeking access to the driver information sign 2-3 year agreements. The requesting agency must certify their intent of use for the information and the SOS has the right to audit how an approved agency actually uses the data.	No Action is Required

## CITATION ADJUDICATION

<b>Overall Assessments</b>			
1) Improve the applicable guidelines for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.			
2) Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.			
3) Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.			
<b>Question rank (very important, somewhat important)</b>	<b>Question from Assessment</b>	<b>Assessor conclusion based on Illinois Responses</b>	<b>Status Report</b>
Very Important	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?	The State of Illinois provides access to, all law enforcement partners, its statewide criminal history and driver information systems (LEADS). The State's response does not indicate if all agencies choose to participate, it does stipulate that access is allowed after standard access agreements have been submitted.	No Action is Required
Less Important	Do the appropriate components of the citation and adjudication systems adhere to the National Crime Information Center (NCIC) data guidelines?	The State's citation and adjudication systems either meet or are working to meet relevant guidelines. Submitted data dictionaries reflect NCIC code restrictions and formats.	No Action is Required
Very Important	Do the citation data dictionaries clearly define all data fields?	The State's data dictionaries clearly define all required fields.	No Action is Required
Very Important	Are the citation system data dictionaries up to date and consistent with the field data collection manual, training materials, coding manuals, and corresponding reports?	The State's newest data dictionary is dated from 2013. The State has an established process for addressing requests and changes that are needed/required by the respective partners who utilize the systems to ensure the data dictionaries are up to date.	No Action is Required

Very Important	Is the State able to track DUI citations?	The State is able to track DUI citations once they are issued to the offender.	No Action is Required
Very Important	Does the DUI tracking system include BAC and any drug testing results?	The State does report BAC results. The results of the test, up to and including the actual BAC of the operator, are contained within the record.	No Action is Required
Somewhat Important	Does the State distinguish between the administrative handling of court payments in lieu of court appearances (mail-ins) and court appearances?	The State by court rule distinguishes between the administrative handling of court payments in lieu of court appearances (mail-ins) and court appearances.	No Action is Required
Somewhat Important	If the State purges its records, are the timing conditions and procedures documented?	The State has a manual that indicates the proper procedure for purging records and the timing requirements for each type of record.	No Action is Required
Somewhat Important	Are the security protocols governing data access, modification, and release officially documented?	The State has applied not only its own statutory requirements governing the release of driver information, but also applies the federal standard (18 U.S.C. 2721-2725).	No Action is Required

## EMS & INJURY SURVEILLANCE

### Overall Assessments

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

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Status Report
Very Important	Does the injury surveillance system include emergency department (ED) data?	Emergency data is included in the State's injury surveillance system. Illinois participates in the State Injury Indicators Report through the CDC's National Center for Injury Prevention and Control. Emergency department data is analyzed for unintentional and intentional injuries, including injuries as a result of motor vehicle crashes. The State's 2013 submission to the CDC was submitted as evidence.	No Action is Required
Very Important	Does the injury surveillance system include trauma registry data?	Trauma registry data is available upon request from the IDPH (aggregate data from 1994-2012). It has been used for traffic safety planning through internal projects to IDPH and IDOT, including alcohol involvement in trauma patients from traffic crashes and helmet use and injury outcomes among ATV crash victims.	No Action is Required
Very Important	Does the EMS system track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	The EMS system contains elements that identify the nature and severity of injuries; it also contains mechanism of injury indicators used to identify traffic-related injuries.	No Action is Required
Very Important	Does the emergency department data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	The emergency department data contains elements to track the frequency, nature, and severity of injuries from traffic crashes (ICD, Ecode, etc.). Although AIS and ISS are not included in this dataset, other elements are used to develop a severity index.	No Action is Required

Very Important	Does the hospital discharge data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	The hospital discharge data contains elements to track the frequency, nature, and severity of injuries from traffic crashes (ICD, Ecode, etc.). Although AIS and ISS are not included in this dataset, other elements are used to develop a severity index.	No Action is Required
Very Important	Does the trauma registry data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	The trauma registry can track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State. A quarterly report detailing nature of injury, injury severity, and frequency of persons with said injury was provided.	No Action is Required
Very Important	Is the trauma registry data available for analysis and used to identify problems, evaluate programs, and allocate resources?	The State's trauma registry data is available for analysis and to identify problems, evaluate programs, and allocate resources. Submitted reports "Access to Trauma Care in Southern Cook County" demonstrates the use of EMS, hospital discharge, and trauma registry data in evaluating the impact of the closure of trauma services on Cook County. This project demonstrates not only that trauma data is available, but the EMS data and the hospital discharge data are available, for problem identification, program evaluation, and resource allocation.	No Action is Required
Very Important	Does the State have a NEMSIS-compliant statewide database?	The Illinois Department of Public Health's pre-hospital data program first submitted data to the NEMSIS national repository in July of 2011, and has been submitting on a quarterly basis ever since. Adherence to the NEMSIS National EMS Dataset has been 100% for all submissions. A letter documenting Illinois' contributions to the NEMSIS database was submitted as evidence.	No Action is Required
Very Important	Does the State's emergency department and hospital discharge data conform to the most recent uniform billing standard?	The hospital systems comply with UB04 data standards and data dictionaries and state rules are available.	No Action is Required
Very Important	Does the State's trauma registry database adhere to the National Trauma Data Standards?	The State Trauma Registry complies with the National Trauma Data Standards and a mechanism for transmission of records to the national database is in place for centers that wish to do so.	No Action is Required
Very Important	Are Abbreviated Injury Scale (AIS) and Injury Severity Scores (ISS) derived from the State trauma registry for motor vehicle crash patients?	The trauma registry does contain AIS and ISS values for all traumatically injured patients.	No Action is Required

Less Important	Does the State EMS database collect the Glasgow Coma Scale (GCS) data for motor vehicle crash patients?	The Illinois pre-hospital database contains the Glasgow Coma Score (GCS). A distribution of GCS scores for motor vehicle crash patients for 2015 meets the evidence requirement	No Action is Required
Less Important	Does the State trauma registry collect the Glasgow Coma Scale (GCS) data for motor vehicle crash patients?	The Glasgow Coma Score (GCS) for motor vehicle crash patients can be derived from the trauma registry.	No Action is Required
Very Important	Are there State privacy and confidentiality laws that supersede HIPAA?	The intent of this question is to determine if there are any obstacles to data sharing among State agencies with regard to identifiable data or protected health information. Illinois does not have any State laws that are more stringent than HIPAA that would prevent data sharing.	No Action is Required
Very Important	Does the EMS system have a formal data dictionary?	The Illinois pre-hospital database adheres to the NEMSIS national standard for EMS data. This enables Illinois to use the NEMSIS Data Dictionary, in combination with a list of elements comprising the Illinois data set and a set of state-specific error checking rules, as its data dictionary. All three documents (data dictionary, pre-hospital transport data set, and the data consistency rule set) were submitted as evidence.	No Action is Required
Very Important	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?	The State maintains formal documentation - the NEMSIS data dictionary - that provides information on the data characteristics, values, limitations and exceptions, and whether submitted or user created. The NEMSIS data dictionary also specifies how and by whom each data element is collected and how the specific data element is used. Additional documentation, "Summary of self-consistency and validation rules that will be enforced," provides information on edit checks and validation rules for specific data elements.	No Action is Required
Very Important	Does the emergency department dataset have a formal data dictionary?	The State maintains a data dictionary for the emergency department data.	No Action is Required
Very Important	Does the hospital discharge dataset have a formal data dictionary?	The data dictionary is complete with elements and attributes	No Action is Required

Very Important	Does the trauma registry have a formal data dictionary?	There is a data dictionary available for the trauma registry. Note: the attachment was an Outlook 2010 message with the dictionary attached. It might be better to attach the pdf directly if the Outlook message isn't accessible to everyone.	No Action is Required
Very Important	Does the vital records system have a formal data dictionary?	There is a State vital records data dictionary with elements and attributes.	No Action is Required
Very Important	Is there a single entity that collects and compiles data from the local EMS agencies?	The Illinois Department of Public Health is statutorily responsible for the prehospital data system.	No Action is Required
Very Important	Is there a single entity that collects and compiles data on emergency department visits from individual hospitals?	The Illinois Hospital Association is responsible for the emergency department data system.	No Action is Required
Very Important	Is there a single entity that collects and compiles data on hospital discharges from individual hospitals?	The Illinois Hospital Association is responsible for the hospital inpatient data system.	No Action is Required
Very Important	Is there a process flow diagram that outlines the EMS system's key data process flows, including inputs from other systems?	A process flow diagram was provided that includes data submission through vendor software; State provided software, and paper reports.	No Action is Required
Very Important	Is there a process flow diagram that outlines the emergency department data's key data process flows, including inputs from other systems?	Data is captured by each hospital, transmitted to the vendor (COMPDATA) within 65 days of the close of the quarter. After validating the data, it is transmitted to the IDPH within 30 days of closing the file.	No Action is Required
Very Important	Is there a process flow diagram that outlines the hospital discharge data's key data process flows, including inputs from other systems?	Each hospital submits data to the vendor (COMPDATA) within 65 days of the end of the quarter. After validating the file, it is transmitted to the IDPH within 30 days of its closing via secure FTP.	No Action is Required

Less Important	Are there separate procedures for paper and electronic filing of EMS patient care reports?	The State maintains separate procedures for paper and electronic filing of EMS patient care reports. The Prehospital Care Report Paper Form Completion Manual details the completion and submission to the State procedures. Additional documentation provided describes the submission of data via the State-supplied prehospital data collection software as well as evidence of validation for EMS providers submitting via third-party software.	No Action is Required
Very Important	Are there procedures for collecting, editing, error-checking, and submitting emergency department and hospital discharge data to the statewide repository?	The IDPH vendor (COMPDATA) maintains documentation related to collection, editing, and submission of clinical data. Those files are accessible via their webpage and include detailed descriptions of error-checking procedures as well.	No Action is Required
Very Important	Does the trauma registry have documented procedures for collecting, editing, error checking, and submitting data?	The State relies on edit checks built into the trauma registry data collection software and records are only accepted/approved in the State file once those checks are satisfied.	No Action is Required
Very Important	Are there procedures for collecting, editing, error-checking, and submitting data to the statewide vital records repository?	The Illinois Department of Public Health, Vital Records maintains the Illinois Vital Records System (IVRS), the statewide repository for deaths occurring in IL. When a death occurs, information regarding the decedent is entered into IVRS by either the funeral home handling the remains or by the coroner/medical examiner in the county where death occurred (if no funeral home has been contacted). The IVRS has edit and error-checking capabilities that require the user to answer mandatory fields and ensure that only valid information is entered into the appropriate fields.	No Action is Required

Very Important	Are there documented procedures for returning data to the reporting EMS agencies for quality assurance and improvement (e.g., correction and resubmission)?	EMS reports submitted through the State-supplied software will not be accepted until all validation checks are satisfied, so no records are rejected from the State. Those agencies using third-party software packages submit records in batches which are subjected to the State validation checks. The State maintains documented procedures for returning rejected data to the reporting EMS agencies for correction and re-submission. The documents provided to support the response include a feedback report for EMS agencies using third party software, explanatory memo for paper submissions, and an example error report for an agency that submits via paper form. Agencies submitting via State-supplied software are subject to the same edit and logic checks that are in place at the State-level repository; only records that are error-free can be saved and submitted to the State. Therefore, no correction or resubmission is necessary with this submission channel.	No Action is Required
Very Important	Are there documented procedures for returning data to the reporting emergency departments for quality assurance and improvement (e.g., correction and resubmission)?	Quality reports are generated and sent to each hospital submitting emergency department data. The error-related report includes details about each record that was rejected. An Edit Detail report is maintained throughout the correction process and a record is removed from the report once it is successfully resubmitted.	No Action is Required
Very Important	Are there documented procedures for returning hospital discharge data to the reporting hospitals for quality assurance and improvement (e.g., correction and resubmission)?	Rejected hospital discharge data is returned to the submitting facility along with a detailed error report for each rejected record. The submitting facilities also receive a summary report of the accepted data including frequency counts for each data element; this report enables hospitals to verify the quality of the data. The IDPH does not have formal documentation of this process	No Action is Required
Very Important	Are there documented procedures for returning trauma data to the reporting trauma center for quality assurance and improvement (e.g., correction and resubmission)?	Trauma registry data cannot be accepted into the State repository unless the data meets certain data quality requirements and the values entered are within the defined accepted values for such data field. This system eliminates the need to return rejected trauma data to the reporting trauma centers for correction and resubmission.	No Action is Required

Very Important	Are there documented procedures for returning data to the reporting vital records agency for quality assurance and improvement (e.g., correction and resubmission)?	Different entities may bring to the attention of the IDPH Vital Records staff possible errors in the death data; entities may include families, funeral homes, coroner/medical examiner, IDOT staff). Vital Records staff then follows up with the coroner/medical examiner in the county where the death occurred to confirm or correct the information submitted on the death record. Errors brought to Vital Records attention by family, funeral homes, or coroner/medical examiner must be dealt with in accordance with Vital Records (410 ILCS 535) and Vital Records Administrative Code (77 IL Admin Code, Part 500) that address corrections to the record of death.	No Action is Required
Very Important	Aggregate EMS data is available upon request. The IDPH Data Release and Research Committee have implemented a very comprehensive process for accessing record-level data managed by the IDPH. That process includes an initial data request, IRB approval, committee review, and development of a data use agreement if the request is granted.	Aggregate EMS data is available upon request. The IDPH Data Release and Research Committee have implemented a very comprehensive process for accessing record-level data managed by the IDPH. That process includes an initial data request, IRB approval, committee review, and development of a data use agreement if the request is granted.	No Action is Required
Very Important	Is aggregate emergency department data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?	The IDPH has implemented a very comprehensive process for accessing data managed by the IDPH. That process includes an initial data request, IRB approval, committee review, and development of a data use agreement if the request is granted. This process is clearly outlined on the IDPH webpage.	No Action is Required
Very Important	Is aggregate hospital discharge data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?	The IDPH has implemented a very comprehensive process for accessing data managed by the IDPH. That process includes an initial data request, IRB approval, committee review, and development of a data use agreement if the request is granted. This process is clearly outlined on the IDPH webpage.	No Action is Required

Very Important	Is aggregate trauma registry data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?	Aggregate trauma registry data is available on the IDPH website through a query system.	No Action is Required
Very Important	Is aggregate vital records data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?	Aggregate vital records data is available to outside parties for analytical purposes through the IL Center for Health Statistics; requests are made by email or postal mail. Interested researchers can request data by following the steps on the IL Department of Public Health website, a copy (screen shot) of which was provided as supporting documentation.	No Action is Required
Very Important	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?	The State has developed and documented an extensive set of validation checks through which all EMS records must pass before inclusion in the State file.	No Action is Required
Very Important	Are there formally documented processes for returning rejected EMS patient care reports to the collecting entity and tracking resubmission to the statewide EMS database?	EMS agencies submitting data via third-party software upload files to a secure web-server, from which a utility transfers them to a folder within the main application housed at the State. Records contained in these files are checked for errors; those without errors are stored in the State database while those with one or more errors are rejected. The system automatically emails feedback to the agency for each file submitted, regardless of whether or not there were rejections. If there were one or more rejections then the report lists the affected records along with error descriptions. The State-supplied data collection software contains the same error-checking logic as the main system housed at the State, and only records that are error-free at the end-user level can be saved and submitted to the State repository. Therefore, no correction or resubmission is necessary with this submission channel. Paper submitters receive an error report and explanatory memo with each batch of rejected forms returned to them. The Feedback Report for the electronic submission of EMS data specifically requests that the EMS provider "Please correct and re-upload all rejected patient care records, using (identifying) information to identify which records need correcting, and what corrections are necessary."	No Action is Required

Somewhat Important	Has the State established numeric goals—performance metrics—for each EMS system performance measure?	The State has established goals for each of the performance categories, although some are merely mandated guidelines.	No Action is Required
Less Important	Are periodic comparative and trend analyses used to identify unexplained differences in the EMS data across years and agencies?	Illinois maintains a website for Illinois EMS Systems that enables EMS Systems to review year-to-date and previous year statistics, allowing for comparison, e.g. number of calls YTD compared to the same time period for the previous year. Comparisons can be made across the EMS agency, EMS System-wide, and statewide levels.	No Action is Required
Very Important	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?	The software vendor COMPdata employs 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. Logic checks among related data elements (age, gender, service date, etc.) are conducted as well.	No Action is Required
Very Important	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?	The web-based data collection software incorporates edit checks and validation rules to ensure data falls within acceptable ranges and values.	No Action is Required
Somewhat Important	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?	The IDPH Central Staff do have limited state-level correction authority do have authority to make corrections without returning the report to the originating entity. Each trauma registry user has an assigned Trauma Security Level which defines their level of access to the registry. IDPH staff have a System Administrator Level of Security that allows them to make changes to all types of trauma records.	No Action is Required

Very Important	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?	NCHS-compliant edit checks and validation rules from the CDC are incorporated into the data collection system, IVRS, to ensure all data falls within acceptable ranges.	No Action is Required
Somewhat Important	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?	Limited state-level correction authority is 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, though it does depend on the data field being amended. The Meets rating reflects the fact that there is limited correction authority for the obvious stuff.	No Action is Required
Very Important	Are there formally documented processes for returning rejected data to the collecting entity and tracking resubmission to vital records?	Errors or omissions that are discovered at the time the death is being registered by the State's Local Registrars, can be 'rejected' and the record sent back to either the funeral home or coroner/medical examiner for clarification/completion. The IVRS tracks all rejected records until they are resolved.	No Action is Required
Very Important	Are high frequency errors used to update vital records training content, data collection manuals, and validation rules?	When high frequency errors are noted, the information is used to update vital records training and user manuals. The State requests the IVRS vendor make updates to edits the validation rules to reduce or eliminate high frequency errors.	No Action is Required
Somewhat Important	Is data quality feedback from key users regularly communicated to vital records data collectors and data managers?	The primary user of the vital records data, the NCHS, sends error reports to the State's Department of Public Health. The reports are reviewed to 1) correct data to be resubmitted, 2) determine if additional training is necessary, 3) determine if program changes are required. The Meets rating reflects the thoroughness of the narrative.	No Action is Required

## DATA USE & INTEGRATION

### Overall Assessments

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

Question rank (very important, somewhat important)	Question from Assessment	Assessor conclusion based on Illinois Responses	Status Report
Very Important	Do behavioral program managers have access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation?	The Division of Traffic Safety (DTS) at IDOT has an Evaluation Unit that has highly technical staff who use various traffic safety database which provide analytical resources for both standard and ad-hoc analyses, using a wide variety of data sources. The State creates annual detailed county-specific reports identifying problematic groups with high fatality and A-injury counts. The State also has created a factsheet using linked crash-hospital patient records that displays the medical consequences of crashes involving impaired drivers. Behavioral program managers outside of the Evaluation Unit do have access to linked data aggregated to the city and county level. Linked health care data at the record-level data is not publicly available due to the issue concerning confidentiality.	No Action is Required
Very Important	Is roadway data integrated with crash data for specific analytical purposes?	The State's roadway feature data is available in the Illinois Roadway Information System (IRIS), which is fully integrated with GIS, and is linked with the crash data. The linkage is done via the location, and provides the basis for such analyses as the 5% list, as well as to drive the analyses for the Strategic Highway Safety Plan and other initiatives. The resulting combined data are used to identify contributing factors to crashes, to identify safety considerations, and to develop the State's Strategic Highway Safety Plan, Highway Safety Improvement Program, High Risk Rural Road Program, and Rail Grade Crossing plans. Furthermore, the use of Safety Performance Functions and the adoption of the Highway Safety Manual is quite demanding regarding roadway feature data.	No Action is Required

## **Appendix 2**

### **Reporting Model Inventory of Data Elements (MIRE) Fundamental Data Element (FDE)**

## **Reporting Model Inventory of Data Elements (MIRE) Fundamental Data Element (FDE) Improvements as Part of the Illinois Strategic Traffic Records Strategic Plan**

### **Status Report**

Based on the traffic record assessment conducted in January-June, 2016, the Illinois Department of Transportation (IDOT) maintains data on all roughly 146,000 miles of public roadways. The data go through a quality control process to insure the information is complete, accurate, and up-to-date before being added to Illinois Roadway Inventory System (IRIS). IDOT maintains a data dictionary for all data elements within IRIS including the MIRE Fundamental Data Elements (FDEs). IDOT makes data accessible via an annual GIS file through IDOT website. Looking at the results of assessment, Illinois roadway data exceeded the traffic records advisory criteria. The only major recommendation on the roadway inventory database to improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory. This means that currently Illinois does not have systematic data quality monitoring system in place to conduct monthly or quarterly to ensure all data elements or at least critical data elements are accurate, complete, and collected in a timely fashion. The data quality components include timeliness, accuracy, completeness, uniformity, accessibility, and integration.

According to the 2016 Traffic Records Assessment, Illinois has a complete set of MIRE, FDE data elements (see Table A). Although this table shows that all the required FDEs are available, it is not clear how complete these data elements are. As indicated earlier, Illinois does not have a systematic quality control process in place.

### **Proposed Plan to Improve Roadway Data Quality**

Based on the 2016 Traffic Records Assessment, the assessment team recommended the following:

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

Currently Illinois does not have a systematic data quality control program since we do not have quantifiable performance measures. After a lengthy discussion of data quality control program, we have requested a Roadway Data Improvement Program (RDIP) to help us to identify the quality components of our roadway data. As we know the RDIP process provides roadway database managers and other traffic safety professionals a tool to assist them in identifying, defining, measuring, and ultimately improving, the quality of the data within their roadway databases. The quality of the data can be characterized by the timeliness, accuracy, completeness, consistency, integration, and accessibility of the roadway data

[https://safety.fhwa.dot.gov/rsdp/downloads/rdip\\_final061312.pdf](https://safety.fhwa.dot.gov/rsdp/downloads/rdip_final061312.pdf)

Once we have gone through that program, we should be in a much better position to what develop a comprehensive strategic plan on how to qualify all the required items develop tangible strategies to improve all six components of data quality (timeliness, accuracy, completeness, consistency, integration, and accessibility).

**Table #: Model Inventory Of Roadway Elements (MIRE) Fundamental Data (FDE) Elements In Illinois**

MIRE FDEs	Non Local Paved Roads - Roadway Segment		Non Local Paved Roads - Intersection		Non Local Paved Roads - Interchange/Ramp		Local Paved Roads		Unpaved Roads	
	State Owned	Non State Owned	State Owned	Non State Owned	State Owned	Non State Owned	State Owned	Non State Owned	State Owned	Non State Owned
<b>ROADWAY SEGMENT</b>										
Segment Identifier (12)	Yes	Yes					Yes	Yes	Yes	Yes
Route Number (8)	Yes	Yes								
Route/Street Name (9)	Yes	Yes								
Federal Aid/Route Type (21)	Yes	Yes								
Rural/Urban Designation (20)	Yes	Yes					Yes	Yes		
Surface Type (23)	Yes	Yes					Yes	Yes		
Begin Point Segment Descriptor (10)	Yes	Yes					Yes	Yes	Yes	Yes
End Point Segment Descriptor (11)	Yes	Yes					Yes	Yes	Yes	Yes
Segment Length (13)	Yes	Yes								
Direction of Inventory (18)	Yes	Yes								
Functional Class (19)	Yes	Yes								
Median Type (54)	Yes	Yes								
Access Control (22)	Yes	Yes								
One/Two Way Operations (91)	Yes	Yes								
Number of Through Lanes (31)	Yes	Yes					Yes	Yes		
Average Annual Daily Traffic (79)	Yes	Yes					Yes	Yes		
AADT Year (80)	Yes	Yes								
Type of Governmental Ownership (4)	Yes	Yes					Yes	Yes	Yes	Yes
<b>INTERSECTION</b>										
Unique Junction Identifier (120)			Yes	Yes						

Location Identifier for Road 1 Crossing Point (122)		Yes	Yes		
Location Identifier for Road 2 Crossing Point (123)		Yes	Yes		
Intersection/Junction Geometry (126)		Yes	Yes		
Intersection/Junction Traffic Control (131)		Yes	Yes		
AADT for Each Intersecting Road (79)		Yes	Yes		
Unique Approach Identifier (139)		Yes	Yes		
<b>INTERCHANGE/RAMP</b>					
Unique Interchange Identifier (178)			Yes	Yes	
Location Identifier for Roadway at Beginning of Ramp Terminal (197)			Yes	Yes	
Location Identifier for Roadway at Ending Ramp Terminal (201)			Yes	Yes	
Ramp Length (187)			Yes	Yes	
Roadway Type at Beginning of Ramp Terminal (195)			Yes	Yes	
Roadway Type at End Ramp Terminal (199)			Yes	Yes	
Interchange Type (182)			Yes	Yes	
Ramp AADT (191)			Yes	Yes	
Year of Ramp AADT (192)			Yes	Yes	
Functional Class (19)			Yes	Yes	
Type of Governmental Ownership (4)			Yes	Yes	

## **Attachment 1**

# **Illinois Training & Technical Assistance Application (NHTSA)**

# Training & Technical Assistance Application

State: Illinois

State Point of Contact

Name: Mehdi Nassirpour

Phone: 217-785-8905

Email: Mehdi.Nassirpour@Illinois.gov

Date: 11/28/2016

NHTSA Regional Program Manager

Name: Lyn Warren

Phone: 708-503-8891 ext. 11

Email: lyn.warren@dot.gov

Please select the type of program requested:

- CDIP w/ MMUCC mapping       MMUCC Mapping *only*       Technical Assistance       Training

**RPM Tracking**

Date of receipt: [Click here to enter a date.](#)

Priority? Yes  No

**RPM Recommendation on page two**

**TR Team Tracking**

Date of receipt: [Click here to enter a date.](#)

Priority? Yes  No

Notes: [Click here to enter text.](#)

For technical assistance requests, please provide a narrative addressing the following:

- Describe the specific technical issue the State wishes to address.
- Describe the specific technical assistance the State requires.
- Describe the desired outcome of this technical assistance.
- Provide the details of the State officials that will work with the Go Team on this issue.
- Describe in detail the specific actions the State has already taken to address this issue?
- Describe how a GO Team for this issue supports the State TRCC's Strategic Plan?
- Describe how will this technical assistance improve the performance of the State's traffic records data systems?

For training requests, please provide a narrative addressing the following:

- Describe the specific training needs.
- Describe any previous training or experience related to this subject has the State received.
- Who are the participants that will take this training and what are their backgrounds?
- Does the State have an appropriate training facility available?
- Provide the details of the person from the State that will coordinate the administrative aspects of this training (if different from the above designated State Point of Contact)?
- Describe how this training will support the State TRCCs strategic plan.
- Describe how this training will improve the performance of the State's traffic records data systems.

State Narrative:

*Box will expand with text*

1. Develop functional Executive and Technical Committees

Currently, Illinois has both Executive and Technical Committees representing several different agencies. It is very difficult to motivate some of the members to participate and take responsibilities in conducting traffic records activities. We need technical assistance on how to motivate members and if necessary, try to replace some of the passive members and recruit new members who will be actively

involved in improving traffic records systems. We also would like to request assistance on how to deal with the executive members who are not willing to commit resources and staff time to implement the traffic records assessment team's recommendations.

2. Develop a data governance plan for the linked data that support the detailed needs of highway safety program

We are planning to develop a traffic records strategic plan based on the assessment team's recommendations. Currently, Illinois does not have comprehensive data governance on all traffic safety related databases including the linked databases. We need technical assistance on how to develop specific data governance on our existing databases, mainly crash, roadway, and health care databases.

3. Develop tangible data quality performance measures on all components of data quality (Timeliness, Accuracy, Completeness, Consistency, Accessibility, and Integration) across all data systems (crash, health care, driver, vehicle, citation, and roadway)
4. Develop a strategy on how to collect statewide citation data

Illinois does not have a statewide citation database. The only citation database we have is based on only convicted citation cases that are maintained at the Secretary of State.

## RPM Comments and Recommendation:

### RPM Narrative:

*Box will expand with text*

[Click here to enter text.](#)

## TR Team Review

### TR Team Narrative:

*Box will expand with text*

[Click here to enter text.](#)

## Questionnaire Instructions and Background Information

Please refer to the Highway Safety Terms document (Appendix B) for definitions of data governance terms, highway safety terms and the NHTSA Traffic Records Program Assessment.

In addition to crash information, safety data includes data that safety personnel need in order to analyze crashes, identify contributing factors, propose countermeasures, and then evaluate the effectiveness of the countermeasures. At the very least, roadway, traffic volume and crash data are necessary in an integrated environment. Ideally such an integrated dataset would include assets (signs, bridges, culverts, traffic barriers, etc.), facility-related information (transit stops, sidewalks, bicycle lanes, etc.), and maintenance data (winter maintenance—snowplowing activity, and amounts of sand and chemicals used on the roadway). Another component is real-time data. This includes, but is not limited to, Road Weather Information System (atmospheric, pavement, subsurface, camera images), 511 traveler information, and traffic (travel time, congestion). Additional elements are identified in MIRE.

### Part A. Data Governance

1. Has there been any formal effort in your agency to identify policy, planning, and research needs for improvements to data for safety programs, and integrating safety into project development? If so, please describe. For the purpose of this question, safety programs refer to activities related to network screening or identification of locations or corridors that would most likely benefit from investment, analysis of contributing factors to crashes at the identified locations, identification and evaluation of countermeasures, economic valuation of alternative countermeasures, and evaluation of implemented safety projects.

***Yes, we do have research and planning activities to identify policy, planning, and research needs. From the human Factors perspective, we have conducted problem IDs, analyses, and evaluations of highway safety projects and programs. From the Engineering perspective, we do identify those roadways that have high potential for safety improvement that can have further detailed safety analysis in the project development stage. The state also has developed its own Safety Performance Functions (SPFs) to perform network screening of fatalities and injuries. In addition, the state has calibrated Illinois crash data, developed predictive HSM (Highway Safety Manual) SPFs for all public roads for the roadway types in the HSM (with the exception of freeways and expressway) that can be used to predict crashes for various improvement types, and modified its prediction tool to include these. IDOT has hosted training related to this and participated in peer-to-peer workshops.***

2. Are data governance and data business planning activities discussed as part of your agency's involvement with the Traffic Records Coordinating Committee (TRCC)? Explain representation on the committee and subcommittees; and specific activities supporting the data needs for the DOT safety program.

***Yes we have discussed. The TRCC committee consists of four types of committees:***

- ***Executive***
- ***Steering Committee***
- ***Technical Committee***
  - ***Engineering Subcommittee***
  - ***Data Quality Subcommittee***

***Based on our TRCC strategic Plan, we have focused on identifying 6 components of data quality across traffic safety databases. Specific activities include activities generated based on funded TRCC projects.***

3. Data sources and streams—who in your agency is responsible for collecting and managing:
  - a. Roadway data (basic cross-section information that includes lane widths, shoulder widths, and median width);
  - b. *William Morgan, Programming***
  - c. Crash data from the crash reports for reportable motor vehicle crashes; Improving Safety Data Programs through Data Governance and Data Business Planning Copyright National Academy of Sciences. All rights reserved. 8 TR Circular E-C196: Improving Safety Programs Through Data Governance and Data Business Planning

***Mehdi Nassirpour***

- d. Traffic volume data [including preparation of the estimated traffic volume information for the Highway Performance Monitoring System (HPMS) and managing short term traffic count data];

**William Morgan, Planning & Systems Section for Roadway and Bridge data  
Operations for other asset data sets-- Tim Armbrecht and Kyle Armstrong**

- e. Asset data (bridge, pavement, signage, and other asset datasets);

***Operations—Tim Armbrecht***

- f. Maintenance data; and

***Operations—Tim Armbrecht***

- g. Data related to incidents on major corridors (this may be incident response datasets or data from traffic management centers).

***William Morgan***

4. State safety program and related activities—who in your agency is responsible for
  - a. Safety analysis for the state Strategic Highway Safety Plan (SHSP) development and monitoring;

***Bureau of Safety Programs and Engineering (Paul Lorton)***

- b. Safety analysis for identifying potential locations or corridors for further evaluation or for investment (e.g., network screening);

***Bureau of Safety Programs and Engineering (Paul Lorton)***

- c. Analysis of contributing factors of crashes at given locations or for corridors;

***Bureau of Safety Programs and Engineering (Paul Lorton)***

- d. Identification and evaluation of countermeasures (including performing an economic valuation of alternative countermeasures); and

***Bureau of Safety Programs and Engineering (Paul Lorton)***

- e. Performing predictive analysis as described in the Highway Safety Manual (HSM).

***Bureau of Safety Programs and Engineering (Paul Lorton)***

- 5. General data-related questions—who in your agency is responsible for
  - a. Making decisions about what data to collect in order to support the safety program or integration of safety into project development;

***Office of Planning and Programming (William Morgan and Jessica Keldermans)***

***Bureau of Safety Programs and Engineering (Paul Lorton)***

***TRCC (Mehdi Nassirpour)***

- b. Recommending and championing investments in safety data improvements;

***Office of Planning and Programming (William Morgan and Jessica Keldermans)***

***Bureau of Safety Programs and Engineering (Paul Lorton)***

***TRCC (Mehdi Nassirpour)***

- c. Developing safety data collection requirements or specifications;

***Office of Planning and Programming (William Morgan and Jessica Keldermans)***

***Bureau of Safety Programs and Engineering (Paul Lorton)***

***TRCC (Mehdi Nassirpour)***

- d. Working with individuals or groups that perform safety analysis to understand their data needs and concerns;

***Office of Planning and Programming (William Morgan and Jessica Keldermans)***

***Bureau of Safety Programs and Engineering (Paul Lorton)***

***TRCC (Mehdi Nassirpour)***

- e. Monitoring and improving safety data quality; and

***Office of Planning and Programming (William Morgan and Jessica Keldermans)***

***Bureau of Safety Programs and Engineering (Paul Lorton)***

***TRCC (Mehdi Nassirpour)***

- f. Ensuring and improving integration across different data sources in order to support the safety program, and integration of safety into project development?

***Office of Planning and Programming (William Morgan and Jessica Keldermans)***

***Bureau of Safety Programs and Engineering (Paul Lorton)***

***TRCC (Mehdi Nassirpour)***

- 6. Do you have formally defined roles for data governance in your agency? If so, please describe the roles and an organizational chart.

***We don't have formally defined roles for data governance.***

7. Do you have an agency wide data governance body? If so, can you provide more information (such as handouts) to explain how it works?

***We don't have formal statewide data governance body.***

8. Do you have a data governance body that specifically focuses on data for safety in the DOT? If so, explain how it works.

***We do discuss the data for safety analyses at the TRCC quarterly meetings***

9. Have your safety data workflows been analyzed and mapped? Please provide an example.

Yes it has

10. Have your data business rules been documented to facilitate safety data processing, quality assurance, interpretation, and use and to ensure continuity with staff turnover?

***Somewhat***

11. Have common geospatial and linear reference-based systems (LRS) been established for
- Roadway data (basic cross-section information that includes lane widths, shoulder widths, and median width);

***Yes***

***Traffic data is stored in what is called IRIS (Illinois Roadway Information System) which is a web-based application using Silverlight and SQL server as the backend database to maintain the specific data. IRIS is integrated with the Illinois DOT maintained GIS which contains geographical linework for all public roads. The Illinois DOT maintains data on all roughly 146,000 miles of public roadways. As the information is collected by the Illinois DOT, the data goes through a quality control process to insure the information is complete, accurate, and up-to-date before being added to IRIS. Illinois DOT maintains a data dictionary for all data elements within IRIS including the MIRE Fundamental Data Elements (FDEs).***

- Reportable motor vehicle crashes on all public roads in the state;

***Yes***

***Crash data is integrated with IRIS through the use of linkages based on either location code or coordinates. The Illinois DOT utilizes GIS to determine key route and station for the crash data. The key route and station are accomplished by spatial population and uses the resultant attribution to link the crash data to IRIS which contains the road inventory attributes. The linked data are used for site based and other analyses***

- Traffic volume data;

***Yes***

- Asset data: bridge, pavement, signage, and other asset datasets;

***Yes***

- Maintenance data; and

***Yes***

f. Incidents on major corridors.

**Yes**

12. Do the systems listed in no. 11 integrate with the LRS mandated for HPMS and for ARNOLD (<http://www.fhwa.dot.gov/policy/information/hpms/arnold.cfm>)?

**Items a, c, and d (pavement and bridges) are in the same system that supports HPMS and ARNOLD. The remaining items in d and e are part of a new system being implemented that ties directly to the same LRS system supporting HPMS and ARNOLD. Crash data is currently not directly tied to the LRS system but both systems have a GIS component that will allow them to be intersected with some effort.**

13. Have service level agreements (SLAs) been established for data timeliness, accuracy, completeness, consistency–uniformity, and accessibility been implemented? If so, in what areas?

**Not Yet. We are in a process of developing performance measures for all traffic safety databases**

14. Have the roles, responsibilities, and accountability for data stewards and data owners been codified (e.g., in job positions)? If so, for what areas?

**I am not aware of specific data stewards. The data owners are in the business areas directly tied to the business processes.**

15. What cultural and institutional issues exist that may inhibit implementing a data governance program that would support the safety program, and integration of safety into project development?

There are several issues:

**Ownership of data**

**Commitment**

**Confidentiality**

**Data-sharing agreement**

**Types of data product**

**Accessibility of data**

## **Part B. Data Management**

This section relates specifically to crash and roadway data.

1. Do you have a process and system for archiving location referencing and historical road inventory data? If so, please describe your process, and how you utilize this archived information. Can the archives be used to accurately locate historical crash information? Are there any problem areas?

**The State has a compatible location referencing system for the entire network of public roadways and maintains the geographical coverage for the entirety of the network. The data attributes are contained within a state-maintained database and these are integrated with the geographic coverage. Approximately 11 per cent of the roadways are State maintained.**

**All roadway data is archived annually and available in a GIS shape file accessible from the IDOT internet site. GIS shapefiles go back to 1996 currently on the web site.**

2. Are there established procedures to review and inventory available data, e.g., a data registry?

- a. Have the data sets critical to safety data programs been identified and catalogued?

***Yes we have identified critical data sets to safety data programs***

- b. How are the procedures implemented?

***We have developed data models to produce statistical reports***

- c. Are new data sets evaluated using a structured process or an ad hoc analysis?

**Yes**

3. Are safety-related data collection and management plans, metadata, and standards in place?

**Yes**

- a. Do you maintain a safety data model? **Yes**
- b. Do you maintain safety data dictionaries? **Yes**
- c. Do you maintain standard metadata about your safety-related data sets? **Yes**
- d. Are database business rules established and who establishes them? **Not systematically.**
- e. Who is responsible for keeping safety-related data models, data dictionaries, and metadata updated? **Data Owners and Data Analysts**
- f. Have data migration, integration, and archiving business rules been established?

**Somewhat**

4. Are all reportable crashes (including local) captured in an electronic data system? **Not all of them. The percent electronically reported crashes are about 61% and they are all spatially located.**

Are they all spatially referenced?

***Yes. There are a few that we partially locate, such as alleys and ring roads, that don't have an exact location, but we place them where we can. About 95% of our crashes have a location spotted on a map. There is just a small amount of the crashes that are only partially located.***

5. How are network screening business intelligence tools used to automate current manual practices for safety-related decision making? (Examples: HSM, tools, others?)

***the state has calibrated Illinois crash data, developed predictive HSM (Highway Safety Manual) SPFs for all public roads for the roadway types in the HSM (with the exception of freeways and expressway) that can be used to predict crashes for various improvement types, and modified its prediction tool to include these.***

**Part C. Data Governance: Integration**

1. Have linkages between roadway, crash, injury surveillance, citation, road weather, health records, and other data systems been established? How well are the linkages working? (Examples: production server linkage, manual integration.)

So far here is the list of liked databases:

- ***Crash and Roadway/traffic Volume data: These files are spatially linked using linear Referencing System***
- ***Crash and Hospital Discharge Data (2002-2012): The linkages were based on probabilistic linkages using indirect linkage variables.***

2. How have crash records been integrated with other agency data in support of programs outside of the crash records and analysis function, e.g., transportation asset management (TAM), performance management, project scoping–preconstruction? No

a. What safety data integration efforts have been most successful? ***Crash and Hospital Discharge Data***

- b. What integration initiatives have been less successful and why? ***The probabilistic linkages between crash and hospital discharge and Emergency Department Databases***
3. Does your agency make use of design or as-built plans to update road network geometry–GIS? If so, describe your process, and any benefits it has had for improving crash analysis?
4. What data access and visualization techniques are being used to facilitate the application of safety data for decision making for
  - a. The safety program, and
  - b. Elements in the project development process? Please provide examples.

#### **Safety Portal**

***The IDOT Safety Portal is a new secure website where IDOT can share current and past crash reports as well as crash data with the community of safety partners. The IDOT Safety Portal is also designed to be easily expanded and enhanced in the future.***

#### **Safety data Analyses**

***The data from the crash system is analyzed by state and local engineering to identify and evaluate potential safety improvements.***

#### **Part D. Program Assessment**

1. Have there been efforts [e.g., Roadway Safety Data Program (RSDP), Roadway Data Improvement Program (RDIP), traffic records assessment] to evaluate your safety data management practices, e.g., with a capability maturity model or other type of program self-assessment? What value have these efforts provided? Does your agency also conduct its own internal self-assessment? What specific actions have resulted from these assessments to improve data management?

***In Illinois, NHTSA has conducted Traffic Records Assessment in 2016. We have requested to have Roadway Data Improvement Program (RDIP) within the next three months. The assessment provided a roadmap to develop a strategic plan to improve data quality.***

2. What procedures are in place to identify risks, gaps, and overlaps in data collected, managed and used in the DOT safety programming activities and the project development process?

#### ***Traffic Records Assessment and traffic Records quarterly meetings***

3. Are there processes in place for data users to assess the quality of your safety-related data and communicate this information to data stewards?

#### ***Somewhat***

4. How do you prioritize DOT safety data needs? Do you perform a risk analysis?

***So far, we have prioritized our data needs based on our traffic records assessment that conducted in January – June, 2016.***

## Part E. Closing

1. What would motivate your agency to implement a comprehensive data business planning process for the DOT?

***Availability of Funding***

***Aggressive TRCC Executive, Steering, Technical Committees***

2. What safety-related business process areas would benefit the most?

***Safety Analyses using integrated databases***

3. What questions do you have for your peers regarding improving safety programs through data governance and data business planning?

***How do we develop comprehensive statewide working and functional data governance in Illinois? The statewide data governance should include all traffic safety data, such as crash, roadway, vehicle, driver, citation, and all public health data.***

## **Attachment 2**

### **Illinois Training & Technical Assistance from FHWA Roadway Data Improvement Program (RDIP)**

## **Technical Assistance Solicitation of State and Local Data (Email from FHWA)**

Alan Ho from the Division Office sent an email to Paul regarding the FHWA's technical assistance solicitation of state and local data. The main focus of this technical assistance is to help Illinois develop a business plan to integrate state and local safety data. Examples:

Adequate number of MIRE data elements for the following Road Type

1. MIRE Fundamental Data Elements (FDE) for Non-local Paved Roads
2. MIRE Fundamental Data Elements (FDE) for local Paved Roads
3. MIRE Fundamental Data Elements (FDE) for Unpaved Roads

### **Recommendation**

After a thorough evaluation of our current roadway inventory system, I recommend that we defer the technical assistance from the FHWA to later date after we re-evaluate our current roadway data and identify some the local agencies that are providing limited or roadway data.

The reevaluation will also include a roadway data assessment program that is called "Roadway Data Improvement Program" (RDIP) offered by the FHWA through its contractors. This program is designed to help transportation agencies improve the quality of roadway data to support their safety initiatives. The improvements may be in terms the data collected, data collection process, geospatial data referencing, data storage, data maintenance, and linkages with other safety databases. I have asked FHWA (Stuart Thompson or Bob Pollack) at FHWA to provide information on the RDIP at the next TRCC meeting on January 17, 2017.

There is a resistance from the Office of Planning and Programming (OP&P) not to get any technical assistance from FHWA at this time. They claim that all the local agencies are sending their roadway data to IDOT. It is not necessary to ask for technical assistance at this time.

### **Some other current issues related to roadway and crash data:**

Currently, we don't maintain a direct link between the roadway inventory route layer and crash location (route and station value). According to Jim Colons, beginning with the location of 2016 crashes, IDOT began capturing and storing route and station value for each crash in separate and distinct columns.

For crash years 2011-2013; IDOT recently did some post-processing and generated a route and station value for crashes based on the known coordinates. Not all crashes could be assigned route and station values for various reasons including spatial search tolerances and inconsistent road networks as data sources. For the 2014 crash year, IDOT was able to reach into the roadway inventory system and capture route and station values for crashes. For the 2015 crash year, the plan is to do the same association that was done for the 2014 crashes.

## Questions for FHWA Division Offices

1. **Your contact information:** (*Mehdi Nassirpour, Illinois Department of Transportation, Bureau of Safety Programs and Engineering*)
2. **Which agencies would be involved?** Please list the State, Tribal, and local agencies (target agencies) that would potentially be involved in the effort.
  - **Illinois Department of Transportation**
  - **Local Agencies**
3. **Which data systems / resources will the project improve?**

Location coding for all crashes, mainly crashes those occurring on local roads where the data are missing or inaccurate.

Crash Data and Roadway Data

4. **What do you see as the project's scope?** Please clearly identify what you think the target agencies would do and how much of the overall pool of data will be affected. For example, will this data business plan lead, ultimately, to fully integrated safety data covering all public roads? Will it include roadway, traffic volume, and crash data? What other data sources might also be included?

### **The main scope of this project is to achieve the following objectives:**

Currently local roads don't not have a consistent linear referencing system of mileposts. Many local roadway crash reports referenced approximate street addresses, alias street names, or any other landmarks. Many of the features used to reference a crash location were not mile-posted. Using street addresses on local names of the streets was often inaccurate. Here are the main objectives

1. **To Improved location referencing for crashes on local roads**
2. **To be Consistent mapping and data standards for all local jurisdictions**
3. **To establish data sharing among local, regional, and State agencies**

1. **Are the target agencies actively seeking assistance?** What is their interest level and what do they hope to achieve?
2. **What level of maturity will the effort achieve within the next 2-3 years?** Are the target agencies looking forward to active implementation of a safety data integration plan, and do they have the resources and support to follow-through by implementing the full data business plan?

**3. What type of assistance will the target agencies need?** Please describe the technical expertise and project-level staffing needed from the FHWA contractor. Services offered include crafting formal agreements, interagency coordination, gap analysis, data governance, training needs assessment, overall project planning, as well as specific plans for implementing data collection, integration, and data management and analysis tools.

**The technical expertise of the FHWA contractor should include background on data business plan of roadway inventory system and crash database, GIS, gap analysis and project implementation.**

**Attachment 3**  
**Traffic Records Performance Measures**  
**(Examples)**







# **Responses to NHTSA's Questions on Traffic Records Strategic Plan**

## Responses NHTSA's Traffic Records Questions

### Question/Concern

States applying for a 405c grant are also required to provide “a written description of the performance measures that clearly identifies which performance attribute for which core database the State is relying on to demonstrate progress using the methodology set forth in the [“Model Performance Measures for State Traffic Records Systems”](#). (§ 1300.22(b) (3))

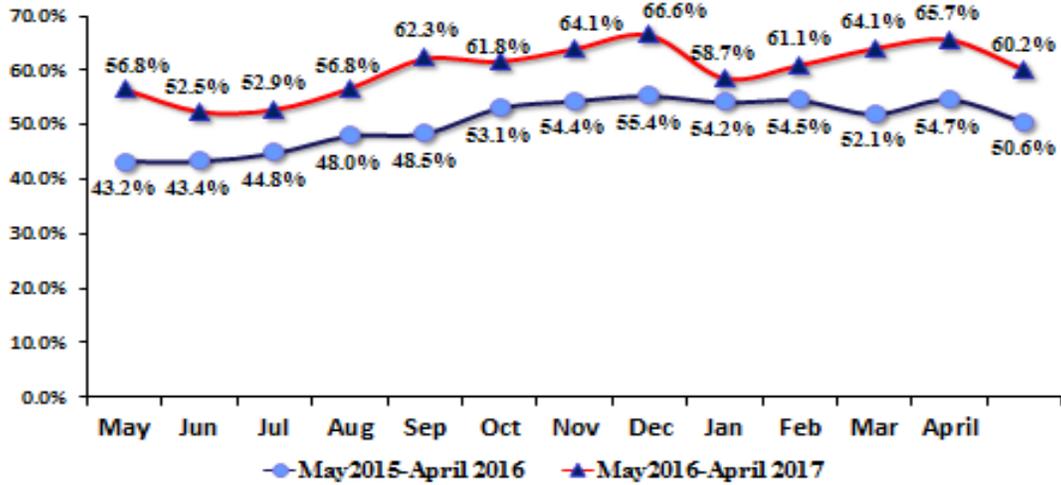
- IL submitted a timeliness improvement from the date of crash occurrence to the date that the Illinois Department of Transportation (IDOT) received crash information. IL provided the percent of electronic crash reports submitted to IDOT within 30 days, by month from May 2015 through April 2016 and for May 2016 to April 2017. However, there was no supporting documentation or values for each month (# reports) to determine if the system increased the percentage of reports within 30 days overall.
  - Please provide supporting documentation covering the contiguous 12-month baseline and performance periods.

### Response

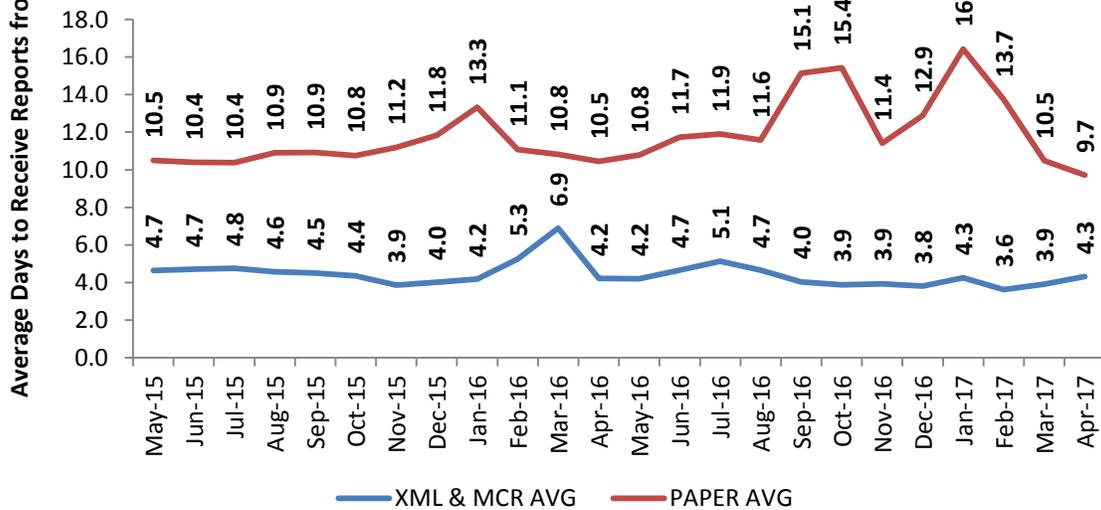
**Table 1** shows frequency and percentage distribution of crashes submitted electronically through XML and paper during the last 24 months of available data (May 2015-April 2017). As shown in this table, the percent electronically submitted crashes have increased significantly during the last 12 months (May 2016-April 2017) as compared to previous 12 months (May 2015 – April 2016). Overall the percent increase was about 9.6 percentage points from 50.6% during the last 12 months as compare to previous 12 months (**Figure 1**).

**Figure 2** provides additional data on number on average number of days it takes to submit Crash Reports by Report Type (XML or PAPER) by Month (May 2015 through April 2017). As expected, the average number of days those crashes submitted electronically are significantly lower than those crashes submitted through papers (**see Table 2**)

**Figure 1: Percent Crash Reports submitted Electronically to IDOT within 30 Days of Crash Occurrence in 2016 and 2017**



**Average Days to Receive Crash Reports by Crash Report Type by Month (May 2015-April 2017)**



**Table 1: Total Number and Percent Electronic Crash Reports Submitted to IDOT Within 30 Days During May 2015 - April 2017**

Month	XML (May 2015 through April 2016)	XML (May 2016 through April 2017)	Paper (May 2015 through April 2016)	Paper (May 2016 through April 2017)	Total Crashes (May 2015 through April 2016)	Total Crashes (May 2016 through April 2017)	% XML Rcvd within 30 days (May 2015 through April 2016)	% XML Rcvd within 30 days (May 2016 through April 2017)	XML Difference from 2015 to 2016	% Paper Rcvd Within 30 Days (May 2015 through April 2016)	% Paper Rcvd Within 30 Days (May 2016 through April 2017)	Paper Difference from 2015 to 2016
May	17,829	23,749	17,089	13,414	41,269	41,835	43.2%	56.8%	13.6%	41.4%	32.1%	-9.3%
June	19,336	23,649	18,349	15,153	44,559	45,008	43.4%	52.5%	9.1%	41.2%	33.7%	-7.5%
July	18,810	20,060	17,690	12,141	41,951	37,892	44.8%	52.9%	8.1%	42.2%	32.0%	-10.2%
August	19,030	29,132	15,594	14,609	39,611	51,293	48.0%	56.8%	8.8%	39.4%	28.5%	-10.9%
September	20,269	26,059	15,414	11,171	41,820	41,849	48.5%	62.3%	13.8%	36.9%	26.7%	-10.2%
October	23,571	27,664	14,086	11,688	44,360	44,796	53.1%	61.8%	8.6%	31.8%	26.1%	-5.7%
November	24,726	28,571	13,954	11,560	45,415	44,580	54.4%	64.1%	9.6%	30.7%	25.9%	-4.8%
December	24,116	30,993	14,075	10,994	43,551	46,566	55.4%	66.6%	11.2%	32.3%	23.6%	-8.7%
January	24,500	24,798	14,594	9,899	45,207	42,262	54.2%	58.7%	4.5%	32.3%	23.4%	-8.9%
February	21,712	21,389	12,630	9,562	39,803	35,015	54.5%	61.1%	6.5%	31.7%	27.3%	-4.4%
March	21,694	25,403	13,754	10,011	41,665	39,605	52.1%	64.1%	12.1%	33.0%	25.3%	-7.7%
April	21,255	24,194	12,646	8,375	38,871	36,803	54.7%	65.7%	11.1%	32.5%	22.8%	-9.7%
May through April	256,848	305,661	179,875	138,577	508,082	507,504	50.6%	60.2%	9.7%	35.4%	27.3%	-8.1%

**Table 1: Total Number and Percent Electronic Crash Reports Submitted to IDOT Within 30 Days During May 2015 - April 2017**

Month	XML (May 2015 through April 2016)	XML (May 2016 through April 2017)	Paper (May 2015 through April 2016)	Paper (May 2016 through April 2017)	Total Crashes (May 2015 through April 2016)	Total Crashes (May 2016 through April 2017)	% XML Rcvd within 30 days (May 2015 through April 2016)	% XML Rcvd within 30 days (May 2016 through April 2017)	XML Difference from 2015 to 2016	% Paper Rcvd Within 30 Days (May 2015 through April 2016)	% Paper Rcvd Within 30 Days (May 2016 through April 2017)	Paper Difference from 2015 to 2016
May	17,829	23,749	17,089	13,414	41,269	41,835	43.2%	56.8%	13.6%	41.4%	32.1%	-9.3%

June	19,336	23,649	18,349	15,153	44,559	45,008	<b>43.4%</b>	<b>52.5%</b>	9.1%	41.2%	33.7%
July	18,810	20,060	17,690	12,141	41,951	37,892	<b>44.8%</b>	<b>52.9%</b>	8.1%	42.2%	32.0%
August	19,030	29,132	15,594	14,609	39,611	51,293	<b>48.0%</b>	<b>56.8%</b>	8.8%	39.4%	28.5%
September	20,269	26,059	15,414	11,171	41,820	41,849	<b>48.5%</b>	<b>62.3%</b>	13.8%	36.9%	26.7%
October	23,571	27,664	14,086	11,688	44,360	44,796	<b>53.1%</b>	<b>61.8%</b>	8.6%	31.8%	26.1%
November	24,726	28,571	13,954	11,560	45,415	44,580	<b>54.4%</b>	<b>64.1%</b>	9.6%	30.7%	25.9%
December	24,116	30,993	14,075	10,994	43,551	46,566	<b>55.4%</b>	<b>66.6%</b>	11.2%	32.3%	23.6%
January	24,500	24,798	14,594	9,899	45,207	42,262	<b>54.2%</b>	<b>58.7%</b>	4.5%	32.3%	23.4%
February	21,712	21,389	12,630	9,562	39,803	35,015	<b>54.5%</b>	<b>61.1%</b>	6.5%	31.7%	27.3%
March	21,694	25,403	13,754	10,011	41,665	39,605	<b>52.1%</b>	<b>64.1%</b>	12.1%	33.0%	25.3%
April	21,255	24,194	12,646	8,375	38,871	36,803	<b>54.7%</b>	<b>65.7%</b>	11.1%	32.5%	22.8%
May through April	256,848	305,661	179,875	138,577	508,082	507,504	<b>50.6%</b>	<b>60.2%</b>	9.7%	35.4%	27.3%

**Table 2: Average Days to Receive Crash Reports by Report Type (XML and PAPER) by Month (May 2015 through April 2017)**

Month-Year	XML Summed Days	XML Freq. Sum	Paper Summed Days	PAPER Freq. Sum	XML AVG	PAPER AVG
May-15	82,861	17,814	179,434	17,089	4.7	10.5
Jun-15	87,648	18,612	183,897	17,671	4.7	10.4
Jul-15	86,034	18,047	171,578	16,524	4.8	10.4
Aug-15	82,845	18,100	145,672	13,363	4.6	10.9
Sep-15	88,239	19,559	165,705	15,174	4.5	10.9
Oct-15	100,075	22,951	151,504	14,086	4.4	10.8
Nov-15	91,262	23,577	144,144	12,877	3.9	11.2
Dec-15	93,398	23,208	166,148	14,044	4.0	11.8
Jan-16	101,360	24,235	194,518	14,594	4.2	13.3
Feb-16	109,932	20,908	134,411	12,134	5.3	11.1
Mar-16	143,966	20,890	143,706	13,281	6.9	10.8
Apr-16	87,577	20,755	132,211	12,646	4.2	10.5
May-16	95,744	22,794	137,026	12,699	4.2	10.8
Jun-16	103,366	22,171	173,017	14,739	4.7	11.7
Jul-16	103,180	20,060	144,623	12,141	5.1	11.9
Aug-16	135,672	29,132	169,142	14,609	4.7	11.6
Sep-16	101,397	25,078	97,608	6,450	4.0	15.1
Oct-16	102,820	26,424	34,960	2,267	3.9	15.4
Nov-16	108,375	27,509	21,097	1,847	3.9	11.4
Dec-16	118,025	30,993	20,356	1,579	3.8	12.9
Jan-17	102,082	24,004	16,861	1,027	4.3	16.4
Feb-17	74,690	20,565	10,696	778	3.6	13.7
Mar-17	96,358	24,596	9,482	905	3.9	10.5
Apr-17	104,558	24,174	9,057	932	4.3	9.7

## Question/Concern

States applying for a 405c grant are required to include a list of all *recommendations* from its most recent traffic records assessment, identify which *recommendations* the State intends to address, the *recommendations* the State does not intend to address and explain reasons for not implementing the *recommendations* for the fiscal year of the application. (§ 1300.22(b) (2))

- IL provided a past-tense status report on all the "partial" and "does not meet" assessment questions that did not meet the ideal from their assessment rather than the 15 higher-level recommendations from its June 2016 traffic records assessment.
  - Please provide the higher-level recommendations and information on whether IL plans to address those recommendations, with projects in their HSP (or Traffic Records Strategic plan) in FY 2018, or why the recommendations won't be implemented in FY 2018.

## Response

The following Tables, list higher-level recommendations and develop action plans to address recommended items. These tables include the following information:

1. Overall Recommendations
2. Proposed Action Plan
3. Traffic Records Project
4. Funding Source
5. Expected Completion Date



**Overall Traffic Records Management**

Recommendation	Proposed Action Plan	HSP Project Title	Funding Source	Completion Date
<p>Identify core system performance measures and monitor progress.</p>	<p>Enhance the role of the TRCC Data quality sub-committee to identify core systems and develop performance measures for all the systems except, the citation database. Currently Illinois does not have statewide citation database. The Bureau of the Safety Programs and Engineering (BSPE) staff has the expertise to implement measures to monitor progress over time. The data quality sub-committee will be in charge of developing performance measures among major data systems, such as crash, roadway, vehicle, driver, trauma registry, EMS, and hospital discharge data.</p> <p>IDOT plans to hire fulltime Traffic Records Coordinator to provide leadership for the traffic records committee, develops the traffic records strategic plan, and chair the TRCC meetings.</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on developing a statewide Data Governance.</p>	<p><b>IDOT will hire a fulltime Traffic Records Coordinator Position at IDOT</b></p>	<p>Road Fund and 408/ 405C Funds</p>	<p>December 2017</p> <p>December 2017</p>
<p>Develop a data Governance in Illinois to promote data integration</p>	<p>Plan to develop Data Governance for all the core data systems including formal processes, policies and procedures that document data definitions and the management of data resources. Data governance will addresses custodians of each data resource and the policies and rules governing access to and use of the data resources.</p>	<p><b>Data Governance Framework--</b> IDOT has vast amounts of high quality and high value data originating from the agency's various data subject areas and spanning the complete transportation project/asset life cycle.</p>	<p>The 405C fund</p>	<p>December 2018</p>

**CRASH**

<b>Recommendation</b>	<b>Proposed action</b>	<b>HSP Project Title</b>	<b>Funding Source</b>	<b>Completion Date</b>
<p>Improve the applicable guidelines for the Crash data system to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Increase the number of agencies submitting electronically. Based on the report provided by the state, there are currently 211 agencies submitting crashes electronically at 100%. Many other agencies are nearing that mark.</p>	<p><b>Electronic Crash Reporting System (Chicago DOT/Chicago Police Department) (Current Project).</b></p>	<p>Road Fund 408/205 (c )Funds</p>	<p>By the end of December, 2017. All the crashes in the city of Chicago will be submitted through XML.</p>
<p>Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.</p>	<p>Develop data quality metrics to generate error reports for all crash types and submit to the responsible agencies.</p> <p>Plan to integrate crash and vehicle/driver files. Currently the TRCC has provided funding for the Illinois Secretary of State to develop data warehouse and integrate the vehicle and drive databases. Once the driver and vehicle are linked, IDOT will link the crash data to linked vehicle/driver files.</p> <p>IDOT is planning to update the Crash Safety Portal web-based system. The site has the ability to monitor the number of registered users based on roles, such as law enforcement, engineers, federal partners, etc. The updated website also provides the user the ability to request data via email. Either counting requests or the number of "hits" on the portal would provide an excellent opportunity to complete the accessibility measure.</p>	<p><b>Illinois Traffic Records Coordinator Position at IDOT</b></p> <p><b>Establishing a Data Warehouse at the Illinois Secretary of State (Current Project)</b></p> <p><b>Development of Second phase of the Safety Portal for linked Crash/Road Data (Current project)</b></p>	<p>Road Fund 408/205 (c )Funds</p> <p>Road Fund 408/205 (c )Funds</p>	<p>December 2018</p> <p>December 2018</p> <p>December 2017</p>

	<p>IDOT plans to hire fulltime Data Scientist to work with large administrative databases and prepare them to be linked through deterministic or probabilistic methods. Plan to link the crash data to Trauma Registry and Hospital Discharge and EMS database (NEMESIS)</p>	<p><b>Data Scientist Position at IDOT</b></p>	<p>408/405c Fund</p>	
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Recommendation	Proposed action	HSP Project Title	Funding Source	Completion Date
<p>Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Implement monthly or quarterly data quality reports focusing on 36 critical MIRE data elements</p> <p>Develop performance measures for all six components of data quality, such as Timeliness, Accuracy, Completeness, Consistency (MIRE, FDE), Accessibility, and Integration. The data quality sub-committee will lead this effort.</p> <p>Establish and begin the implementation of a data governance framework. IDOT has vast amounts of high quality and high value data originating from the agency’s various data subject areas and spanning the complete transportation project/asset life cycle</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance.</p>	<p><b>Safety Analysis and Vehicle Probe</b>-- The University of Maryland – CATT Lab has a portfolio of tools within a web hosted Environment for a Real-Time Data, Situational Awareness, &amp; Analytical Platform.</p> <p><b>Data Governance Framework at IDOT</b>-- Planning to provide funding for IDOT to develop a data warehouse in order to integrate all the existing IDOT databases, including crash, roadway, traffic and land use and many other small databases.</p>	<p>Road Fund and 408/405C</p> <p>408/405C</p>	<p>December of 2019</p> <p>December 2018</p> <p>December 2017</p>

**VEHICLE**

<b>Recommendation</b>	<b>Proposed Actions</b>	<b>HSP Project Title</b>	<b>Funding Source</b>	<b>Timeline</b>
<p>Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Develop a data warehouse in order to streamline their vehicle and driver databases. This project will ultimately help the Illinois Secretary of State (SOS) link their vehicle and driver databases. Currently, only around 50% percent of vehicles and driver files are linked.</p>	<p><b>Data Warehouse at SOS</b>--For the last 12 months, IDOT has provided a funding for SOS to develop data warehouse to integrate vehicle and driver data</p>	<p>408/405 C Fund</p>	<p>June 30, 2019</p>
<p>Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Develop performance measures for all six components of data quality. The IDOT data quality sub-committee will be in charge of developing tangible and quantifiable measures for both driver and vehicle databases</p> <p>Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance.</p>		<p>408/405 C Fund</p>	<p>June 30, 2018</p> <p>December 2017</p>

**DRIVER**

<b>Recommendation</b>	<b>Proposed Actions</b>	<b>HSP Project Title</b>	<b>Funding Source</b>	<b>Timeline</b>
Improve the data dictionary for the Driver data system to reflect best practices identified in the Traffic Records Assessment Advisory.	Develop a data warehouse in order to streamline their vehicle and driver databases. This project will ultimately help the Illinois Secretary of State (SOS) link their vehicle and driver databases. Currently, only around 50% percent of vehicles and driver files are linked.	<b>Data Warehouse at SOS</b> --For the last 12 months, IDOT has provided a funding for SOS to develop data warehouse to integrate vehicle and driver data	408/405 C Fund	June 30, 2019
Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Assessment Advisory.	Develop performance measures for all six components of data quality. The IDOT data quality sub-committee will be in charge of developing tangible and quantifiable measures for both driver and vehicle databases  Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance.		408/405 C Fund	June 30, 2018  December 2017

**CITATION/ADJUDICATION**

<b>Recommendation</b>	<b>Proposed Action</b>	<b>HSP Project Title</b>	<b>Funding Source</b>	<b>Timeline</b>
<p>Improve the applicable guidelines for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.</p> <p>Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.</p> <p>Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Identify a single agency that will have authority to collect statewide citation data. Currently, Illinois Secretary of State is collecting only conviction data.</p>	<p>Currently there is not HSP project that addresses this issue. We are planning to conduct a feasibility study of the existing agencies, namely, Illinois Secretary of State (SOS), Illinois Administrative Office of courts (IAOC), and Illinois State Police (ISP) to determine what course of action we need to take to improve the current status of the Citation and Adjudication systems. It should be noted that the State only receives citation dispositions from 92 of the 102 county courts. The State only tracks dispositions that are required to be tracked by statute and there is no mandatory tracking requirement for all disposition types.</p>	<p>Road Fund/State Fund</p>	<p>On-going</p>

## EMS & INJURY SURVEILLANCE

Recommendation	Proposed Actions	HSP Project Title	Funding Source	Timeline
<p>Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Assessment Advisory</p>	<p>Establish and maintain infrastructure to lead, coordinate, monitor and evaluate the implementation of the State Strategic Plan to prevent injury, violence, and suicide.</p>	<p><b>Trauma Registry</b>—Provide funding to develop a new, functional and updated Illinois Trauma Registry that also includes a subset of Head and Spinal Cord and Violent Injury Registry. This new registry will expand the current data reporting from 71 trauma centers to all general hospitals and trauma hospitals within Illinois (approximately 185 hospitals), and will address timeliness, accuracy, completeness, accessibility, uniformity and integration of statewide trauma data.</p>	<p>408/405C Fund</p>	<p>December of 2019</p>
	<p>Develop and maintain financial, material, and human resources for prevention, intervention, and surveillance to ensure the long-term sustainability of injury, violence, and suicide related efforts in Illinois.</p>	<p><b>Crash Injury Surveillance--</b> Address recommendations made by the 2016 Traffic Records Assessment for Data Use and Integration, as well as the NHTSA performance measure of Integration by linking Fatal Analysis Reporting System (FARS) records to the Illinois Trauma Registry records in order to augment blood alcohol concentration data available in FARS.</p>	<p>408/405C</p>	<p>December 2018</p>
	<p>Build capacity at the state and local level for evidence-based injury prevention so communities can effectively reduce and prevent injuries, violence, and suicide.</p> <p>IDOT will hire a fulltime Data Scientist to link the crash data to health care databases, mainly trauma registry, EMS, and hospital discharge data).</p>	<p>IDOT will hire a fulltime Data Scientist</p>	<p>405C C Fund</p>	<p>December of 2017</p>

<p>Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Increase the quality, availability, and dissemination of statewide and community specific injury, violence and suicide data for planning, surveillance, and evaluation.</p>		<p>IDPH/State Fund</p>	<p>December of 2018</p>
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## DATA USE & INTEGRATION

Recommendation	Proposed Actions	HSP Project Title	Funding Source	Timeline
<p>Improve the traffic records systems capacity to integrate data to reflect best practices identified in the Traffic Records Assessment Advisory.</p>	<p>Illinois will establish processes, policies and procedures which document data definitions, content, and management of data sources.</p>	<p><b>Data Governance Framework at IDOT</b>-- Planning to provide funding for IDOT to develop a data warehouse in order to integrate all the existing IDOT databases, including crash, roadway, traffic and land use and many other small databases.</p>	<p>408/405C</p>	<p>December 2018</p>
	<p>Illinois has provided funding for the Bureau of Information System to develop data governance at IDOT. Data governance will address which entities are the custodians of each data resource and the policies and rules governing access to and use of the data resources including linked databases.</p>	<p><b>Crash Injury Surveillance</b>-- Address recommendations made by the 2016 Traffic Records Assessment for Data Use and Integration, as well as the NHTSA performance measure of Integration by linking Fatal Analysis Reporting System (FARS) records to the Illinois Trauma Registry records in order to augment blood alcohol concentration data available in FARS.</p>	<p>408/405C</p>	<p>December 2018</p>
	<p>Reestablish and enhance the Crash Outcome Data Evaluation System (CODES) project in Illinois. Note: Due to the budget impasse in 2016, we were unable to conduct additional data linkages since we were unable to keep the CODES analyst. We are in a process of hire a fulltime Data Scientist to perform data linkages using probabilistic deterministic data.</p> <p>IDOT will hire a fulltime Data Scientist to link the crash data to health care databases, mainly trauma registry, EMS, and hospital discharge data).</p>	<p><b>Fulltime Data Scientist Position at</b></p>	<p>408/405C Fund</p>	<p>December 2017</p>

Illinois has requested technical assistance from FHWA (Roadway Data Improvement Program (RDIP) and technical assistance from NHTSA on data Governance

**IDOT**--IDOT will hire a fulltime Data Scientist to link the crash data to health care databases, mainly trauma registry, EMS, and hospital discharge data).

December 2017