|         | Description of Potential Recommendations of Traffic Records Improvement  | Level of Effort<br>to implement<br>(low/Medium/High | 2013 Progress Updates   |
|---------|--|---|---|
| Crash D | ata  |   |   |
| 1       | Formalize the plan to transition current data entry staff to fulfill an expanded data quality improvement role in coordination with the increase in electronic data submissions. Particular tasks that the staff could perform include:  | High  |   |
| 2       | Review and correction of location information and location codes to achieve better accuracy and specificity.   | Medium  | On-hold   |
| 3       | Feedback to law enforcement agencies and officers regarding errors on individual reports.  | Medium  | From the Fatals side, this is being done on<br>a case by case basis through phone or<br>email. Once electronic submission<br>increases, there are plans to generate<br>error reports for all crash types and<br>submit to the responsible agencies. |
| 4       | Compiling error lists to formalize the link between data quality activities and training. (Example: Identify and train for consistent and accurate severity rating).   | High  | See #3  |
| 5       | Review of reports targeted based on triggering events such as a short narrative, sparse diagram, logical inconsistencies, or past problems from that officer or agency.  | Medium  | See #3  |
| 6       | Conducting periodic form-level audits based on a representative sample of reports.   | High  | See #3  |
| 7       | Coordinate with various bureaus in order to locate and define intersection crashes appropriately to<br>ensure proper analysis and recommendations.   | High  | No change   |
| 8       | Continue to maintain and expand the use of the inventory, key route, milepost linear referencing system<br>along with XY coordinate crash location identification for all public roads (this is essential in the 5%<br>analysis and safety analyst, sliding window process.<br>Continue to move towards one linear referencing system. We still have to make the link between crash<br>locations in XY, analyzable IRIS segments, and defining the locations in DTS milepost nomenclature that<br>the districts use. | High  | No change   |
| 9       | Develop communication protocols so that data users know when and how data coding changes have been made.   | Low   | No change   |
| 10      | Reduce the time for provisional crash data release.  | Low   | Staffing levels continue to be the determining factor for accomplishing this task.  |
| 11      | Increased availability and flexibility of data release.  | Low   | No change   |
| 12      | Improve process for access to crash reports for analysts that are free of personal data.   | Low   | No change   |
| 13      | Many districts use GIS for analysis-additional training of crash data analysis in GIS would be helpful to advance users in approaches and tools.   | Low   | BIP continues to conduct GIS classes.   |

|      | Description of Potential Recommendations of Traffic Records<br>Improvement  | Level of Effort<br>to implement<br>(low/Medium/High | 2013 Progress Updates   |
|------|---|---|---|
| Road | lway Data   |   |   |
| 1    | Include directional road inventory information in IRIS for freeway and divided facilities.  | Medium  | The IRIS system and the ISIS system (structures) have<br>been removed from a mainframe system and<br>redeployed to a Silverlight platform. Directional data<br>for AADT, Lanes, Surface type, and CRS is now available<br>to enter into IRIS.   |
| 2    | Continue the development and implementation of the SafetyAnalyst and HSM tools.   | High  | The HSM includes methodology to utilize Safety<br>Performance Functions equations to predict the<br>number and type of crashes. Calibration of the HSM<br>Safety Performance Functions to fit Illinois conditions<br>has not been completed. This includes Crash<br>Distribution Tables and Calibration Factors.<br>Implementation and Training will occur in 2013. Policy<br>changes will follow. SafetyAnalyst is in the testing<br>phase.  |
| 3    | Evaluate the additional data requirements of the SafetyAnalyst and HSM tools<br>and consider adding the data to the IRIS database based on MIRE guidelines. | High  | FHWA has provided additional guidance based on MAP-<br>21 requirements. IDOT has identified those data<br>elements and methods to capture the data. IDOT is<br>presently only collecting 72 of the 202 MIRE (Model<br>Inventory of Road Elements) data elements. The MIRE<br>elements are a recommended listing of roadway<br>inventory and traffic elements with definitions and<br>attributes for each listed element. MAP-21 requires the<br>establishment of a subset of the MIRE that are useful<br>for the inventory of roadway safety and ensure that<br>States adopt and use the subset to improve data<br>collection. FHWA plans to propose new elements as<br>well as requirements for their adoption and use in a<br>forthcoming rulemaking. |

| Road | lway Data  |        |  |
|------|--|--------|--|
| 4    | Review the IRIS quality control measures to improve the timeliness, accuracy, consistency, and completeness of roadway features.   | High   | Over the last few years, 30,000 miles of city jurisdiction<br>streets has been added to GIS so all IRIS data is now<br>available through the GIS layers available throughout<br>the Department.  |
| 5    | External Safety needs to be enhanced for completeness and flexibility of safety analysis.  | Medium | Not completed. Critical item. MAP-21 Emphasis.   |
| 6    | Utilize the Interchange/Freeway Analysis.  | Medium | NCHRP Project 17-45 has been completed. AASHTO<br>needs to complete the balloting of the material for use<br>as HSM chapters. The ISAT-e spreadsheet analysis tool<br>is complete and has been placed along with the ISAT-e<br>User Guide on IDOT-HSIP site. Policy changes will<br>follow in 2013.                                |
| 7    | Continue to endorse and use linear referencing that corresponds to crashes.  | Low    | Continual improvement needed on intersections and ramp data.   |
| 8    | Continue to add roadway data elements necessary for safety analyses i.e. type<br>and location of guardrail end treatments, location of rumble strips, location of<br>safety wedge, type of pavement markings used and when it was installed,<br>roadside hazard rating or slopes, presence of attenuators on bridge piers and<br>signs, etc. | High   | An efficient means of acquiring a large percentage of<br>these elements can be accomplished through<br>pavement condition video logs which can be viewed at<br>IDOT through two systems, the Condition Rating Survey<br>(CRS) and Illinois Roadway Analysis Database System<br>(IROADS). Lidar data collection will be considered. |
| 9    | Improve the quality and accuracy of traffic control data in IRIS, particularly at the local level.   | High   | No Change  |
| 10   | Link sign inventories to IRIS. Make broader - roadway assets such as pavement marking, guardrail and lighting.   | High   | No Change  |
| 11   | Include IHSDM in data analysis tools.  | Medium | Evaluating implementation needs.   |
| 12   | Safe Routes to School program should be listed under BSE responsibility.   | Low    |  |
| 13   | Add the research project that is underway to determine methods for adding additional data elements to IRIS for HSM applications.   | High   | The study is ongoing with a completion date of 6/30/2013. Implementation Plan will be developed.   |

|      | Description of Potential Recommendations of Traffic Records<br>Improvement   | Level of Effort<br>to implement<br>(low/Medium/<br>High | 2013 Progress Updates   |
|------|--|---|---|
| Driv | er & Vehcile Data  |   |   |
| 1    | Expand use of the PDPS (Problem Driver Pointer System) to all DL applicants (to include DL renewals as well as current application to first time DL issuance), but prioritization/time frame has not been set as of yet. | High  | The Driver Services Department has done some<br>investigation into the PDPS and CDLIS Search process<br>for all drivers. The office needs to determine the best<br>way to implement to minimize the impact on the<br>facility process. We have done some preliminary work<br>where we conducted searches on drivers that were<br>coming up for renewal. This was an attempt to<br>determine how many renewal applicants would have a<br>pointer in another state with a negative status. We<br>want to notify them prior to them coming to the<br>facility. We were having little success at getting<br>responses in a timely matter to answer this question.<br>We had to stop our investigation and proceed to<br>working on another project required by FMCSA that<br>had a January 29, 2013 deadline. |

| Driver & Vehcile Data |  |        |  |
|-----------------------|--|--------|--|
| 2                     | Create a current data dictionary and flow process diagram for the existing driver<br>record and vehicle record file data. The SOS is currently investigating a re-<br>design/enhancement of our current Drivers and Vehicles databases. As part of the<br>long-term planning for this re-design, we anticipate updating the data dictionaries<br>and flow process documentation for both databases. We plan to apply for Section<br>408 federal grant funding for federal fiscal year 2014, to contract with two (2)<br>analysts to update/provide this documentation. The outcome of this grant project<br>should satisfy this Strategic Plan recommendation.   | High   | SOS Department of Information Technology (DoIT) has<br>created a project plan for the Drivers Data Dictionary.<br>They have also done extensive analysis on the current<br>Drivers database and created relevant statistical<br>documents to support their findings. They are<br>currently working on a normalized model (using Excel)<br>of a potential design replacement for the current<br>database. At this point, DoIT are not including<br>Vehicles database. The scope of this project as<br>discussed with IDOT in November was strictly the<br>Drivers Database. |
| 3                     | Make Driver History data available for use in Safety Analysis and linkage to other traffic record components. SOS recommends omitting this recommendation and resubmitting after further discussion with IDOT as to the nature and intent of the information and access desired. IDOT should provide specific information about the fields and information they wish to capture with regard to the driver history, realizing that SOS is prohibited from sharing some information contained on the driver history due to federal DPPA (Driver Privacy Protection Act) requirements. With specific information, the Secretary of State's Office may be able to better determine the type of programming required to obtain this material as well as build a time frame. | Medium | No action has been taken   |
| 4                     | Facilitate the electronic transfer of vehicle information (owner information, make,<br>model, year and vehicle identification number) to other traffic record systems. This<br>could be achieved by placing a new bar code on the vehicle registration document<br>that can be scanned to auto-populate the vehicle information for mobile crash<br>reporting purposes, but we believe there may be alternative existing avenues (i.e.,<br>LEADS) to obtain this information. We recommend IDOT initiate a discussion with<br>Illinois State Police and SOS to determine the most effective approach to achieve<br>this recommendation.  | Medium | No action has been taken   |

| Driver & Vehicle Data |   |        |   |
|-----------------------|---|--------|---|
| 5                     | Continue to develop guidelines for vehicle ownership name and address<br>information that is identical to the driver record information requirements to<br>facilitate future data file linkage of driver and vehicle ownership. The SOS has been<br>diligently working towards a "One Driver/One Record" system which would provide<br>driver's license and vehicle registration information. This system is planned to be<br>operational sometime in calendar year 2013. Once completed, the system should<br>satisfy this recommendation. | High   | This project is on hold due to other office priorities.<br>However, the data dictionary project (#2 above) is<br>relevant to the eventual completion of one customer.   |
| 6                     | Expand ADR (Automated Disposition Reporting) data fields to capture all data<br>necessary to be compatible with the planned statewide citation data repository (as<br>outlined in Recommendation #3 of the Citation Data Recommendations in this<br>Strategic Plan.   | Medium | The Administrative Office of Illinois Courts (AOIC)<br>called a meeting with all parties involved with the ADR<br>expansion of data fields on November 30, 2013. Staff<br>from IL SOS attended the meeting. It was indicated<br>that all agencies wanted to proceed with the project<br>and AOIC would take the lead. No further meetings<br>have been held at this time. |

|          | Description of Potential Recommendations of Traffic Records<br>Improvement   | Level of Effort<br>to implement<br>(low/Medium/High | 2013 Progress Updates   |
|----------|--|---|---|
| Injury D | ata  |   |   |
| 1        | Develop incentives for EMS agencies to improve compliance with current reporting requirements.   |   | Ongoing. If NHTSA funding is obtained this<br>will include a one-time monetary incentive<br>to assist small, under-resourced EMS<br>agencies obtain hardware so that they can<br>convert from paper to electronic<br>submission using software that is supplied<br>free of charge by the state. |
|          |  | Medium  |   |
| 2        | Based on the NHTSA's recommendation, go back and link the 2006-2008 crash data to hospital inpatient database.   | Medium  | We have completed the 2006 crash/hospital inpatient data linkage. We  |
| 3        | Link 2010 crash data to hospital inpatient and emergency department data and produce descriptive and technical reports, such factsheets and may other reports based on the lined data. |   | We are finalizing the 2010 Crash to hospital inpatient and ED data linkages.  |
|          |  | Medium  |   |
| 4        | Link the 2010 crash data to pre-hospital run reports when the web-based data become available.   | High  | Ongoing   |
| 5        | Transition Illinois from NEMSIS 2.2.1 standard to NEMSIS 3.x standard by 2015 (to accomplish this, work will need to commence in the upcoming fiscal year).                            | Medium  | Pending NHTSA funding through IDOT.   |

| Injury Data   |     |   |
|---|-----|---|
| 6 Create a pilot project to model real-time linkage of the Illinois prehospital database and the Illinois trauma registry in the upcoming fiscal year; expand this statewide in the following fiscal year; use lessons learned from these projects to extend the process to other real-time linkages with the prehospital database, including to the hospital discharge database and the vital records deaths database. The use of state injury data to affect change in safety programs remains hindered by the time delay between injury occurrence and when administrative datasets become available for secondary analysis. In the past five years, national standards for pre-hospital Emergency Medical Services data collection (i.e., NEMSIS) and hospital trauma registry data collection (i.e., NTDB) have become available. Because of this synergy, several states now collect and report on pre-hospital data that are "linked" to hospital trauma registry data in real time. These types of linkages make "real time" injury surveillance possible. The purpose of this session is to allow state representatives to describe how these various data systems were designed, funded and implemented. In addition, state representatives will demonstrate how the real time, linked injury surveillance data are being used to affect change to identified environmental factors and statewide policy. | Low | Pending NHTSA funding through IDOT. If<br>funded, we intend to pilot this in<br>collaboration with the Lincolnwood Fire<br>Department Data Manager. |

#### Description of Potential Recommendations of Traffic Records Improvement Level of Effort to **2013 Progress Updates** implement (low/med/high) **Citation Data** Group A – Citation Repository Create a Statewide Citation Repository that would include all citations within the state User testing completed - interfaces being and their dispositions which would include convictions as well as non-convictions. The developed - DuPage County project. project includes the following: 1 High Continue to deploy and support DuPage County and the Illinois State Police as the pilot Ongoing agencies using electronic citations so that the formal requests and approvals on e-2 citation issues can be obtained from the Conference of Chief Judges. High Develop formal guidelines for the development and use of e-Citations for vendors and E-citation printing instructions have been state agencies, as required by the Conference of Chief Judges, to include the revised by AOIC; Conf of Chief Judges are development of additional electronic forms i.e., Overweight, DNR citation. 3 expected to file with Supreme Court within the next few months. Medium Promote and assist all local police agencies in electronically generating and filing N/A at this time citations with the courts and to the future Statewide Citation Repository to include 4 funding for thermal paper and printers. High Provide expertise and support for TraCS and other electronic citation platforms. N/A at this time 5 Medium Develop a query to the Statewide Citation Repository to ensure police agencies receive N/A at this time 6 an individuals' complete driving history at the time of the traffic stop. Medium Group B - Citation Repository Dispositions Update the ADR (Automated Disposition Reporting) data dictionary to ensure the In progress appropriate information is sent from the courts to the AOIC and/or the Statewide 7 Citation Repository for accurate and complete disposition reporting. High In conjunction with the revisions to the ADR, update the Statewide Citation Data In progress 8 Definitions document. Medium

| Citation Data |  |        |                  |
|---------------|--|--------|------------------|
| 9             | Update and expand the Offense Code Table.  | Low    | In progress      |
|               | Group C – Citation Repository Disposition Reporting  |        |                  |
| 10            | Begin work on user agreements for users of the Statewide Citation Repository so the sharing of information is understood and promoted among agencies.  | Low    | N/A at this time |
| 11            | Encourage and assist all jurisdictions in electronic reporting of dispositions to the Administrative Office of Illinois Courts and/or the Statewide Citation Repository for future use by the SOS's office.  | Medium | N/A at this time |
| 12            | Provide training to circuit clerks and law enforcement officers on the importance of correct data collection as well as the transmittal of information from the circuit clerks' offices.   | Low    | N/A at this time |
| 13            | Develop XML data standards to support data exchange between electronic citation<br>systems, court case management systems, the Secretary of State's driver history file<br>and police records management systems as well as the Statewide Citation Repository. | High   | N/A at this time |

|        | Description of Potential Recommendations of Traffic Records Improvement   | Level of Effort<br>to implement<br>(low/Medium/Hi<br>gh | 2013 Progress Updates  |
|--------|---|---|--|
| TRCC & | Strategic Plan  | _   |  |
| 1      | Continue to engage the Planning Subcommittee to conduct planning activities for the ITRCC, including meeting planning, in a collaborative fashion that includes a representative set of agency participants in ITRCC meetings and activities.   | Low   | Ongoing  |
| 2      | Formalize an Executive Group that consists of individuals who can feasibly meet on a regular basis to provide overall direction and leadership for ITRCC activities.  | Low   | Ongoing  |
| 3      | Hire a full-time dedicated traffic records coordinator.   | Low   | IDOT had a fulltime Traffic Records<br>Coordinator.                              |
| 4      | Reduce the reliance on IDOT DTS staff for maintenance of the strategic plan. In particular, project managers must commit to monthly status reports for the projects included in the strategic plan, and must ensure that all required performance measures are submitted in a timely manner.  | Low   | Refer # 3  |
| 5      | Create a data quality improvement project for each component of the traffic records system as<br>part of the 2011 strategic plan update. Ensure that each custodial agency works with the ITRCC<br>to develop a set of data quality metrics designed to measure overall system performance<br>independent of any other projects that might be included in the strategic plan.   | Modium  | IDOT has a data quality sub-<br>committee that addresses data<br>quality issues. |
| 6      | Consider use of webinar technology to increase participation in the ITRCC meetings, especially those related to development of the strategic plan. Systems including video interaction may encourage participation by remote agencies more effectively than the teleconference methods already being used.  | Low   | Ongoing  |
| 7      | Add a section to the plan designed to address sustainability. This section should address the<br>need to move projects from grant funding sources to State funding where possible. It is<br>recognized that in the current fiscal climate it may not be possible to move many (or any)<br>programs away from grant funding, but the plan can address how that movement might<br>happen in the future and how much it would cost to do so. | Medium  | Ongoing  |
|        |   | Medium  |  |