



---

**Illinois Department of Transportation  
Division of Traffic Safety**

***Traffic Records Coordinating Committee***

***Strategic Plan for  
Traffic Records Improvement***

---

Developed by:

Data Nexus, Inc.  
PO Box 11770  
College Station, TX 77842-1770

June 5, 2006

## **Authors' Note**

This is the report of the strategic planning process conducted of the traffic records systems in the State of Illinois. This plan is based, on the 2006 traffic records assessment, including interviews with users, collectors, and custodians of traffic records in the state, written documentation provided by the state, and the expertise of the project team.

## **Disclaimer**

The conclusions and opinions expressed in this document are those of the authors. They do not necessarily represent those of the State of Illinois, the Illinois Traffic Records Coordinating Committee, the Illinois Department of Transportation, the IDOT Division of Traffic Safety, or any political subdivision of the state or federal government.

## **Project Team**

Data Nexus, Inc.

Robert A. Scopatz, Ph.D.  
Barbara Hilger DeLucia  
Larry C. Holestine

## SUMMARY OF PLAN'S COMPONENTS

### Overview and Introduction

**Pages 1-3** introduce the strategic plan project and key stakeholders. The relationship of the plan to SAFETEA-LU Section 408 is presented so readers will know that it meets (and exceeds) the requirements in that legislation.

### Status of Traffic Records Systems

**Pages 5-18** provide an overview of the current systems and processes relating to the traffic records system. The focus is in three areas:

- Quality and availability of data
- Support for analysis and decision-making
- Coordination of improvements to the systems

### Overview of Content, Focus, and Usefulness

**Pages 19-25** provide an overview of the plan's contents and how the plan may be used as a framework and logical sequence to implement improvements to the traffic records system.

### Details of the Strategic Plan

**Pages 26-40** suggest strategies to complete the plan. Strategies are grouped in three phases:

- Phase 1 — issues related to coordination and managing change
- Phase 2 — issues related to recommended changes to specific system components
- Phase 3 — issues related to use of data to improve decision-making and to reduce the frequency and severity of crashes

Strategies are further divided into actions that can be implemented early (immediate actions), those that may take 1-3 years to implement (near-term actions), and those that are on-going tasks performed periodically (long-term actions).

### Action Item Table

**Pages 41-55** present the action item table that represents the core of the implementation step for this strategic plan. The requirements for each action are specified and space is provided to track who is responsible, due date, status, and measures of completeness for each action.

### PERT Charts

**Pages 56-64** present diagrams that graphically display the sequence and pre-requisites for each action item in the plan. These illustrate how the elements of the plan relate to one another.

### Grant Funds Tracking

**Page 65** presents a sample matrix for tracking the relationship between projects funded with traffic records grants and the elements of this strategic plan. This table is provided expressly to meet and exceed the requirements of Section 408 with respect to linking grant funding and traffic records planning.

### A Primer on Strategic Planning

**Appendix A, Pages A1-A6** presents a primer on strategic planning that will be useful to the state for continuing the planning process to update this plan.

### Four Box Analysis

**Appendix B, Pages B1-B2** presents an overview of the "Four Box Analysis" -- a useful methodology for prioritizing projects within a strategic planning framework.

## TABLE OF CONTENTS

INTRODUCTION.....	1
SUMMARY OF PLAN'S COMPONENTS.....	3
CONTENT OF PLAN.....	19
OVERVIEW.....	25
PHASE 1 .....	26
PHASE 2 .....	29
PHASE 3 .....	37
ACTION ITEM TABLE.....	41
PHASE ONE.....	41
PHASE TWO.....	43
PHASE THREE .....	52
PERT CHARTS.....	56
GRANT FUNDS TRACKING.....	65

## APPENDICES

APPENDIX A. STRATEGIC PLANNING PRIMER

APPENDIX B. FOUR BOX ANALYSIS

## INTRODUCTION

### *Statutory Requirements for a Strategic Plan for Traffic Records Improvement*

The SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) legislation, Section 408, includes a requirement for strategic planning to qualify for grant funds to improve a state's traffic records system. The law requires states to establish a Traffic Records Coordinating Committee (TRCC), to develop a "*multiyear highway safety data and traffic records system strategic plan*" that addresses deficiencies in the traffic records system, and to obtain approval of the plan by the state's TRCC. The strategic plan must specify how deficiencies are identified, prioritize activities, identify performance-based measures, and describe how grant funds will be used to address the needs and goals identified in the plan.

While related to eligibility for funding under Section 408, the requirements may be interpreted more broadly as a need to link the state's safety planning process to the traffic records strategic plan. Support for this linkage is that safety planning requires these data and requires a statement about the data quality and reliability when used for planning. Where deficiencies are noted, a state is expected to address those with a series of activities that will result in data improvements. This *Strategic Plan for Traffic Records Improvement* could meet this obligation by being adopted by reference into other planning documents, as well (e.g., the Strategic Highway Safety Plan).

The sections of this *Strategic Plan for Traffic Records Improvement* meet the requirements under Section 408 of the SAFETEA-LU legislation:

- The *System Assessment* section describes the process by which deficiencies were identified.
- The *Plan Content*, *Action Item Table*, and *PERT Chart* sections give three views of the prioritized activities.
- The *Action Item Table* also identifies performance-based measures.
- The *Grant Funds Tracking* table can be used to describe the allocation of funds to address the needs identified in the strategic plan.

<p><i>The Purpose of this Document</i></p>	<p>The purpose of this document is to provide the Illinois Traffic Records Coordinating Committee (TRCC), the Division of Traffic Safety (DTS) of the Illinois DOT (IDOT), and other traffic safety stakeholders of the State of Illinois with a <i>Strategic Plan for Traffic Records Improvements</i>. This plan is aimed primarily at actions that the Illinois TRCC can help accomplish through its membership while pursuing the goal of improving traffic records. As such, it touches on the activities of all stakeholder agencies within the state, but it does not represent an attempt to set those agencies' agendas. Rather, it is an attempt to help the TRCC fulfill a broad role of communication, coordination, and assistance among collectors, managers, and users of traffic records data in Illinois.</p> <p>This plan is based on the 2006 NHTSA Traffic Records Assessment. The assessment was supplemented by information from other documents provided by the state to the project team. The remainder of this document includes sections on the status of the Illinois traffic records system, as well as an overview and details of the strategic plan. The plan includes major goals, objectives, and steps to completion, an action item table, and a set of Pert charts that graphically illustrate the order and interdependencies of the various steps to completion.</p>
--------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## SUMMARY OF PLAN'S COMPONENTS

*Agencies Involved with Traffic Safety and Traffic Records Systems*

Agencies and organizations recognized in this plan as being vested with a responsibility for transportation safety include:

**Division of Traffic Safety** — that is responsible for traffic safety program management, problem identification, and countermeasure grant funding.

**Illinois Department of Transportation** — that is responsible for planning, constructing, and maintaining the roadway infrastructure.

**Illinois State Police** — that is responsible for enforcing laws on state highways.

**Illinois Secretary of State, Driver Services Department** — that licenses drivers and maintains conviction and crash data.

**Illinois Secretary of State, Vehicle Services Department** — that registers vehicles, maintains vehicle title information, and manages information on commercial motor carriers.

**Metropolitan Planning Organizations** — that are vested with the responsibility for addressing traffic safety issues within designated areas of the state.

**Trauma Care Providers** — those physicians, hospitals, emergency medical services, and long-term care providers who treat persons injured in motor vehicle crashes.

**Illinois Department of Public Health** — that is responsible for collecting and managing information that describes incidences of trauma occurring within the state.

**The Judicial System** — that is responsible for the adjudication of traffic offenses at both the state and local level.

**Medical Examiners & Coroners** — who add to the understanding of the factors contributing to fatal injuries suffered in motor vehicle crashes.

**Local Law Enforcement Agencies** — that enforce traffic laws and regulations at the local level.

**Local Traffic Engineering Agencies**— those are responsible for the roadways and traffic operations within their jurisdictions.

**Community Groups** — with an interest in traffic safety, those are often responsible for accomplishing local traffic safety objectives.

<p><i>Recommended Improvements are Based on the Results of an Assessment of the System</i></p>	<p>The recommendations contained in this strategic plan are the result of a systematic review of Illinois' existing traffic records system components and interviews with those persons knowledgeable in their use and operation. These findings of the 2006 NHTSA assessment have been combined with the project staff's knowledge of traffic records concepts and contemporary approaches to traffic safety to produce this strategic plan, including knowledge of the state's:</p> <ul style="list-style-type: none"> <li>• Compliance with recommended standards, practices, and federal guidelines.</li> <li>• Efficiency and effectiveness of data processing, information exchange, and existing technology.</li> <li>• Ability to support highway safety program management with timely and accurate traffic records information.</li> </ul>
<p><i>The System Assessment is a Synthesis of Information</i></p>	<p>This strategic plan includes a synthesis by the review team of information derived from the following sources:</p> <ul style="list-style-type: none"> <li>• <i>Interviews</i> with data collectors, users, and system managers of traffic records data throughout the state.</li> <li>• <i>2006 Traffic Records Assessment Report</i>.</li> <li>• <i>System Documentation</i> for the various data systems identified.</li> <li>• <i>Recommended Practices and Standards</i> promulgated by various federal agencies and professional organizations involved in transportation, highway safety, and traffic records.</li> <li>• <i>Technical Expertise</i> of the project team itself in the definition, development, and use of traffic records to support national, state, and local highway and traffic safety applications.</li> </ul>

<p><i>Evaluation Criteria/Results</i></p>	<p>In order to provide Illinois with an overall evaluation of its traffic records system, the capabilities of that system are compared against a set of criteria established by the project team, building on those used by National Highway Traffic Safety Administration (NHTSA) in state traffic records assessments. These criteria relate to the ability to develop accurate analytic measures of crash characteristics and recognize the need for data from a variety of sources within the state.</p> <p>The following sections are based on the findings from the 2006 <i>Illinois Traffic Records Assessment</i>, as well as information gathered during the 2005 and 2006 audits of the crash reporting systems and processes at IDOT. The subsections that follow present questions related to the desired analytic measures of crash characteristics. Each question can be answered at varying levels of specificity, requiring correspondingly more or less detail in the information needed for analysis.</p> <p>For example, to conduct an overall comparison of the state's crash experience for this year versus last year, aggregate data showing crashes per million vehicle miles traveled may be sufficient. However, in order to identify highway safety problems, develop a comprehensive annual program of work, or evaluate previously implemented countermeasures, a detailed knowledge of the roadway, vehicles, occupants, injuries sustained, course of medical treatment applied, and the ultimate effectiveness and cost of those treatments may be required.</p>
<p><i>Crash Data Processes</i></p>	<p><i>Does the traffic records system include sufficient detail to support valid descriptions of the state's crash experience sufficient to identify problems and evaluate effectiveness of safety programs?</i></p> <p>The statewide Crash Information System (CIS) is a recently upgraded relational database system managed by IDOT, Division of Traffic Safety (DTS). It is used to document the time, location, environment, and characteristics of crashes. A multi-step data entry and data management/ process is used to image and key enter crashes received from law enforcement agencies. Location coding uses a map-based locator tool that accesses the Illinois Road Inventory System (IRIS) and identifies latitude/longitude (x, y) coordinates pinpointing the location. At the same time, selected roadway attributes are linked with the crash record.</p>

An electronic field version of crash software is available for data collection. The Mobile Capture & Reporting (MCR) system is used by participating law enforcement agencies to report crashes to IDOT into an MCR system server at IDOT. At present, DTS staff prints each crash report from MCR and submits it to the CIS for handling just as if it was a paper crash report. CIS does not currently accept data electronically from MCR, but it was reported that the process to allow transfer of crashes from MCR has been programmed. Implementation of electronic crash transfer has been delayed pending a policy decision about generating an MCR crash report image compatible with the document management system used by CIS.

CIS is not yet able to accept crash data and create crash report images from non-MCR sources. A data import format using XML has been defined and was shared with the Chicago Police Department (CPD). This local agency is responsible for approximately 25 percent of all crash reports received by IDOT. CPD is not able to send data to IDOT electronically at present.

It is possible that the XML import format given to CPD could be used by other enforcement agencies that automate crash data with a local records management system (RMS) or non-MCR crash data collection software. The same policy question arises about creating crash report form images when these data have been transferred into CIS electronically. It is not known how many local enforcement agencies use their own crash records system, but send a paper form to IDOT for CIS.

The 2006 Illinois Traffic Records Assessment conducted by a NHTSA team includes the following information about crash data quality.

*Timeliness*

Crash data entry currently lags about 18 months past the end of a calendar year. Additional months are required then to closeout the annual database and generate official data summaries. Supervisors over the crash data entry process can obtain numerous production reports to help them keep track of timeliness problems and the size of various data entry queues. While there are no standard measures of timeliness that are reported outside of the data entry area, key users are generally aware of the overall timeliness issues with the crash data.

	<p><i>Consistency</i></p> <p>The crash data are consistent with MMUCC and ANSI D-16.1 standards. A recent comparison with MMUCC resulted in a 97 percent compliance with individual data values. Illinois complies, in particular, with many of the roadway linkage recommendations in MMUCC.</p> <p><i>Completeness</i></p> <p>Based on previous years' volumes, it is believed that most of the reportable crashes are received by IDOT. Some anecdotal evidence was offered regarding missing crash reports from smaller enforcement agencies, but quality control checks during crash report pre-processing help to ensure that any large-scale underreporting is not likely to take place.</p> <p><i>Accuracy</i></p> <p>The CIS and MCR software both have extensive edit checks that provide warnings and trap critical errors during data entry. In 2004, the CIS edits were over-ridden in an effort to reduce the data entry backlog. Unfortunately, this resulted in some 50 percent of the crash records routed to a supervisory queue for error correction at the end of the data entry cycle, which resulted in severe delays. For entry of 2005 crashes, the edit checks were reinstated early in the process and even those reports that went into the system without extensive edits were double-checked by senior and supervisory personnel. It is believed that 2005 crash data are much more accurate than those that were entered for 2004.</p> <p>At the end of a data entry year, DTS analytic staff process over 100 data tabulations looking for results that do not fit with expectations based on comparisons to prior years' data summaries. This technique is part of an iterative process to identify data quality issues, isolate crash records for correction, and reanalysis the resulting database to ensure that it is comparable to prior years. Knowledge about which fields and values to check in the database has built up over the years and relies heavily on the expertise of the analysts.</p> <p>There are a small number of routinely reported quality control measures of accuracy of the crash data. For the most part, these relate to the fatal crash data rather than being reported for the crash data overall. There is no formal quality control measurement process in place.</p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>Roadway-Related Safety Analyses</i></p>	<p><i>Does the traffic records system support roadway-related safety analyses with data about locations, roadway types, structures, control devices, roadside appurtenances, and traffic volume?</i></p> <p>The Illinois Road Inventory System (IRIS) is a source of information about the 17,000 miles of state-maintained roadways and the 123,000 miles of local roads. IRIS contains over 150 roadway attributes to assist in the management of these roadways. Data include physical characteristics, traffic, jurisdictional and geographic boundaries (county, township, political), road conditions, shoulders, surface, lanes, et al.</p> <p>IDOT also maintains a Structure Inventory System (30,000 structures), a Railroad Inventory System (13,000 at grade crossings), and the Highway Performance Management System (HPMS). These roadway-related systems can be used to help identify safety problems and develop appropriate safety programs. Examples of these major road projects include hazard elimination, rail grade crossing, and skid reduction programs.</p> <p>The High Accident Location Identification System (HALIS) identifies crash locations by equivalent road types using three years of crash and traffic data with criteria that consider the frequency of crashes, severity of crashes, and the rates of crashes based on vehicle miles traveled. HALIS can be used for various crash types, such as, wet road crashes, alcohol-involved crashes, run-off-the-road crashes, and many others. However, HALIS is written in the FORTRAN programming language and cannot easily be changed to accept crash data from the CIS.</p> <p>IDOT developed a Local Accident Reporting System (LARS) in the mid-1970s that located crashes on the local road system. LARS requires the local agencies, either law enforcement or engineering, to annotate location data on the crash report in order to be included in the system. For those communities that participate in the program, IDOT provides crash data extracts from LARS for their community by location. Currently, LARS can produce reports using Crystal Reports and the reports can be sent to the user electronically as either a PDF document or an Excel spreadsheet. An Access database application has also been written that will allow electronic transmittal of the updated listing of LARS agency streets. LARS agencies can also request ad hoc reports.</p>
-----------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

A fundamental concern of analysts in using information systems for safety programs is the precision with which crashes or other data are located on the roadway systems. IDOT uses several location reference methods: key route number, route name and milepost, street name and/or address, link-node, and latitude/longitude coordinates.

The 2006 NHTSA Traffic Records Assessment includes the following information on roadway data quality:

*Timeliness*

IRIS is updated when construction or reconstruction projects are completed, when jurisdictional boundaries or functional classifications change, when periodic traffic count surveys are conducted, and when a re-inventory of roadway segments indicate that the characteristics have changed. In IDOT, this must wait until district staff is available to make these changes.

*Consistency*

The data in the roadway database appear consistent from year-to-year for the types of characteristics collected.

*Completeness*

The roadway database appears complete with the exception of the 28,000 miles of city streets that are not available for mapping with the GIS. IRIS includes the remainder of the roadways, both local and state-maintained.

*Accuracy*

A major issue regarding accuracy is the precision used to identify locations on the public road system. Crash locations are generally less accurate than the location of roadway features. This discrepancy is likely due to the diverse user community that collects crash data, as opposed to the homogeneity of IDOT staff who inventory the roadways. The precision of identifying locations should improve for both crashes and roadway features with current activities to migrate these systems to a GIS supported by NAVTEQ software using latitude/longitude coordinates.

<p><i>Vehicle-Related Safety Analyses</i></p>	<p><i>Does the traffic records system support vehicle-related safety analysis with data on vehicle types and physical characteristics, age, condition, and safety devices present?</i></p> <p>The Vehicle Services Department (VSD) of the Illinois Office of the Secretary of State (SOS) maintains the registration and title database, containing records for about 10.7 million registered motor vehicles. VSD offices process vehicle registrations and renewals, updating the databases in real time. A successful pilot project allowed automobile dealers to process vehicle title and registrations using the services of a commercial vendor. VSD reports that VIN coding from that system is more accurate than VIN coded through the VSD offices.</p> <p>The vehicle database also support inquiries on individual records from law enforcement, and inquiries required for the Fatality Analysis Reporting System (FARS). Management summary reports are produced annually and ad hoc statistical queries can be processed upon request. The vehicle database cannot currently link with other traffic records files, but the driver database is also available to the VSD. The managers of the CIS and MCR have requested access to the vehicle registration to auto-populating crash records in the data entry process. Details are being worked out to enable that access.</p> <p>The 2006 NHTSA Traffic Records Assessment reports the following information about vehicle data quality:</p> <p><i>Timeliness</i> The registration file is updated in real time from Vehicle Services Department facilities.</p> <p><i>Consistency</i> The file appears to contain the data content recommended by the <i>Advisory</i> and required for AAMVAnet support.</p> <p><i>Completeness</i> Odometer readings are captured when vehicles are titled, but they are not required for all vehicles.</p> <p><i>Accuracy</i> A VIN verification program is used to improve the accuracy of VINs on the vehicle database.</p>
-----------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>Driver-Related Safety Analyses</i></p>	<p><i>Does the traffic records system support driver-related safety analyses with data about age, gender, experience, physiological and psychological condition, license status and driver training, and use of safety devices?</i></p> <p>The Driver Services Department (DSD) of the Illinois SOS maintains the driver database containing approximately 12.5 million driver records, of which 8.5 are active (i.e., licenses are eligible for renewal). The database includes records for commercial drivers. Driver histories from previous states are included only for these commercial vehicle operators.</p> <p>Crash involvement is posted to the driver record whether or not a citation is issued. The DSD administers financial responsibility laws, but it is DTS in IDOT that is charged with initial identification of crash-involved motorists owing financial restitution. There is no apparent, systematic way to ensure that this is a comprehensive and timely process or that there is no duplication of activities between the two agencies.</p> <p>All enforcement agencies use a Uniform Citation and Complaint form, except for Chicago and the surrounding Cook County area. The uniform citation form contains violator information, charge, court of jurisdiction, court date, and final disposition. Several jurisdictions have experimented with using electronic citations (e.g., Peoria, Rolling Meadows, and Pallatine); however, these systems have not yet had a major impact at the statewide level.</p> <p>Court convictions and supervisions for major offenses (e.g., DUI) are filed with the SOS for inclusion on the driver history record. Acquittals, dismissed cases, and other non-convictions are not filed with the SOS.</p> <p>Courts in about 20 counties do not file convictions electronically, but instead send the SOS a copy of the paper citation marked with the final disposition. There is no tracking system to evaluate whether convictions are transmitted properly to the SOS.</p> <p>A court using driver records reports a significant problem with multiple driver records for the same individual. When inquiries are for defendants who claim they have no license or record, multiple records are found with minor variances in descriptive data. Verification that these records were for the same person was done through fingerprint records in the court's system.</p>
----------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

The 2006 NHTSA Traffic Records Assessment report includes the following information about the quality of driver data:

*Timeliness*

The driver database is updated continuously with newly issued and renewed licenses. Convictions received electronically are entered within 24 hours (often same day), and those received on paper are processed within 15 days.

Courts with automated case management systems can transmit dispositions to SOS on the day judgment is entered. For the remaining courts, dispositions are sent to SOS on the paper citation. Due to both mailing delays and data entry delays at SOS, there can be substantial delays in posting these convictions to the driver history.

*Consistency*

Content of the driver history database appears to meet the requirements of the PDPS, CDLIS, and other AAMVAnet applications. All enforcement jurisdictions, except Chicago and the Cook County suburbs, use a Uniform Citation and Complaint form approved by the Illinois Supreme Court.

*Completeness*

Driver records contain all of the suggested elements for all drivers, but adverse histories from a previous state of record are recorded only for commercial drivers. Police agencies may track their own citations but there is no statewide tracking system. Convictions are reported back to arresting agencies, but if no conviction, it is necessary to find out disposition from the individual court. Disposition for all traffic convictions and court supervisions for major offenses are reported to SOS.

*Accuracy*

Driver records appear to be generally accurate based on the identification requirements published by the DSD and the use of the Social Security Administration's On- Line Verification (SSOLV). Convictions reported to the SOS, however, are not always linked correctly to the driver's history, resulting in multiple, unlinked records for the same driver. In the absence of a biometric identification system, some failures to link an individual's records are unavoidable; however, a large number of unlinked records for the same individual were reported.

<p><i>Environmental Factors</i></p>	<p><i>Does the traffic records system support safety analyses of the interaction among environmental factors (e.g., pavement damp or oily, precipitation, visual obscuration, illumination, time of day)?</i></p> <p>The crash database is sufficient for aggregate analysis of the contribution of environmental factors to safety. The detail available on state-maintained roadways is much better than for local roadways through the automated links to IRIS during crash data entry. However, Illinois has supported local roadway safety analysis since the mid-1970s and has had good success with linking data about crashes and roadways. Improved accessibility of local roadway data is being planned with use of the IDOT GIS.</p>
<p><i>Collision Factors</i></p>	<p><i>Does the traffic records system support safety analyses of the interaction between collision factors (e.g., number of vehicles, manner and speed of collision, the nature of the object struck)?</i></p> <p>The crash database is the only source for this information in highway safety analysis. The Illinois crash report contains sufficient detail to support most analyses of collision factors. DTS analytic staff in several units can generate reports and analyses of collision factors for annual publications and in response to specific user requests for information.</p>
<p><i>Post-Collision Factors</i></p>	<p><i>Does the traffic records system support safety analyses of the interaction between post-collision factors (e.g., EMS, hospital treatment, rehabilitation)?</i></p> <p>Illinois does not have a comprehensive injury surveillance system, although some key components are present, including the Illinois Department of Public Health (IDPH) emergency medical services database, statewide trauma registry, mortality data, and the hospital discharge data repository. Starting in 2007, Emergency Department (ED) data will also be collected.</p> <p>EMS providers are required to submit all pre-hospital care reports to the state data repository. Two versions of the EMS run report are used. About 40 percent of the reports are submitted in a scannable paper format (bubble form) and the remaining data are collected using EMS field collection software. The EMS Division has not adopted the new data dictionary for the National Emergency Medical Services Information System (NEMSIS).</p>

Illinois has 67 hospitals designated as trauma centers. These trauma centers are required to submit data electronically to the state trauma registry and about 35,000 trauma cases are reported annually. Data are submitted for the Illinois Hospital Discharge database using the standard Uniform Billing (UB-92) form. This form is used by hospitals to bill for their charges and it includes data for patients who spent at least 24 hours as in-patients or those discharged from acute care and rehabilitation facilities. It does not include patients who are treated only in the emergency room and then released.

Illinois state law mandates that all death certificates be filed with the IDPH. A commercial firm enters these death certificates into an electronic database that the Division of Vital Records uses for analysis. Analyses include the frequency of deaths of Illinois residents, demographic characteristics of the decedents, and conditions leading to death, even those that may have occurred outside of the state. Available data include demographics, occupation, gender, age, date of birth, age at death, place of death, manner of death, state of residence, and cause of death.

The 2006 NHTSA Traffic Records Assessment reports the following information on post-collision data quality:

*Timeliness*

EMS providers are required to submit all pre-hospital patient care reports to the state every 30 days, but this is not measured. Trauma Centers are complying with a 90-day submission requirement. All acute care hospitals are complying with the 90 day requirement for submission of UB92 patient data. Mortality data are submitted to the IDPH Division of Vital Records on the 10<sup>th</sup> of every month for the prior's month's events.

*Consistency*

EMS providers can use two different versions of the uniform run sheet. There is no mapping or conversion of the data elements between the two forms for data consistency. The state has not adopted the standard NEMSIS data dictionary and data collection protocol. The IDPH collects data about trauma patients using the state's web-based uniform trauma flow sheet, a published data dictionary, and a list of data elements available on the EMS website.

	<p>Acute care hospitals and rehabilitation facilities are required to submit the standard UB-92 data format that is used to bill for their hospital charges. Mortality data are also submitted on a standardized form.</p> <p><i>Completeness and Accuracy</i>  There is no tracking of EMS providers' compliance with reporting requirements to the state data repository. No penalties are levied against providers that are not compliant. Compliance with data reporting requirements for trauma patient care data is tracked and 100 percent of the designated trauma centers are compliant. Edit checks and validation are performed on trauma data submitted electronically to the state repository but data quality feedback is not provided to the trauma centers. All acute care hospitals and rehabilitation facilities report in-patient care data to the state repository. Mortality data are submitted to the state, as well, with all funeral directors, coroners, and medical examiners reported as compliant with the state reporting requirement.</p>
<p><i>Accessibility and Ease of Analyzing Interactions</i></p>	<p><i>Does the traffic records system allow users to access and combine data from various sources in order to determine the interactions between crash-related characteristics?</i></p> <p>Data linkage and access are limited in some key areas of the traffic records system. IDOT and the SOS are working to obtain real time links to the driver and vehicle databases to use in crash reporting software to validate entries and auto-populate the crash report fields. Some barriers exist to outside agencies having the necessary access to the SOS' files.</p> <p>A variety of users could benefit from access to images of crash report created and stored by IDOT, but privacy concerns have limited this access.</p> <p>Access to medical information for the CODES project has been working well. Multi-agency Memoranda of Understanding (MOU) exist among the data owners involved in the CODES Project. These MOUs establish a data sharing partnership for probabilistic data linking and analysis. The CODES Board of Directors includes all members of the Traffic Records Coordinating Committee (TRCC) that includes owners of the data being used.</p>

	<p>Inclusion of additional members who are not also data owners may hamper open discussions related to data quality and data linking processes, such as imputation. Currently, there is not a CODES Advisory Committee that includes data users and traffic safety advocates.</p>
<p><i>Data Quality</i></p>	<p><i>Are the traffic records data of sufficient quality (i.e., timeliness, accuracy, and completeness) to support valid quantitative analysis and give decision-makers confidence in the results?</i></p> <p>Disabling the edit checking when entering the 2004 crash data resulted in numerous data quality issues. Reversing this decision early in the entry of 2005 crash data should help alleviate the large post-processing delays. Timeliness of the crash data and its availability for analysis was mentioned frequently during the assessment as a problem. Reasons for the delays are well documented and IDOT has taken several steps to address their ability to enter the large backlog of crash reports.</p> <p>Lack of electronic data transfer from MCR into CIS, or from other automated sources of crash data, is a longer-term problem. Encouraging use of MCR or other crash data collection software with approved edit checks would help to reduce the volume of manual data entry at DTS and enhance the quality of crash data.</p> <p>Quality of EMS data is a problem because of the use of more than one run report form. On-line data extraction tools for medical data serve users well.</p> <p>The IDOT's GIS is growing in both content and capabilities. It will likely take on the role of supporting the enterprise-wide data warehouse. Gaps in roadway-related data between local and state-maintained systems, though not unusual, is a problem for users trying to make comprehensive statewide highway safety decisions.</p>
<p><i>Management and Coordination of the Traffic Records System</i></p>	<p><i>Do stakeholders in traffic records have input into the practices and system improvement processes that affect their ability to collect, manage, and use the information?</i></p> <p>A Traffic Records Coordinating Committee (TRCC) has been formed in the past several years. The current TRCC roster lists 51 members from a variety of agencies.</p>

	<p>TRCC members include IDOT, Administrative Office of Illinois Courts, Illinois State Police, Department of Public Health, Secretary of State, and a variety of local agencies (e.g., MPOs, engineers, enforcement). All of the major stakeholders have signed Memoranda of Understanding.</p> <p>The TRCC is relatively large and is organized as a single-tier structure with both executive and technical members. Under Section 408 guidelines, the TRCC should consist of two levels: executive and technical. The executive level sets the mission of the TRCC and provides oversight, approval authority, and resource support for actions proposed by the technical level committee.</p>
<p><i>Overall Assessment</i></p>	<p><i>How does the traffic records system compare to national standards, practices in other states, and what is possible given the current state of technology and management?</i></p> <p>Illinois has a strong tradition of providing quality data and analytic support to highway and traffic safety users at the state and local level. It was among the first states to create databases that support local roadway safety analysis. The MCR system is unique in its development and ownership by IDOT and serves well as a crash data collection tool for law enforcement officers.</p> <p>Now, Illinois is poised to take advantage of technology advances for data collection, management, and analysis. Nevertheless, there are also several challenges to be met. The main challenges include:</p> <ul style="list-style-type: none"> <li>• Delays in availability of crash data related to a very complex manual data entry and management process along with some user requirements that are delaying implementation of electronic data sharing.</li> <li>• Specific limitations on data access that hamper some legitimate uses of the safety data for decision-making.</li> <li>• A growing need for simple, easy to use analytic tools and queries that allow decision makers to incorporate data from multiple systems.</li> <li>• Effective coordination of the future improvements to the traffic records system.</li> </ul>

	<p>The 2006 Traffic Records Assessment includes a number of recommendations related to specific system components (crash, roadway, vehicle, driver, courts, and medical), along with the management and linkage of these components and the traffic records system overall. These recommendations are included in this strategic plan in the form of action items.</p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## CONTENT OF PLAN

<p><i>The Plan Provides Guidance for Needed Improvements</i></p>	<p>Information contained in this strategic plan is that needed to provide overall guidance to promote improvements to the safety-related information contained in the Illinois traffic records system. Information is provided to establish the basis for each proposed improvement, the recommended sequence for accomplishing these improvements, and a justification for their inclusion in the plan.</p> <p>The TRCC does not have operational responsibility for any of the traffic records system components. However, by virtue of its role in promoting highway and traffic safety, and through its role as the primary deliberative body concerned with traffic records information, the TRCC serves in a lead role to ensure that the traffic records system in Illinois serves all users well.</p> <p>The central focus of this plan is use of traffic records data to support highway and traffic safety decision-making. The TRCC is intended to be the representative body for the traffic records community where collection, management, and use of the records are discussed and where plans are made for meeting the needs. Thus, even when specific goals or objectives may involve actions by specific departments or agencies, the steps to be taken are written with the implied understanding that those steps and oversight of the strategic plan will be guided and coordinated by the TRCC.</p>
<p><i>The Plan Emphasizes Safety</i></p>	<p>The sole purpose of this strategic plan is to provide Illinois with the guidance needed to achieve a traffic records system that meets the broadly stated system goal of providing complete, accurate, and timely transportation safety information. The emphasis of this plan is on safety in the broadest sense; i.e., transportation safety encompasses the improvement of road systems; the regulation of motor vehicles and drivers operating on these road systems; and the treatment of injuries arising from motor vehicle crashes.</p>

<p><i>Three Sections in the Plan Describe Needed Improvement and a Method for Managing these Improvements</i></p>	<p>Recommended improvements are presented in three sections corresponding to key issue areas that must be addressed:</p> <ul style="list-style-type: none"> <li>• Phase 1 —Elements of the plan relating to coordination and statewide initiatives affecting broad areas of responsibility.</li> <li>• Phase 2 — Elements of the plan relating to improvement of specific components of the traffic records system and how the components interact.</li> <li>• Phase 3 — Elements of the plan relating to promoting use of the data for decision-making.</li> </ul>
<p><i>Relationship of this Plan to the Final Implementation Plan</i></p>	<p>This plan contains the framework and most important action items for improving the Illinois traffic records system. It is designed to elevate the system to the state of the art while allowing flexibility in the methods and time frame for achieving this goal. This flexibility is required given the realities of changing financial resources, competing priorities, and the consensus required of the various responsible departments and agencies in Illinois.</p> <p>Flexibility is required because of the nature of the TRCC's role as an advocate for the improvement of system components that it does not own or control. Thus, the TRCC must have the ability to move forward on those parts of the plan where it can find willing partners ready to take the necessary actions in coordination with the TRCC's efforts. It is explicitly recognized that some elements of the plan may be performed "out of sequence" from that recommended here simply because the affected stakeholders agree and have the resources to do so.</p> <p>It is important to realize that performance indicators and grant justifications are part of the on-going strategic planning process and appear herein as a set of recommended indicators that must tie in to the various available grants that the state may pursue. Once the stakeholders and lead agencies determine a course of action, this plan should be updated to reflect the actual programs that will be implemented, how program success will be measured, and the full justification for any grant funding.</p>

	<p>If that course is pursued, this document will continue to meet the requirements for Section 408 eligibility for years to come. If, however, the TRCC lets the document fall into disuse by not updating it when actions are taken and grants are implemented, it cannot possibly serve as a valid strategic plan for the future. Monitoring and updating the plan is a job for which the TRCC is ideally suited.</p>
<p><i>Focus on the TRCC</i></p>	<p>By design, this strategic plan relies heavily on the TRCC. The plan is expandable and touches on the actions that may be required of various state and local agencies for any given improvement (e.g., improving location coding accuracy on crash report forms). The goal is not to ignore the agencies that collect, manage, and/or use the data, but rather to specifically point to the role that the TRCC can and should play in strategic goals and objectives that touch mostly on the responsibilities of these other departments and agencies.</p> <p>The TRCC's role, in short, is to create and manage opportunities for coordinated strategic action by the agencies managing various components of the traffic records system.</p> <p>The sections, goals, and objectives of this strategic plan are written to address both the things that need to be done and the role of the TRCC in ensuring that these things happen to everyone's benefit. That role is unique to the TRCC within Illinois. No other state or local entity has the mission to make sure there is a coordinated traffic records system to support safety analyses, let alone make sure that it runs well and supports those needs of users, managers, and data collectors.</p>
<p><i>Relationship of the Plan to the Traffic Records Assessment Report</i></p>	<p>Action items in this Strategic Plan are drawn from the recommendations in the 2006 Illinois Traffic Records Assessment. Some of the recommendations have been expanded with additional detail to provide necessary sequencing of actions.</p> <p>Some recommendations in the 2006 assessment require action by entities that are not part of the TRCC. These recommendations are included in this plan because, even though the TRCC may not be directly responsible for their final implementation, the members and their agency leaders are in a position to support these initiatives.</p>



<p><i>The TRCC will help Develop and Monitor the Specific Action Steps.</i></p>	<p>This plan is written with the following vision in mind: that Illinois' traffic records system must be driven by users' needs and that improvements must involve communication and cooperation among stakeholders across all interested divisions, agencies, and political subdivisions. Specific action steps to implement these improvements may change--the custodial agencies must ultimately decide how best to implement specific strategies and steps. However, the plan has been designed to facilitate the TRCC's determination of these action steps and to assist in monitoring their progress.</p>
<p><i>The Plan Attempts to Consider the Changing Needs of All System Users</i></p>	<p>The potential for diminished utility of the data and the need to avoid it are guiding factors in the development of this strategic plan for enhancing Illinois' traffic records system. Other factors given consideration include:</p> <p><i>The Changing Role of State/Regional/Local Agencies –</i> Shifts in national programs and changes resulting from SAFETEA-LU legislation require state, regional, and local agencies to continue to assume broad responsibilities for improving traffic safety. In fact, these needs expand the scope of what data are needed, who needs access, how they use it, and how it can be distributed.</p> <p><i>The Need to Allocate Resources and Measure Progress --</i> Increasingly, the demand for resources to support traffic safety programs exceeds the available supply. As the cost of initiatives increases and the demand for new programs rises, states assume more of the financial burden for their program administration and funding. Information plays an expanded role and greater emphasis must be placed on effective allocation of available resources. Of particular importance for traffic safety is that much of the value of information rests in its ability to improve resource allocation decisions and measure progress in achieving defined goals.</p> <p><i>The Need to Rapidly Integrate New Initiatives into the State's Safety Programs –</i> Continually, new legislative mandates and administrative responsibilities are placed on state safety programs. These changes must often be made quickly, implying that processes, rulings, and data required for implementation must be in place as rapidly as possible.</p>

<p><i>The Plan Attempts to Consider the Primary Mission of Traffic Records System Component</i></p>	<p><i>The Need to Maintain the Primary Operational Functions --</i> Most systems that provide the data used to analyze highway and traffic safety are created and maintained for other distinct missions; e.g., licensing drivers, titling vehicles, etc. It is not feasible to change these systems to bring a more direct safety-related focus, if the primary uses of a system cannot be retained, as well. Cost savings to the state as a whole for effectively managing these data systems for multiple uses must be recognized.</p>
-----------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## **OVERVIEW**

### **PHASES OF THE STRATEGIC PLAN**

**PHASE 1: Strengthen the structure for guiding improvements to the traffic records data and highway safety decision-making.**

Step One. Strengthen the traffic records coordinating committee.

**PHASE 2: Improve data capture, storage, and linkage.**

Step One. Improve crash reporting and processing.

Step Two. Improve citation data collection, adjudication, and driver history processing

Step Three. Improve roadway information processing.

Step Four. Improve medical information processing.

Step Five. Improve data linkage and sharing.

**PHASE 3: Improve the use of traffic records for highway safety decision-making.**

Step One. Create a traffic records clearinghouse

Step Two. Train users and collectors of traffic records information.

**PHASE 1: Strengthen the Structure for Guiding Improvements to the Traffic Records System and Highway Safety Decision-Making.**

*Rationale:  
The need for strong leadership and coordinated action*

In Illinois, the Traffic Records Coordinating Committee (TRCC) has many characteristics in common with the guidelines listed in the SAFETEA-LU legislation. Section 408 of that legislation gives the following descriptions on the roles and responsibilities of state TRCCs:

**Membership.**

*In order to satisfy the TRCC requirement for a grant, SAFETEA-LU legislation provides that a TRCC must have a multidisciplinary membership that includes, among others, the managers, collectors, and users of traffic records systems, public health systems, and injury control data systems.*

**Strategic Planning Authority.**

*The TRCC must have the authority to approve the State's Strategic Plan for Traffic Records Improvement.*

**Inclusive membership**

*The TRCC includes representatives from highway safety, highway infrastructure, law enforcement, adjudication, public health, injury control, and motor carrier agencies and organizations.*

**Authority**

*The TRCC has authority to review any of the state's highway safety data and traffic records systems and to review changes to such systems before the changes are implemented.*

**Function**

*The TRCC provides a forum to discuss highway safety data and traffic records issues and report on any such issues to the agencies and organizations in the state that create, maintain, and use highway safety data and traffic records.*

**Coordination**

*The TRCC considers and coordinates the views of the organizations in the state involved in the administration, collection, and use of the highway safety data and traffic records system.*

	<p><b>Promotion</b>  <i>The TRCC represents the interests of the agencies and organizations within the traffic records system to outside organizations.</i></p> <p><b>Technology</b>  <i>The TRCC reviews and evaluates new technologies to keep highway safety data and traffic records systems up-to-date.</i></p> <p>To ensure representative participation, the TRCC membership and mandate needs to be reviewed now, and periodically in the future. The TRCC also needs to be more involved in identifying and promoting new technologies to improve data collection and data access.</p> <p>One new responsibility of the TRCC in Illinois will be to keep this strategic plan up to date. In addition, formally vesting the TRCC with the authority to review quality control measurements for system components and charging the group with, at a minimum, an advisory role to the lead agencies, will further establish the requisite authority.</p> <p>Where the TRCC will face the biggest challenges, and perhaps be most effective in the long run, is in implementing the strategies for improving crash reporting to bring Illinois' system more in line with current practices in the nation.</p>
<i>Objective</i>	To strengthen the TRCC as the advisory body for management, improvement, and promotion of traffic records systems and data-driven decision-making in Illinois.
<i>General Approach</i>	The recommended approach to meet this objective addresses the first recommendation in the 2006 Traffic Records Assessment. Included under this heading are actions aimed at ensuring that the committee is representative of the traffic safety community/stakeholders and that the group has the authority to act as outlined in the SAFETEA-LU legislation.
<i>Steps</i>	Step One. Strengthen the Traffic Records Coordinating Committee.

**PHASE 1: Strengthen the Structure for Guiding Improvements to the Traffic Records System and Highway Safety Decision-Making.**

**Step One: Strengthen the traffic records coordinating committee.**

<p>Immediate Actions:</p>	<p>Review and approve the Strategic Plan.</p> <p>Establish an executive level within the TRCC from among the leadership of key stakeholder agencies.</p> <p>Review the mission and membership of the TRCC.</p> <p>Ensure that Memoranda of Understanding (MOU) are in line with SAFETEA-LU guidelines.</p>
<p>Near Term Actions:</p>	<p>Establish a quality control measurement review process to be part of regular TRCC meetings and covering all components of the traffic records system.</p> <p>Establish a method for obtaining input from policy-level stakeholders (including legislators).</p>
<p>Long Term Actions:</p>	<p>Periodically update the mission and membership of the TRCC.</p>

## PHASE 2: Improve Data Capture, Storage, and Linkage.

*Rationale:  
The need for  
traffic records  
system  
improvements*

This section of the plan deals with specific system component and functional recommendations from the 2006 Traffic Records Assessment and from the summary of the system status found earlier in this strategic plan. This section goes beyond the strict requirement of Section 408 of SAFETEA-LU in that it also addresses the footnote regarding GAO's concerns that strategic plans should address the recommendations of the state's most recent traffic records assessment. This is not stated in the legislation as an absolute requirement, but it is a feature added to this plan in order to meet the intent of the footnoted material as well.

The recommendations from the 2006 traffic records assessment are incorporated into this strategic plan in the form of steps and the action items within each step. The system-specific recommendations have been retained and are combined under more general headings where appropriate. More than in any other section of this plan, the steps in this section can happen simultaneously and largely independent of each other since the various systems are under different agency or department control. It should be noted, however, that there are many interactions between these systems and that the efficiencies to be gained are significant in, for example, upgrading software for law enforcement, courts, and roadway functions in a coordinated fashion.

It is crucial that the TRCC be involved in serving as a forum to discuss multiple users' needs and in providing overall monitoring and coordination of the improvement efforts. It is assumed, moreover, that the lead departments or agencies for each system are working with and through the TRCC to help identify those who have a stake in the improvement efforts and furthermore, will use that group as a source of on-going information and assistance for system design, development, and testing efforts.

Additionally, some of the recommendations go beyond changes to systems to address barriers that must be dealt with at a level beyond the control of agencies or the TRCC. The role of TRCC is especially important here in supporting these efforts through promotion, encouragement, and coordinated action.

<i>Objective</i>	The objective of this section of the plan is to incorporate all necessary system improvement efforts and provide a logical sequence for their completion.
<i>General Approach</i>	<p>The approach to accomplishing this objective is to sequence the steps for each of the planned and/or proposed system improvement efforts and then to show the necessary links between these efforts through use of the action item table and PERT charts. The relevant recommendations from the 2006 assessment that are incorporated into this phase of the plan relate to:</p> <ul style="list-style-type: none"> <li>• Improvements needed to specific components of the traffic records system (crash, roadway, driver, vehicle, court, medical, etc.).</li> <li>• Improvements to linkages between components of the traffic records system.</li> <li>• Improvements in electronic data sharing and use of technology for data collection and management.</li> </ul>
<i>Steps</i>	<p>Step One. Improve crash reporting and processing.</p> <p>Step Two. Improve citation data collection, adjudication, and driver history processing</p> <p>Step Three. Improve roadway information processing.</p> <p>Step Four. Improve medical information processing.</p> <p>Step Five. Improve data linkage and sharing.</p>

## PHASE 2: Improve Data Capture, Storage, and Linkage.

### Step One: Improve crash reporting and processing.

<p>Immediate Actions:</p>	<p>Implement the CIS revision to support electronic transfer and image creation from reports created using MCR.</p> <p>Ensure that CIS can accept electronic data from any source capable of supplying edit-checked data electronically in a standard format.</p> <p>Establish a TRCC mechanism for providing advice to law enforcement agencies regarding implementation of local RMS and field data collection tools and systems.</p>
<p>Near Term Actions:</p>	<p>Invest in automation for Chicago Police Department to reduce the number of paper crash reports processed manually at IDOT.</p> <p>Consider replacing the current CIS-limited multi-step data entry process with a more streamlined process, perhaps using MCR as the data entry “front end.”</p> <p>Create a flexible data export feature for MCR and CIS.</p> <p>Develop a set of standard quality control metrics for reporting crash data quality on a routine, repeatable basis periodically throughout the year.</p> <p>Use the data quality metrics to provide feedback to law enforcement agencies and to influence future form revision training.</p> <p>Document the end-of-year quality checking process, and produce a standard set of warnings regarding known caveats and limitations in the crash dataset.</p>

<p>Long Term Actions:</p>	<p>Integrate MCR and CIS to be a seamless system instead of two separate development and maintenance activities.</p> <p>Migrate MCR to a .NET framework.</p> <p>Expand the MCR software to support other reporting needs of law enforcement agencies.</p>
-------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## PHASE 2: Improve Data Capture, Storage, and Linkage.

### Step Two: Improve citation data collection, adjudication, and driver history processing.

<p>Immediate Actions:</p>	<p>Record the driver histories from previous states of record on non-commercial drivers (as required for commercial driver records).</p> <p>Promote and assist all local police agencies in electronically generating citations and reporting them to the courts and to any future statewide citation tracking system.</p> <p>Improve the methodology for identifying drivers to ensure that records corresponding to the same individual are properly posted.</p> <p>Implement biometrics (facial recognition, fingerprinting) to ensure that drivers' records can be tied to a single individual.</p>
<p>Near Term Actions:</p>	<p>Promote and assist local courts without computerized case management systems and/or electronic conviction filing, in obtaining computerized management systems and in electronically filing convictions with the SOS office.</p> <p>Promote and assist all local courts in electronically reporting <b>all</b> dispositions to any future statewide citation tracking system – convictions as well as acquittals, dismissals, and other non-conviction cases, etc.</p> <p>Establish a statewide citation tracking system.</p>
<p>Long Term Actions:</p>	<p>Move the process for identifying crash-involved uninsured motorists to the Secretary of State.</p>

## PHASE 2: Improve Data Capture, Storage, and Linkage.

### Step Three: Improve roadway information processing.

Immediate Actions:	<p>Resolve the issue of the incompatibility between HALIS and other roadway files with CIS.</p> <p>Accelerate the deployment and use of Global Positioning System (GPS) devices for the capture of location data by latitude/longitude coordinates for roadway data.</p>
Near Term Actions:	<p>Accelerate the development and use of the GIS as the IDOT enterprise system for all road and road related information systems.</p> <p>Replace the LARS reporting process with more advanced reporting tools based on the GIS.</p>
Long Term Actions:	None

## PHASE 2: Improve Data Capture, Storage, and Linkage.

### Step Four: Improve medical information processing.

<p>Immediate Actions:</p>	<p>Move forward with a total electronic data submission process for EMS run reports.</p> <p>Provide incentives to the EMS providers for submission of the required data set.</p> <p>Develop and implement a data quality report for the state EMS and Trauma office.</p>
<p>Near Term Actions:</p>	<p>Develop and implement a data quality report that can be sent to the EMS providers and Trauma Centers upon processing their data submission.</p> <p>Develop and implement an annual data cleansing process (removal of duplicates, incomplete data fields, invalid data variables, etc.).</p> <p>Refine the CODES Board of Directors to include <u>only</u> the data owners. This will encourage open honest discussion of data quality issues and data linking processes.</p> <p>Establish a CODES Advisory Group (data users) that can provide direction and vision for the use of the linked CODES data.</p>
<p>Long Term Actions:</p>	<p>None</p>

## PHASE 2: Improve Data Capture, Storage, and Linkage.

### Step Five: Improve data linkage and sharing.

Immediate Actions:	Standardize recording of names and addresses in the driver and vehicle databases.  Link the driver, crash, and vehicle files to support data entry and validation.
Near Term Actions:	Develop standards to support electronic transfer of crash, citation, roadway, driver and vehicle information.
Long Term Actions:	None

### **PHASE 3: Improve the Use of Traffic Records for Highway Safety Decision-Making.**

<p><i>Rationale: Need for Improved Data- Driven Highway Safety Decision- Making</i></p>	<p>Several contemporary efforts to improve highway safety decision-making (including SAFETEA-LU legislation and the ongoing development of a <i>Highway Safety Manual</i>) point to the central role and proper use of data. Illinois has a strong tradition of analytic support for decision-making including expert-level statistical data analysis and systems designed specifically for local highway safety analysis. There are gaps in the resources available to users, however, in terms of both ease-of-use and access to data or individual reports.</p> <p>One of the key ways to support users of traffic records is to simplify the task of finding data in the first place. A resource that gives users a list of available data sources, and contacts – a system inventory – is recommended in the 2006 Traffic Records Assessment. Some consideration is also recommended to developing a data clearinghouse based on a concept presented by the IDOT Information Technology Division (ITD). The ITD concept was aimed mainly at an IDOT enterprise-wide warehouse. Expanding that concept to all traffic records components would serve the broader user community and help to better integrate engineering and behavior-related countermeasure planning and evaluation. Giving users access to data and analytic tools helps to promote data-driven decision-making and also builds a constituency for further improvements to the data and the systems.</p>
<p><i>Objective</i></p>	<p>The objective of this phase of the plan is to develop the means for improving decision-making and establishing the link between better data and improved highway and traffic safety.</p>

<p><i>General Approach</i></p>	<p>The approach to meet the objective of improved decision-making is by meeting the information needs of decision makers. These needs include knowledge of where to obtain the data, how best to use the data, and how to measure the outcomes of their decisions. The steps in this section of the plan address each of these critical needs and specifically address the recommendations in the 2006 Traffic Records Assessment related to:</p> <ul style="list-style-type: none"> <li>• Availability and access to data and analytic resources.</li> <li>• Training for collectors and users of the data.</li> </ul>
<p><i>Steps</i></p>	<p>Step One. Create a traffic records clearinghouse</p> <p>Step Two. Train users and collectors of traffic records information.</p>

## PHASE 3: Improve the Use of Traffic Records for Highway Safety Decision-Making.

### Step One: Create a traffic records clearinghouse.

Immediate Actions:	<p>Task the TRCC to coordinate development of the traffic records clearinghouse.</p> <p>Create an inventory of all traffic records systems and resources in the state, including local systems.</p> <p>Create and publish a catalog of available highway safety reports and resources.</p>
Near Term Actions:	<p>Expand the IDOT ITD data warehouse concept to become a full traffic records clearinghouse.</p> <p>Produce statistical reports and make them available through the clearinghouse.</p> <p>Provide data analysis support to users through the clearinghouse.</p> <p>Provide data analysis and extraction tools to meet users' needs.</p>
Long Term Actions:	<p>Periodically update the system inventory.</p> <p>Periodically update the resource catalog.</p>

**PHASE 3: Improve the Use of Traffic Records for Highway Safety Decision-Making.**

**Step Two: Train users and collectors of traffic records information.**

<p>Immediate Actions:</p>	<p>Continue to conduct training sessions for the State Police and local law enforcement agencies on the completion of the crash report form.</p> <p>Conduct a training needs assessment for key target groups in law enforcement, courts, engineering, and medical areas related to data quality improvement for data collectors.</p> <p>Conduct a training needs assessment for users of the traffic records data.</p>
<p>Near Term Actions:</p>	<p>Develop an electronic training method to provide short courses addressing critical data quality problems.</p> <p>Develop training on use of traffic records for quantitative decision-making.</p> <p>Provide training on use of available analytic tools and resources.</p>
<p>Long Term Actions:</p>	<p>Periodically update the training needs assessments.</p> <p>Periodically update course offerings and content.</p>

### ACTION ITEM TABLE

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>PHASE ONE: Strengthen the Structure for Guiding Improvements to the Traffic Records System and Highway Safety Decision-Making.</b>						
<b>Step One: Strengthen the traffic records coordinating committee.</b>						
1.1.1	Review and approve the strategic plan.		None			Endorsement of the plan
1.1.2	Establish an executive level within the TRCC from the leadership of key stakeholder agencies.		1.1.1			Executive TRCC impaneled
1.1.3	Review the mission and membership of the TRCC.		1.1.2			# members, # member agencies
1.1.4	Ensure that Memoranda of Understanding (MOU) are in line with SAFETEA-LU guidelines		1.1.3			Updated MOUs, as needed

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step One: Strengthen the traffic records coordinating committee.</b>						
1.1.5	Establish a quality control measurement review process to be part of regular TRCC meetings and covering all components of the traffic records system.		1.1.4			# metrics for each system
1.1.6	Establish a method for obtaining input from policy-level stakeholders (including legislators).		1.1.5			n/a
1.1.7	Periodically update the mission and membership of the TRCC.		Ongoing			n/a

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>PHASE TWO: Improve Data Capture, Storage, and Linkage.</b>						
<b>Step One: Improve crash reporting and processing.</b>						
2.1.1	Implement the CIS revision to support electronic transfer and image creation from reports created using MCR.		Completion of Phase 1 Step 1			% reports received electronically, timeliness of reports, accuracy of reports
2.1.2	Ensure that CIS can accept electronic data from any source capable of supplying edit-checked data electronically in a standard format.		2.1.1			% reports received electronically, timeliness of reports, accuracy of reports
2.1.3	Establish a TRCC mechanism for providing advice to law enforcement agencies regarding implementation of RMS and field data collection systems.		Completion of Phase 1 Step 1			# agencies pursuing electronic data transfer to CIS
2.1.4	Invest in automation for Chicago Police Department to reduce the number of paper crash reports processed manually at IDOT.		2.1.2 & 2.1.3			% reports received electronically, timeliness of reports, accuracy of reports

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step One: Improve crash reporting and processing.</b>						
2.1.5	Consider replacing the current CIS-limited multi-step data entry process with a more streamlined process, perhaps using MCR as the data entry "front end."		Completion of Phase 1 Step 1			# days from receipt of paper crash report to final data entry
2.1.6	Create a flexible data export feature for MCR and CIS.		2.1.5			Availability of extracts; # extracts created
2.1.7	Develop a set of standard quality control metrics for reporting crash data quality on a routine, repeatable basis periodically throughout the year.		2.1.6			# metrics
2.1.8	Use the data quality metrics to provide feedback to law enforcement agencies and to influence future form revision training.		2.1.7			Frequency of errors; # agencies contacted; % improvement

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step One: Improve crash reporting and processing.</b>						
2.1.9	Document the end-of-year quality checking process, and produce a standard set of warnings regarding known caveats and limitations in the crash dataset.		2.1.8			Production of end of year QC report
2.1.10	Migrate MCR to a .NET framework		Long Term			n/a
2.1.11	Integrate MCR and CIS to be a seamless system instead of two separate development and maintenance activities.		Long Term			n/a
2.1.12	Expand the MCR software to support other reporting needs of law enforcement agencies.		Long Term			n/a

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Two: Improve citation data collection, adjudication, and driver history processing</b>						
2.2.1	Record the driver histories from previous states of record on non-commercial drivers (as required for commercial driver records).		Completion of Phase 1 Step 1			# driver records collected
2.2.2	Promote and assist all local police agencies in electronically generating citations and reporting them to the courts and to any future statewide citation tracking system.		Completion of Phase 1 Step 1			# & % of citations collected electronically
2.2.3	Improve the methodology for identifying drivers to ensure that records corresponding to the same individual are properly posted.		2.2.1 & 2.2.2			# drivers in court with multiple records
2.2.4	Implement biometrics (facial recognition, fingerprinting) to ensure that drivers' records can be tied to a single individual.		2.2.3			% driver records with biometric data; # drivers with multiple records

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Two: Improve citation data collection, adjudication, and driver history processing</b>						
2.2.5	Promote and assist local courts without computerized case management systems and/or electronic conviction filing, in obtaining computerized management systems and in electronically filing convictions with the SOS office.		2.2.4			# and % of convictions received electronically; timeliness of conviction data
2.2.6	Promote and assist all local courts in electronically reporting <b>all</b> dispositions to any future statewide citation tracking system – convictions as well as acquittals, dismissals, and other non-conviction cases, etc.		2.2.5			# and % of dispositions reported electronically, timeliness of disposition data
2.2.7	Establish a statewide citation tracking system.		2.2.6			Creation of system
2.2.8	Move the process for identifying crash-involved uninsured motorists to the Secretary of State.		Long Term			n/a

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Three: Improve roadway information processing.</b>						
2.3.1	Resolve the issue of the incompatibility between HALIS and other roadway files with CIS.		Completion of Phase 1 Step 1			Situation resolved
2.3.2	Accelerate the deployment and use of Global Positioning System (GPS) devices for the capture of location data by latitude/longitude coordinates for roadway data.		2.3.1			Accuracy of roadway location information; % locations reported using GPS coordinates
2.3.3	Accelerate the development and use of the GIS as the IDOT enterprise system for all road and road related information systems.		2.3.2			# of roadway systems accessible through IDOT GIS
2.3.4	Replace the LARS reporting process with more advanced reporting tools based on the GIS.		2.3.3			# users on LARS; # local users of GIS

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Four: Improve medical information processing</b>						
2.4.1	Move forward with a total electronic data submission process for EMS run reports.		Completion of Phase 1 Step 1			# and % of EMS run reports submitted electronically; timeliness of submissions
2.4.2	Provide incentives to the EMS providers for submission of the required data set.		2.4.1			# and % of EMS run reports submitted electronically; timeliness of submissions
2.4.3	Develop and implement a data quality report for the state EMS and Trauma office.		2.4.2			# metrics; improvement over time
2.4.4	Develop and implement a data quality report that can be sent to the EMS providers and Trauma Centers upon processing their data submission.		2.4.3			# errors; improvement over time
2.4.5	Develop and implement an annual data cleansing process (removal of duplicates, incomplete data fields, invalid data variables, etc.).		2.4.3			# errors

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Four: Improve medical information processing</b>						
2.4.6	Refine the CODES Board of Directors to include <u>only</u> the data owners. This will encourage open honest discussion of data quality issues and data linking processes.		Completion of Phase 1 Step 1			n/a
2.4.7	Establish a CODES Advisory Group (data users) that can provide direction and vision for the use of the linked CODES data.		2.4.6			Establishment of Advisory Group; # members

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Five: Improve data linkage and sharing</b>						
2.5.1	Standardize recording of names and addresses in the driver and vehicle databases.		Completion of Phase 1 Step 1			% records with matching name/address
2.5.2	Link the driver, crash and vehicle files to support data entry and validation.		2.5.1			% records linked
2.5.3	Develop standards to support electronic transfer of crash, citation, roadway, driver and vehicle information.		2.5.1			Standards developed

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>PHASE THREE: Improve the Use of Traffic Records for Highway Safety Decision-Making.</b>						
<b>Step One: Create a traffic records clearinghouse.</b>						
3.1.1	Task the TRCC to coordinate development of the traffic records clearinghouse.		Completion of Phase 1 Step 1			n/a
3.1.2	Create an inventory of all traffic records systems and resources in the state, including local systems.		3.1.1			# system components & resources included
3.1.3	Create and publish a catalog of available highway safety reports and resources.		3.1.1			# reports included
3.1.4	Expand the IDOT ITD data warehouse concept to become a full traffic records clearinghouse.		3.1.2 & 3.1.3			# systems and agencies participating
3.1.5	Produce statistical reports and make them available through the clearinghouse.		3.1.4			# reports available

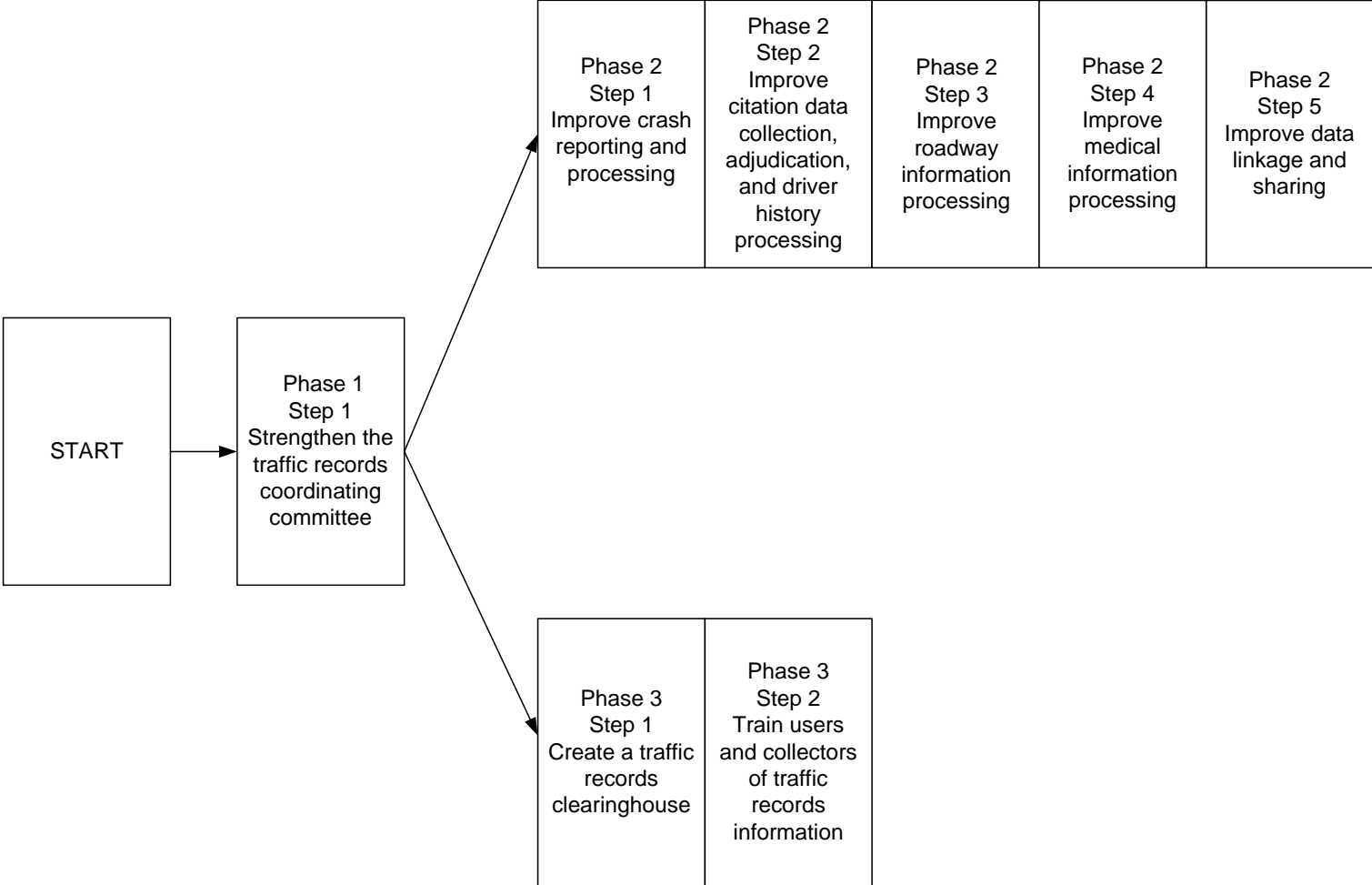
Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step One: Create a traffic records clearinghouse.</b>						
3.1.6	Provide data analysis support to users through the clearinghouse.		3.1.5			# analyses conducted
3.1.7	Provide data analysis and extraction tools to meet users' needs.		3.1.6			# users; # analyses conducted & extracts produced
3.1.8	Periodically update the system inventory.		Ongoing			n/a
3.1.9	Periodically update the resource catalog.		Ongoing			n/a

Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Two: Train users and collectors of traffic records information.</b>						
3.2.1	Continue to conduct training sessions for the State Police and local law enforcement agencies on the completion of the crash report form.		Completion of Phase 1 Step 1			# sessions; # participants; # participating agencies; Crash report error rate
3.2.2	Conduct a training needs assessment for key target groups in law enforcement, courts, engineering, and medical areas related to data quality improvement for data collectors.		3.2.1			Completion of needs assessment report
3.2.3	Conduct a training needs assessment for users of the traffic records data.		3.2.1			Completion of needs assessment report
3.2.4	Develop an electronic training method to provide short courses addressing critical data quality problems.		3.2.2 & 3.2.3			# participants; data quality impact

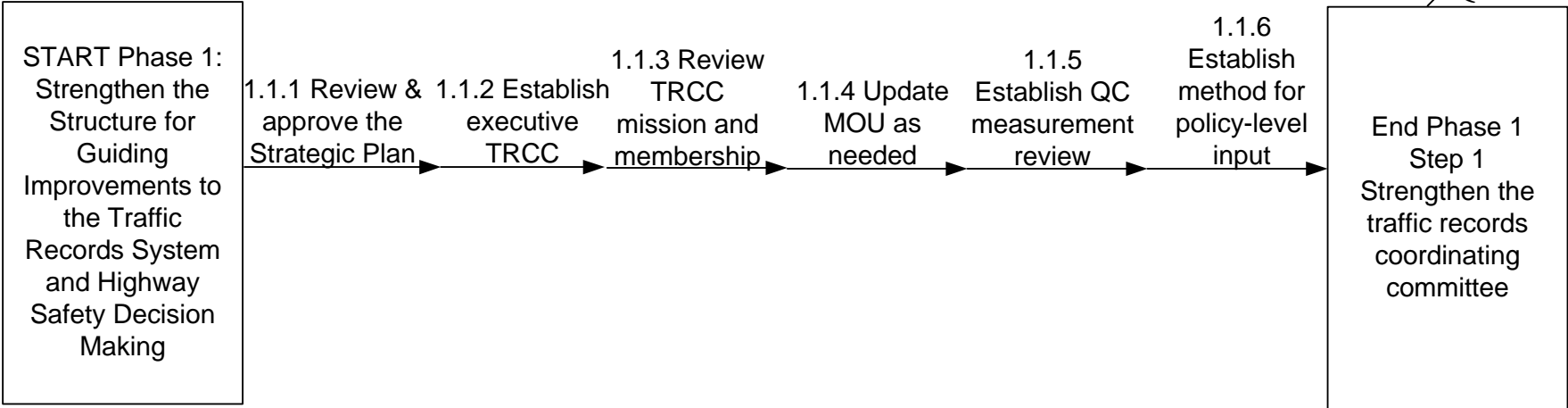
Item #	Action Item	Responsibility	Dependencies	Completion Date	Status	Performance Measure
<b>Step Two: Train users and collectors of traffic records information.</b>						
3.2.5	Develop training on use of traffic records for quantitative decision-making.		3.2.4			# participants
3.2.6	Provide training on use of available analytic tools and resources.		3.2.5			# participants; # users of tools
3.2.7	Periodically update the training needs assessments.		Ongoing			n/a
3.2.8	Periodically update course offerings and content		Ongoing			n/a

# PERT CHARTS

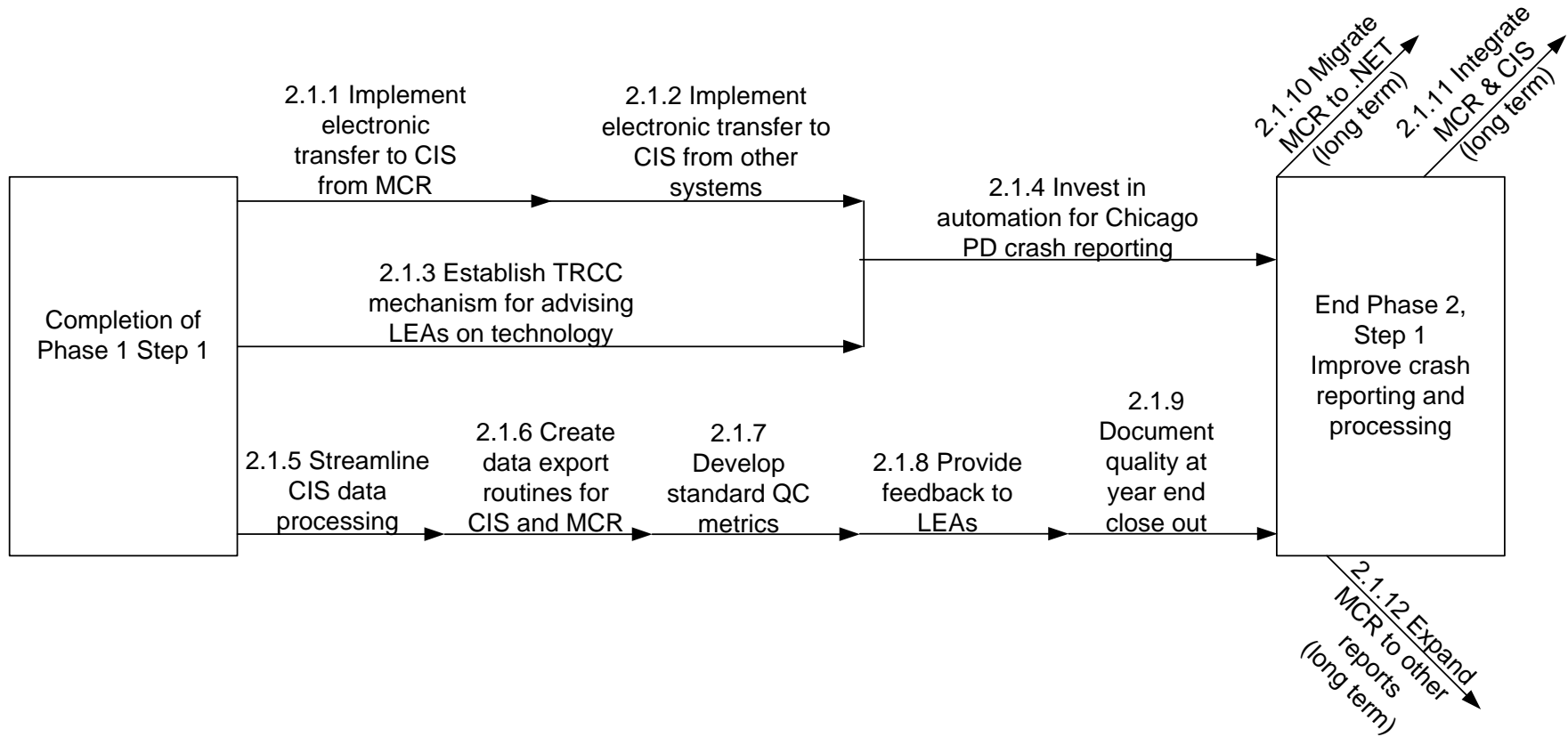
## Overview of Illinois Strategic Plan Elements and Dependencies Among Phases of the Plan



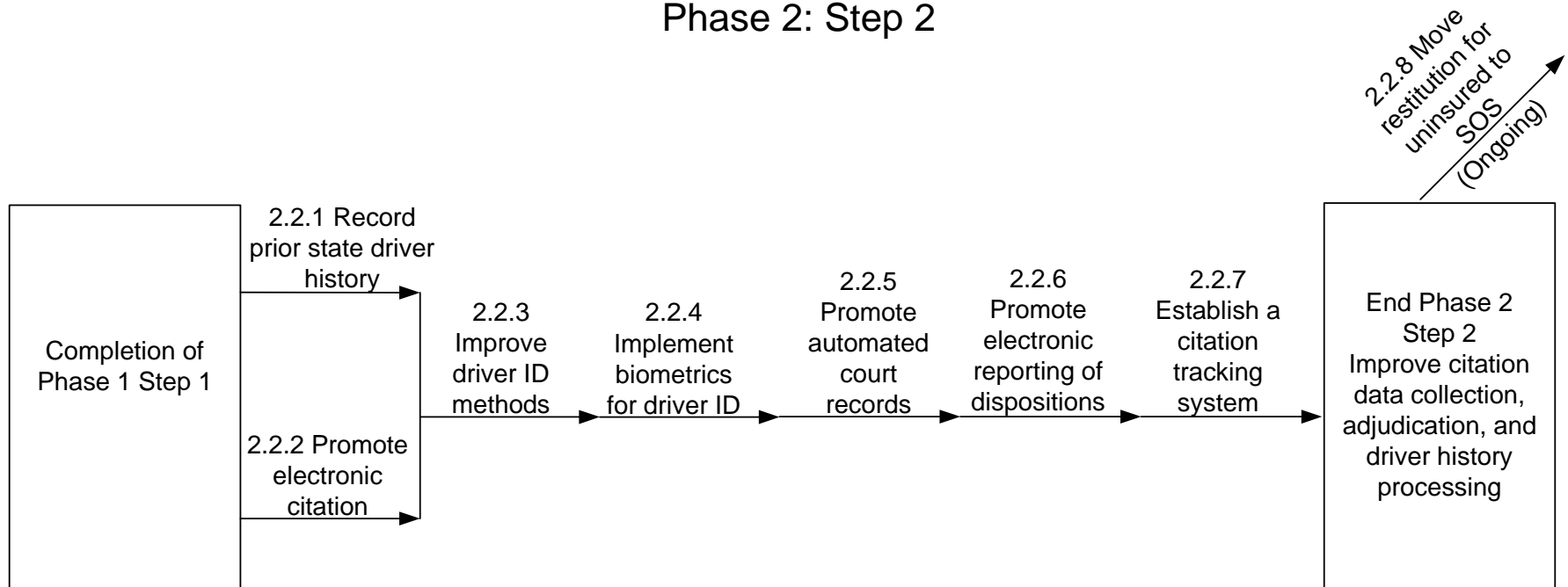
### Phase 1: Step 1



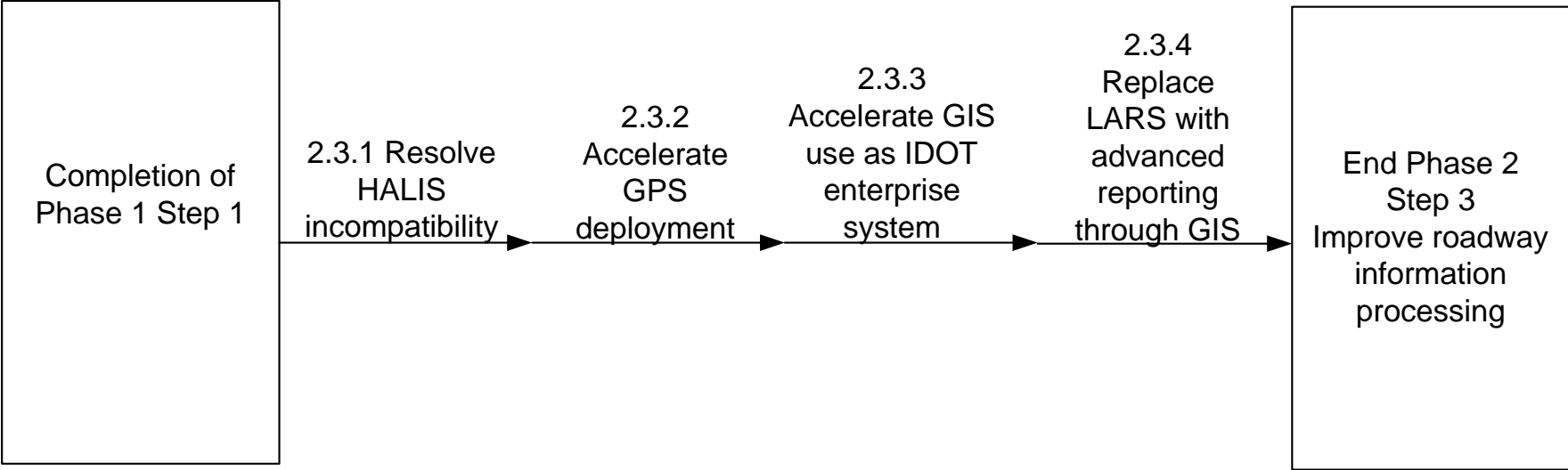
## Phase 2: Step 1



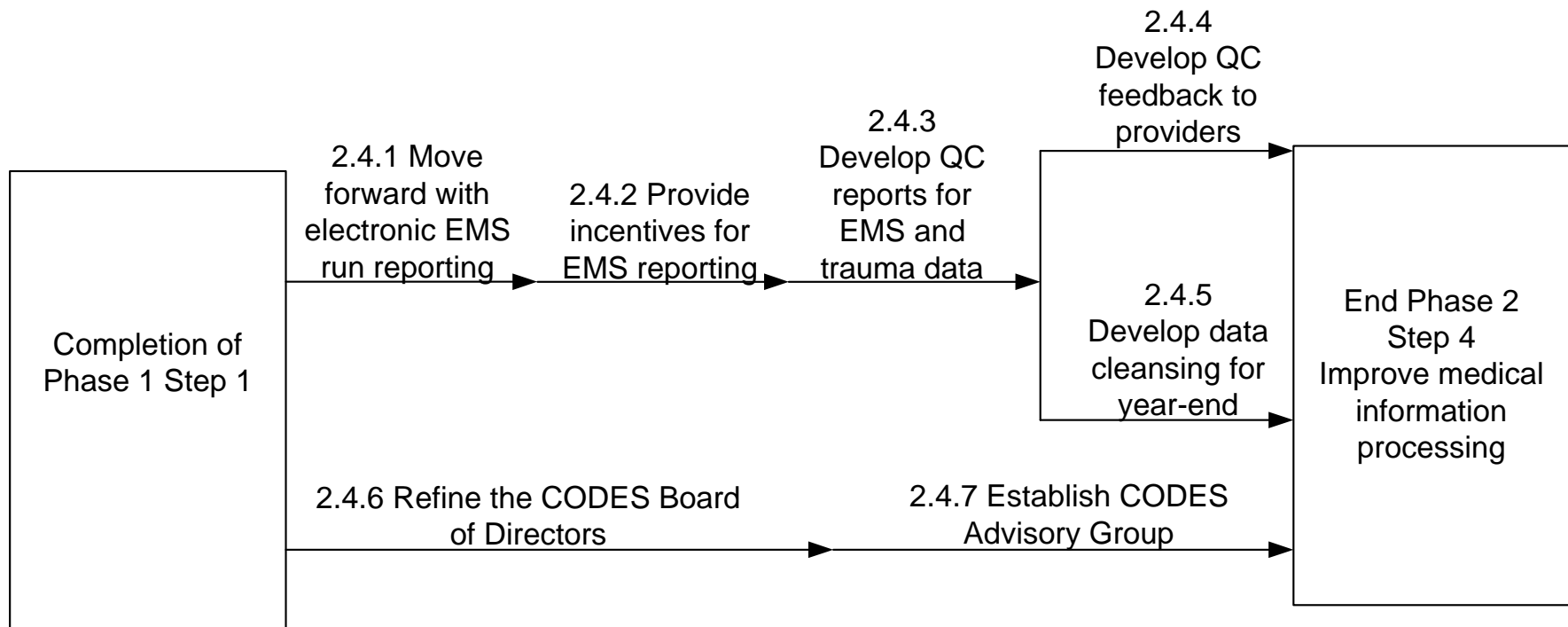
## Phase 2: Step 2



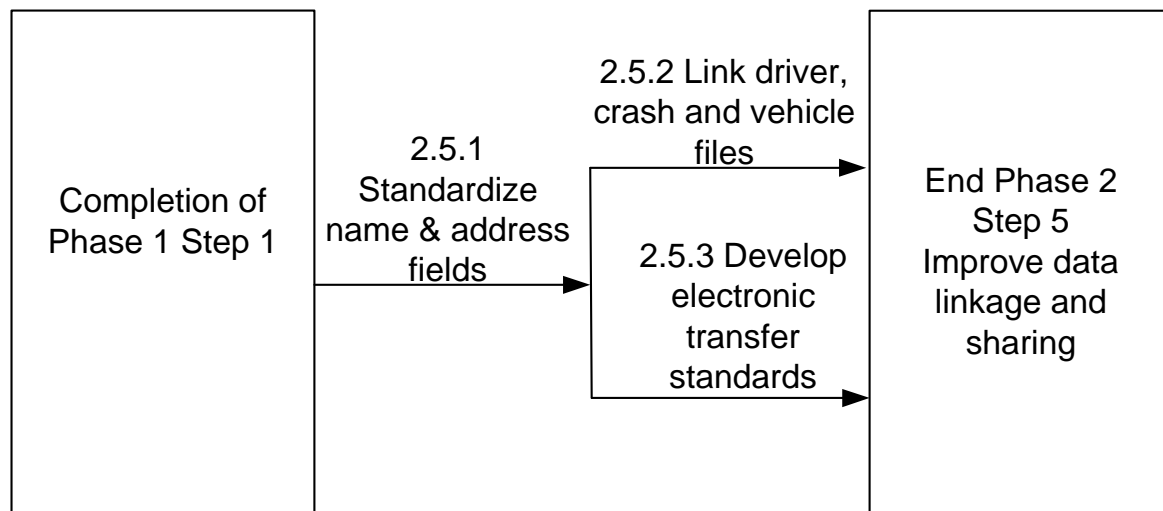
# Phase 2: Step 3



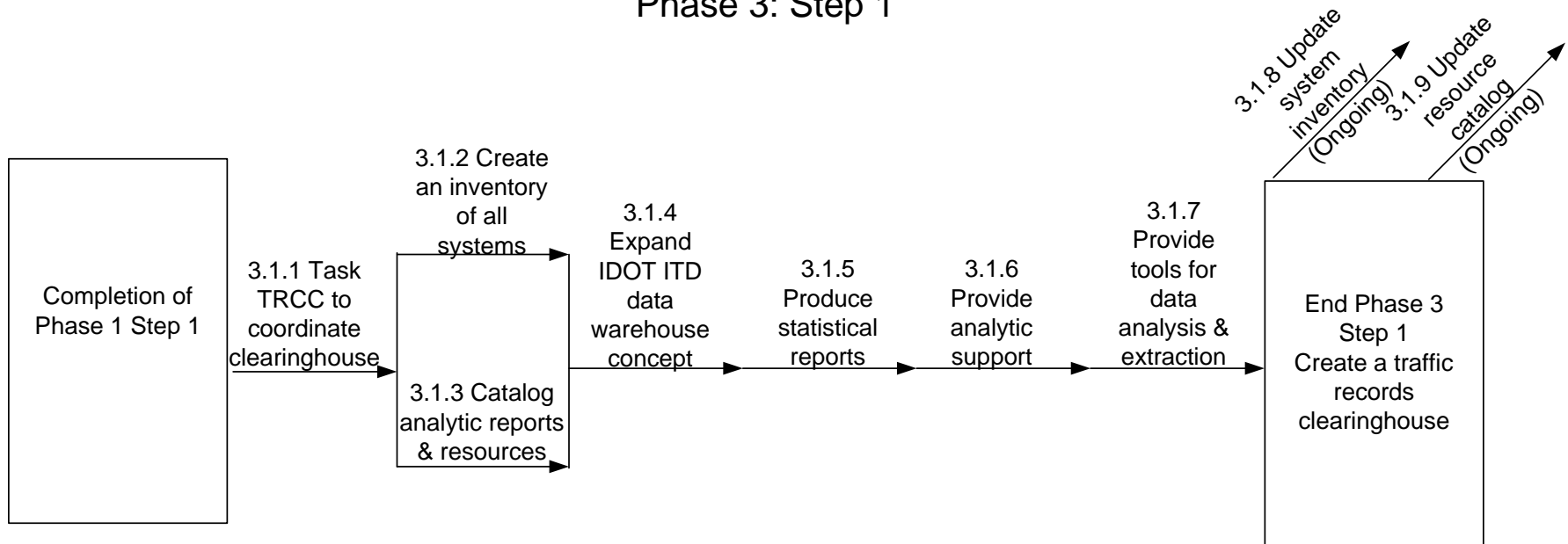
## Phase 2: Step 4



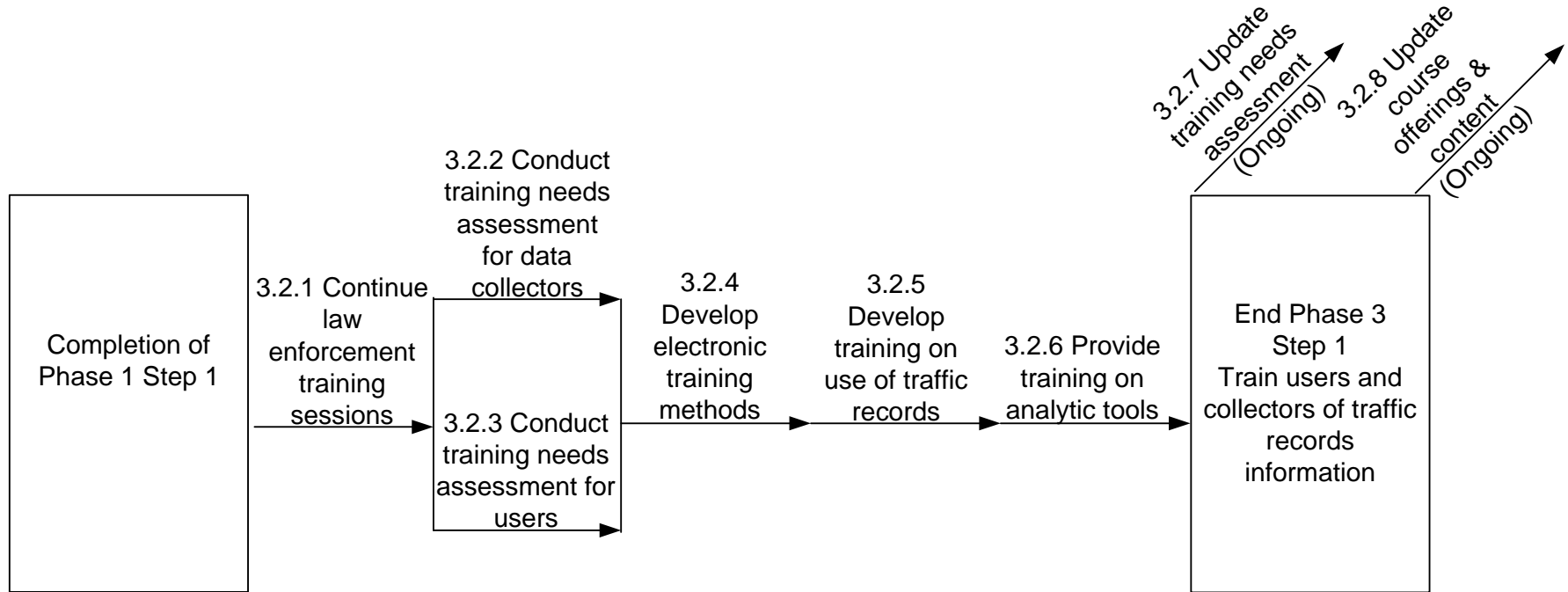
## Phase 2: Step 5



### Phase 3: Step 1



## Phase 3: Step 2



## GRANT FUNDS TRACKING

Section 408 of the SAFETEA-LU legislation calls on states to link their grant funding to their strategic planning efforts. The following table provides an example of one method for TRCC to report the link between grant programs for safety planning and specific elements of the *Strategic Plan for Traffic Records Improvement*. The grant is identified by ID name, the name of the agency, the dollar amount, start and end dates, and, in the final two columns, the strategic initiatives and a description of how the grant relates to them.

The strategic initiatives are, in this case, the same numbers that appear in the Action Item Table and the PERT charts for this plan. This table has the advantage of being easy to update and share with NHTSA without having to make changes to the larger Action Item Table or to the Strategic Plan document itself. This table, or other formats for this information, could then be forwarded to NHTSA as part of required reports for the traffic safety grants program.

Grant ID	Grantee	Dollar Amount	Start Date	End Date	Strategic Initiative	Relationship to Strategic Initiative
Sample 1	Chicago Police Department	\$ 150,000	Xx/xx/2006	Xx/xx/2006	2.1.4	This grant is for purchase of laptops for 1 <sup>st</sup> year implementation of MCR at Chicago PD.
Sample 2	IDOT ITD	\$ 100,000	Xx/xx/2006	Xx/xx/2006	2.1.1, 2.1.2, 2.1.4, 2.1.5, 2.1.6, 2.1.7	This grant is for IDOT ITD support of CIS and MCR improvement initiatives in the 1 <sup>st</sup> year, as well as support of the MCR implementation at Chicago PD.

## APPENDIX A. STRATEGIC PLANNING PRIMER

<p><i>Purpose of Strategic Planning</i></p>	<p>The purpose of this strategic plan is to guide Illinois's traffic records organizations, and especially the Traffic Records Coordinating Committee and the IDOT Division of Traffic Safety, in fulfilling its vision of what the traffic records system should be. Strategic planning is characterized by two attributes. First, it is continuous. Many organizations that fall short in strategic planning do so because they treat it as a single activity, not a process. The process of strategic planning is as important as the plan itself.</p> <p>Second, strategic planning must translate the desired future state (vision) into reality, including an organizational structure, operating budget, and resource decisions. Illinois's traffic records organization will have to take time to define its vision, communicate its vision, relate its activities to this vision, measure its progress in achieving this vision, and identify changes in its behavior that must be accomplished to maintain this vision. It is this activity that will prepare the organization for the future and permit them to act in advance of events that impinge on them rather than be driven by them in a direction they do not wish to proceed.</p>
<p><i>Strategic Planning builds interagency coordination</i></p>	<p><b>Shared Responsibility</b> -- The responsibility for developing and maintaining traffic records information that supports Illinois's traffic safety mission is shared among many organizations and literally hundreds of individuals. Without a coordinated process of strategic planning, these organizations and individuals may take actions that inhibit the state's ability to manage its traffic records systems in an efficient and effective manner. Simple decisions to add or delete specific information items require careful planning and consideration if the traffic records system is to remain viable. This plan offers a means by which these decisions may be effected in a coordinated way.</p> <p>This strategic plan focuses on the role of the TRCC in promoting a system-wide approach to traffic records and its role in helping other responsible agencies move forward. It is explicitly recognized that to be truly effective, the TRCC must work with and through their members to achieve mutually agreed upon goals.</p>

	<p>This cannot happen by command or even with an official sanction. Nor can it happen if the TRCC is not acknowledged as the leaders in the traffic records community in the state. Defining the active and facilitative roles of the TRCC is, therefore, one of the primary uses of this planning document.</p>
<p><i>Strategic Planning provides continuity</i></p>	<p><b>Leadership Changes</b> -- Changes in state and local leadership affect the direction and magnitude of transportation safety programs, particularly those involving traffic records. These changes can have profound effects on the utility of this information and ultimately, the success of efforts to improve safety. An active strategic planning process will give Illinois's traffic records organization a buffer against these changes and a vehicle for anticipating and responding to them in a way that minimizes any adverse impact on the traffic records system.</p> <p>This plan is written to explicitly recognize the work that must take place in the future in order to not only implement portions of the plan, but to make the plan a vital and lasting contribution to the traffic safety work of stakeholders in Illinois. Having a plan is only the first step. Continuity can only be achieved by working to promote, implement, and revise the plan with the explicit cooperation of every agency.</p>
<p><i>Strategic Planning helps build cost-effective systems</i></p>	<p><b>Limited Resources</b> -- Traffic records systems are expensive to maintain, expensive to change, and expensive to use. The financial, technical, and human resources required to operate these systems are substantial. Without careful planning, upkeep of these systems can easily become a burden to state and local governments. The result is invariably a reduction in content and quality that further erode the benefits of the systems. Systematic planning for these systems will help Illinois's state and local government agencies maximize the benefits and minimize the costs of the traffic records system and its components.</p>
<p><i>Strategic Planning helps build systems that support analysis</i></p>	<p><b>Measurement Limitations</b> -- It is often difficult to measure accurately the effect that any particular program has on safety. This is particularly true of when objectives are to modify driver behavior (frequently the purpose of many state and local traffic safety initiatives).</p>

	<p>It is the combined impact of many effective programs that produce the measurable benefits that will ultimately be reflected in substantial decreases in deaths and injuries in Illinois and nationwide. These combined effects produce significant benefits only because the socio-economic consequences of motor vehicle crashes are so great that eliminating relatively few crashes will result in significant economic and societal savings.</p> <p>The difficulties of measuring impacts of individual programs, however, require that programmatic decisions be fully supported by information that accurately defines problems and supports the evaluation of programs to alleviate them. This strategic plan is designed to help Illinois construct such a system.</p>
<p><i>Strategic Planning helps build responsive, flexible systems</i></p>	<p><b>Changing Information Needs</b> -- The information needed by Illinois's state and local agencies to address traffic safety issues is constantly evolving. As individual problems are addressed, new problems emerge. Record systems that once contained all the information needed now frequently lack even the most basic information required to address contemporary traffic safety issues.</p> <p>Strategic planning will allow the state to identify these emerging needs at the earliest point and plan for their effects on the current system structure before affecting change becomes a difficult, if not impossible task.</p>
<p><i>Strategic Planning Process Overview</i></p>	<p>To develop fully its strategic plan, Illinois will need to proceed systematically, beginning with recognizing the existence and then defining the mission of the current traffic records organization, and ultimately assigning action items for specific persons or agencies to complete in accomplishing that mission. It is important to view this as an ongoing process since missions can change, as can the actions that the traffic records organization takes to achieve its mission. The process followed in this plan involves the following steps:</p>

<p><i>First, take stock internally...</i></p>	<p><b>Internal Scan</b> -- Viewing traffic records as a product that is supplied by the agencies involved, it is important to look at the quality of that product. Keep in mind who the customers are, what their needs are, what the systems' strengths and weaknesses are, and be aware of opportunities for improvement and threats to the product's quality or the system's ability to supply that product. In short, take stock of the current situation, the environment in which the system operates, and the current service provided.</p> <p>A detailed assessment of what is right and wrong in Illinois's traffic records system and an awareness of all the people and organizations that have a stake in the system helps to bring a practical focus to the remaining steps in forming the strategic plan. The <i>2006 Traffic Records Assessment Report</i> provides this evaluation along with a set of recommendations for further consideration. The earlier sections of this plan provide a synopsis of this report.</p>
<p><i>...and externally</i></p>	<p><b>External Scan</b> -- Equally important to understanding internal organizational factors is an analysis of the environmental factors that affect the Illinois traffic records system and its stakeholders. A scan of these economic, political, and social factors helps to shape the strategic plan so that it is realistic and can be implemented within the constraints and requirements placed on the system from outside.</p> <p>It is important to realize that the external factors are not static and they must be reviewed periodically for changing impacts on the content and sequencing of actions to be taken under the implementation plan.</p>
<p><i>Develop Mission and Vision Statements</i></p>	<p><b>Mission and Vision Statements</b> -- Mission statements describe the organization as it is today: what it does. Vision statements describe the desired state of the organization and its products: where it is going, what it wants to be. Typically, the mission of traffic records organizations is handed down from executive or legislative branches of the state government in the form of laws, mandates or delegated authority. Vision statements are usually not supplied to organizations from outside.</p>

	<p>It is the job of those involved in traffic records to decide what the organization should become in the future. This strategic plan was developed with the preliminary vision that Illinois wants to “Develop a traffic records system which supports the traffic safety mission of all the users, managers, and collectors of the information.” This vision is purposefully broad enough to encompass whatever final vision is set down by the traffic records community of the state.</p> <p>The remainder of the strategic plan is a road map of how the organization will get from the current state to the future vision.</p>
<p><i>Describe what to do and how to do it</i></p>	<p><b>Goals and Objectives</b> -- Goals and objectives are like the “cities, towns and places of interest” on the road map leading from the current state to the vision. They define where the Illinois traffic records organization is going next and what it has left to accomplish.</p> <p>As such, goals and objectives should be stated in clear operational terms. Goals are specific statements of what the organization is going to do and typically correspond to major “issue areas” that the organization is dealing with. An example of a goal for the traffic records system might be “Solidify the organizational structure for guiding improvements to Illinois’s traffic records system.” Goals state what is going to be done in concrete terms.</p> <p>Objectives are specific statements of how the organization is going to achieve the goals. To continue the example, possible objectives include “Adopt mission and vision statements which support and define the role of Illinois’s traffic records community in guiding improvements to the system.”</p> <p>Objectives should always be written to include a measurable criterion for completion so that the people involved will know with absolute certainty what it will take to finish the job.</p>
<p><i>Assign activities and set deadlines</i></p>	<p><b>Action Assignments and Milestones</b> -- Action assignments and milestones provide the precise route and schedule from the current state to the future vision. Illinois’s traffic records stakeholders need to know if the organization is accomplishing its goals and objectives and, therefore, on track to achieving the vision.</p>

	<p>To do this, specific members of the planning team and other stakeholders must take on specific goals and objectives as their assigned duties and they must discharge those duties in a timely fashion. In order to do this, objectives must be further stated in terms of specific tasks involved in meeting the objective and each must be assigned a due date and responsible party/organization.</p> <p>In order keep track of progress and to assess the impact of delays, Illinois's traffic records organization will need to use a standard planning method and tools (e.g. "Critical Path," Gantt Charts, PERT Charts, etc.). This will ensure that dependencies between tasks are known ahead of time and the schedule takes them into account. Use of standard methodology will also ensure that the plan is understandable to decision makers in the state's executive and legislative branches of government and can be communicated clearly to all members of the traffic records community.</p>
<p><i>Revise the Plan</i></p>	<p><b>Continuous Planning</b> -- The future cannot be known. As the time passes, the plan will need to change in response to factors listed in the section on the role of strategic planning: leadership changes, resource changes, changes in information needs, etc. These changes affect the schedule, at a minimum, but may also affect the organization's objectives, goals, vision, and even its very mission. Periodically (usually annually), Illinois should revisit the planning process by conducting internal audits and environmental scans, and by reviewing the vision. Failure to update the plan is the same as operating without one because changes catch the organization off guard and precipitate a crisis.</p> <p>It is within the stakeholders' power to keep the plan up to date. If they do so, the plan will serve as a guide to future activities and as a means to judge the merits of new proposals. If the plan is allowed to languish or fall into disuse, agencies will once again go their separate ways and miss opportunities to build the best for less.</p>

## APPENDIX B. FOUR BOX ANALYSIS

<p><i>Four Box Analysis</i></p>	<p style="text-align: center;">The Four Box Analysis</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 10px;">High Payoff  Good Opportunity</td> <td style="padding: 10px;">High Payoff  Poor Opportunity</td> </tr> <tr> <td style="padding: 10px;">Low Payoff  Good Opportunity</td> <td style="padding: 10px;">Low Payoff  Poor Opportunity</td> </tr> </table>	High Payoff  Good Opportunity	High Payoff  Poor Opportunity	Low Payoff  Good Opportunity	Low Payoff  Poor Opportunity
High Payoff  Good Opportunity	High Payoff  Poor Opportunity				
Low Payoff  Good Opportunity	Low Payoff  Poor Opportunity				
<p><i>Decision Technique</i></p>	<p>The Four Box Analysis is a method for deciding which issues or problems are worth dealing with. It is used to illustrate the trade-offs between the anticipated benefit of a project or solution and the likelihood of implementing that project or solution.</p> <p>In selecting among potential projects, it is best to choose those that would fall in the upper left hand box in the four-box analysis. These are the ones which have large benefits and also are judged to be implementable (i.e., there is support for them, the cost is low enough, no significant barriers exist to their implementation, etc.).</p> <p>The worst projects would be those that have a low payoff and are not easily implemented. These are in the lower right box in the four-box analysis.</p>				

<p><i>Basic Rules of Thumb</i></p>	<p>Choosing between intermediate projects (those represented by the upper-right and lower-left boxes) is where the strategic decision-making process is most important. Deciding between these two intermediate choices amounts to deciding between high and low risk. It is risky to go after high but difficult to achieve payoffs. It is much less risky to go after low payoffs with a reasonable chance of successful implementation.</p> <p>In deciding between the two intermediate types of choices, it is helpful to remember some basic rules of thumb:</p> <ul style="list-style-type: none"><li>• Try to ensure that you have <i>some</i> successes by selecting more than one project and by selecting at least some low risk projects.</li><li>• Measurable successes are preferable.</li><li>• If you can only do one project, make sure it has a payoff and is reasonably likely to succeed.</li><li>• Joint decision-making is helpful in deciding on the right mix of risks and payoffs.</li></ul>
------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------