

# **NEBRASKA TRAFFIC RECORDS SYSTEM PLAN**

**FY2015 – FY2019**



**Prepared by Nebraska's Traffic Records  
Coordinating Committee**

Revised June 08, 2018

**Table of Contents**

- I. Executive Summary ..... 3
- II. Traffic Records Coordinating Committee ..... 3
  - TRCC Mission ..... 3
  - Traffic Records Priorities ..... 3
  - TRCC Targets ..... 4
  - TRCC Organization ..... 4
    - Executive Committee ..... 4
    - Core Team ..... 5
    - Technical Subcommittees ..... 5
- III. NHTSA Traffic Records Assessment ..... 6
  - Crash Records System ..... 6
  - Citation and Adjudication Records ..... 6
  - Traffic Records Coordinating Committee ..... 7
  - Driver Records ..... 7
  - Vehicle Records ..... 8
  - Nebraska Injury Surveillance System ..... 8
  - Roadway Information ..... 8
  - Strategic Planning ..... 8
- IV. Safety Data System Benchmarking and Targets ..... 8
  - A. Crash Records System ..... 8
  - B. Roadway Data Component Status ..... 11
  - C. Driver Data Component ..... 14
  - D. Vehicle Data Component ..... 16
  - E. Citation/Adjudication Data Component ..... 17
  - F. Nebraska Injury Surveillance System Data Component ..... 20
    - 1. Emergency Medical Services ..... 21
    - 2. Emergency Department and Hospital Discharge Data System ..... 22
    - 3. Trauma Registry ..... 23
    - 4. Division of Vital Records ..... 24
    - 5. Crash Outcome Data Evaluation System ..... 25
- V. Projects and Prioritization ..... 26
- VI. Projects Selected for Implementation ..... 29
- Index of Acronyms ..... 58

## I. Executive Summary

Traffic safety data is the primary source of information about the traffic safety environment, human behavior and vehicle performance. Therefore, in order to address safety problems, timely, accurate, complete, uniform, integrated and accessible data is required. The U.S. Department of Transportation's (U.S. DOT) National Highway Traffic Safety Administration (NHTSA) has made improving traffic safety data one of the agency's highest priorities.

Under the coordination responsibility of the Nebraska Department of Transportation - Highway Safety Office (HSO), the TRCC (Traffic Records Coordinating Committee) has been created as an ad hoc group of key multidisciplinary Nebraska highway safety and traffic records system data collectors, custodians, operators, and users. They have review and approval authority with respect to Nebraska highway safety data and traffic records systems, the technologies used to keep such systems current, TRCC membership, the TRCC coordinator, and changes in the Nebraska five-year Traffic Record System Plan. This plan will include the six core data systems – crash, vehicle, driver, roadway, citation and adjudication, and injury surveillance.

The effectiveness of informed decision making requires sound research, programs and policies, and is directly dependent on data availability and quality. Accurate and comprehensive, standardized data provided in a timely manner, allows Nebraska to:

- Determine the causes of crashes and their outcomes
- Evaluate strategies for preventing crashes and improving crash outcomes
- Support traffic safety data operations
- Measure progress in reducing crash frequencies and severities
- Update traffic safety policies and laws

## II. Traffic Records Coordinating Committee

The TRCC is the primary point of leadership, planning, policy setting and accountability for Nebraska's Traffic Safety Information System. The TRCC was established in 1994 and was officially revitalized following the passage of The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users of 2005 (SAFETEA-LU) in order to meet federal guidelines and to provide a framework for strategic planning for traffic records improvement within the State. The TRCC has developed the following mission statement, priorities and targets.

### TRCC MISSION

The mission of this traffic records plan is to make Nebraska's traffic record system an integral and useable element of the state's highway safety efforts by all involved parties. The traffic records and information systems will be coordinated through the Nebraska Department of Transportation - Highway Safety Office to form the foundation for effective and cooperative highway safety management of the state's core traffic records data systems:

1. Crash, 2. Vehicle, 3. Driver, 4. Roadway, 5. Citation/Adjudication and 6. EMS/Injury Surveillance.

### Traffic Records Plan Priorities

- Expand electronic crash data submission to the Nebraska Department of Road's Crash File.
- Enhance the Nebraska Department of Motor Vehicles (DMV) Driver/Vehicle Record Files.
- Enhance and expand the Crash Outcome Data Evaluation System (CODES) infrastructure.
- Nebraska Criminal Justice Information System (NCJIS) and the NCJIS System Improvements.
- Determine if a Citation Tracking System can be implemented.
- Consider funding support for Jail/Prosecutor data interface and TraCS software local installation.

- Examine use/utility of the Model Impaired Driving Records Information System (MIDRIS) DUI tracking system for changes.

#### **TRCC Targets**

- Facilitate the comprehensive collection, maintenance, and dissemination of traffic safety-related data in order to set the direction for safety improvement measures.
- Improve the timeliness, accuracy, completeness, uniformity and accessibility of data that is needed to identify priorities for transportation and traffic safety programs.
- Strive to ensure that all Traffic Safety Information System projects funded by and under the direction of the TRCC, move forward on schedule and within budget. For projects outside of this scope, use the authority of the TRCC to ensure that these projects move forward in a timely manner, recognizing budgetary and staffing constraints.

#### **TRCC ORGANIZATION**

The TRCC was revitalized following the passage of SAFETEA-LU in order to meet federal guidelines and to provide a framework for strategic planning for traffic records improvement within the State. The TRCC continues to develop and promote a comprehensive Traffic Records System that provides Timely, Accurate, Complete, Uniform, Integrated, and Accessible Traffic Records System data for management of state and local Highway and Traffic Safety Programs.

#### **Executive Committee**

The Executive Committee of the Traffic Records Coordinating Committee consists of the following members:

- Unit Administrator, Nebraska Department of Health and Human Services
- Superintendent, Nebraska State Patrol
- Director, Nebraska Department of Transportation
- Director, Nebraska Department of Motor Vehicles
- Executive Director – Nebraska Commission on Law Enforcement and Criminal Justice
- Nebraska State Court Administrator
- Sheriff – Lancaster County
- Chief of Police – City of Omaha

The Executive Committee has the responsibility to designate or assign individuals from their agencies to represent them on the TRCC.

The role and responsibilities of the Executive Committee and/or their assigned representatives include:

- Reviewing and recommending revisions, as needed, to the Mission, Purpose and Targets of the TRCC.
- Providing guidance to the development and formal approval of Nebraska's Traffic Records System Plan based on recommendations.
- Providing recommendations with the implementation of the Traffic Records System Plan.
- Identifying funding sources as appropriate in order to support and improve the Traffic Records System Plan.

The Executive Committee and/or their assigned representatives will meet no less than once annually.

### **Core Team**

The TRCC Core Team's primary authority is established by the TRCC Executive Committee. The Core Team has the responsibility to develop and implement an annual Traffic Records System Plan. The Core Team also has the responsibility to review and recommend improvements to any of the State's transportation safety data and traffic records systems. The Core team consists of personnel that are responsible for the collection, management, and use of the various Traffic Safety Information System components. The Core Team consists of the following members:

- Administrator, Nebraska Department of Transportation - Highway Safety Office
- Analyst, Nebraska Commission on Law Enforcement and Criminal Justice
- Assistant Attorney General
- Citation/Adjudication, Nebraska Department of Motor Vehicles
- Crash Database Coordinator, Nebraska Department of Transportation
- Deputy, County Sheriff's Office
- Driver/Vehicle Records, Nebraska Department of Motor Vehicles
- EMS/Injury Surveillance, Nebraska Department of Health and Human Services
- Health Data Coordinator, Nebraska Department of Health and Human Services
- Information Technology Business System Analyst, Nebraska Supreme Court
- Information Technology Development, Nebraska Department of Administrative Services
- Lieutenant, Omaha Police Department
- Manager, Nebraska Commission on Law Enforcement and Criminal Justice
- Regional Program Manager, National Highway Traffic Safety Administration
- Roadway City Crash Records, Lincoln Public Works
- Roadway, Nebraska Department of Transportation
- Roadway, University of Nebraska – Lincoln
- Safety & Information Technology Service Engineer, Federal Highway Administration
- State Patrol Lieutenant, Nebraska State Patrol
- Traffic Records Coordinator, Nebraska Department of Transportation - Highway Safety Office

The role and responsibilities of the Core Team include:

- Guiding the development and implementation of a comprehensive Traffic Records System Plan which provides a foundation for improving traffic records systems within Nebraska.
- Providing leadership, technical direction, and oversight for the development and implementation of a Traffic Safety Information System Improvement Program as reflected within the Traffic Records System Plan.
- Providing regular briefings/updates to Executive Committee members of their respective agencies regarding the development of the Traffic Records Plan and other TRCC activities.
- Establishing and participating on Technical Subcommittees as appropriate; guiding the completion of various tasks and projects assigned to the Technical Subcommittees.
- Providing input and obtaining additional information from the Technical Subcommittee members and assembling appropriate information to advise and aid the Executive Committee in the decision making process.

It is anticipated that the Core Team will meet at least three times a year.

### **Technical Subcommittees**

The Core Team may establish Technical Subcommittees as needed to provide more targeted traffic records planning and program implementation. These technical subcommittees will be led by Core Team members

and will meet as necessary for the success of the projects. These technical subcommittees will change as the needs of Nebraska's traffic records systems evolve.

### III. NHTSA Traffic Records Assessment

The National Highway Traffic Safety Administration (NHTSA), responding to a request by the Nebraska Department of Transportation - Highway Safety Office (NDOT-HSO) within the Nebraska Department of Transportation (NDOT) assembled a team to conduct a traffic records assessment. Concurrently the HSO carried out the necessary logistical and administrative steps in preparation for the electronic assessment. A team of professionals with backgrounds and expertise in the several component areas of traffic records data systems (crash, driver, vehicle, roadway, citation and adjudication, and injury surveillance) conducted the assessment September 14, 2015 to January 5, 2016.

The scope of this assessment covered all of the components of a traffic records system. The purpose was to determine whether Nebraska's traffic records system is capable of supporting management's needs to identify the State's safety problems, to manage the countermeasures applied to reduce or eliminate those problems, and to evaluate those programs for their effectiveness. The following discusses some of the key findings regarding the ability of the present traffic records system to support management of the State's highway safety programs. The next assessment will be September 2020 which will provide a benchmark for progress on the recommendations from the 2016 assessment.

Following are the major recommendations for improvements to the State's traffic records system. Following each recommendation is a summary of the status (*in italics*).



#### **Crash Records System**

- Deploy a "smart map" point-and-click interface for law enforcement officers to indicate the precise locations from an electronic map. Ideally, this system would support auto-population of location data fields on the crash report, citations and other forms including street names, reference posts, offsets, and latitude/longitude coordinates. The Nebraska Department of Transportation should supply the base map for the field-deployed smart map so that crash locations indicated by officers automatically match locations in the roadway inventory data and can overlay with enforcement for traffic safety analysis. *Sean Owings (see project 4) NDOT has built the backend of this system which will allow the capture of incoming data and map this data to the investigator forms. The second stage will allow the officers to navigate a map to place a point at the location of the crash or citation. This "point placement" will then transfer the maps latitude/longitude data into the Electronic Accident Form (EAF) system or other collection software database and into NDOT's database. Mike Fargen (see project 4)*
- Establish a comprehensive, formal quality control program for crash data. This would include performance measures for all six performance attributes, (timeliness, accuracy, completeness, uniformity, integration and accessibility) and a data dictionary. *Sean Owings (see projects 5 and 7)*



#### **Citation and Adjudication Records**

- Assign a subcommittee of the Traffic Records Coordinating Committee the responsibility for review of the current citation data collected by NCJIS and JUSTICE (Nebraska Trial Courts Case Search System) and a determination of the feasibility of enhancing either for use as a Citation Tracking System. *NCJIS - Mike Fargen (see project 14). This project has not been implemented.*

The tracking of citations through the criminal justice system, specifically from issuance filing and subsequent court record, hinges on two data sources: the citation data and court data. Court data will include the filing information, such as offenses which may be different from what the citation was

written for, as well as disposition information. While the court information would only contain data on cases that are actually filed and not ones that the prosecutor declines to file, one can infer from a lack of a court case that filing was declined.

There are a couple of issues with how these systems are now being populated which cause problems for currently implementing a citation tracking system. The first point is that only data on NCJIS will be able to be used, which is limited to those agencies issuing citations electronically (and subsequently transmitting the data to NCJIS).

The other issues hinge on the use of the citation number as an identifier across systems. There is some inconsistency with how court clerks enter the citation number into JUSTICE; some include spaces that are not in the actual format. The data is transmitted to the courts electronically, but may be manually entered into the court system. This could be a training or programming issue that could be corrected.

Another issue is having the court data field of the citation number available. The current data feed of JUSTICE data, downloaded for general statistics, does not include the citation number. This can be easily remedied by having the courts add the data field.

- Review the use and utility of the MIDRIS DUI (Model Impaired Driving Records Information System) tracking system to determine if changes are needed and if it is being used to its fullest capacity. *NCJIS - Mike Fargen (see project 16).*

DUI cases are not currently tracked. However, all of the comments above regarding tracking citations would apply to the specifics of a MIDRIS. NCJIS receives the offense data within the citation dataset and could identify and track those cases based upon the offenses. It actually would also be possible to identify cases based upon the filing offenses.

- Improve the data quality control program for the citation/adjudication system. This would include performance measures for all six performance attributes, (timeliness, accuracy, completeness, uniformity, integration and accessibility) and a data dictionary. *Mike Fargen (see projects 11 and 12)*



#### **Traffic Records Coordinating Committee (TRCC)**

- Develop basic quality metrics for each system component and report on them regularly. *HSO – Bill Kovarik (see project 18)*
- Develop a traffic records inventory. *HSO – Bill Kovarik (see project 17). The table has been created and coordination with data managers is in process.*
- Develop data governance for all data systems. *HSO – Bill Kovarik (see project 39)*



#### **Driver Records**

- Record the adverse driver histories from previous states of record on non-commercial drivers as required for commercial driver records. *DMV – Kathy Van Brocklin and Sara O'Rourke (see project 20) The American Association of Motor Vehicle Administrators is currently developing the state-to-state system (S2S) that will facilitate the electronic transfer of information between participating states, Nebraska implemented S2S 10-17-2016. Implementation went smoothly and all errors and issues have been resolved. As new states join S2S, duplicate resolution is required, and Nebraska has resolved all issues with all states at this time. Full compliance will not occur until all U.S. based jurisdictions have completed implementation. At this time implementation by all jurisdictions is not mandated.*



#### **Vehicle Records**

- Improve the data quality control program for the driver and vehicle systems. This would include performance measures for all six performance attributes, (timeliness, accuracy, completeness, uniformity, integration and accessibility) and a data dictionary. *Kathy Van Brocklin, Sara O'Rourke and Betty Johnson (see projects 22, 23, and 26)*



#### **Nebraska Injury Surveillance System (NISS)**

- Improve the data quality control program for the EMS/Injury Surveillance systems. This would include performance measures for all six performance attributes, (timeliness, accuracy, completeness, uniformity, integration and accessibility) and a data dictionary. *Ashley Newmyer (see projects 27 - 31)*



#### **Roadway Information**

- Allow access to roadway data for consumption and updates. *(project not implemented)*
- Improve the data quality control program for the Roadway information system. This would include performance measures for all six performance attributes, (timeliness, accuracy, completeness, uniformity, integration and accessibility) and a data dictionary. *Mark Osborn (see project 37)*



#### **Strategic Planning**

- Charge the TRCC with updating the Traffic Records Plan addressing the recommendations in the 2016 traffic records assessment. Identify deficiencies apart from those noted in the traffic records assessment by canvassing each TRCC member and especially the traffic records system component custodian.

### **IV. Safety Data System Benchmarking and Targets**

Development of this Traffic Records Plan included a review of each of the six information systems (Crash, Roadway, Vehicle, Driver, Enforcement/Adjudication, and Injury Surveillance). The Traffic Records Assessment (TRA) conducted during September 14, 2015 to January 5, 2016 was the primary source for identifying system, data or process deficiencies. In addition to the TRA, the TRCC Core Team conducted a baseline evaluation of each of the six systems and identified additional deficiencies. Tables 1 through 11 contain the six data quality categories, and a status for each quality category for each system. Baselines, targets/objectives and performance measures were identified for quality categories where projects were identified to address deficiencies. The targets identified are the TRCC's priorities for improving the traffic records system over the next five years. The performance measures will be used to measure progress towards achieving the targets for each system.



#### **Crash Records System**

The Nebraska Department of Transportation collects crash data from all law enforcement agencies throughout the state as well as from drivers involved in crashes.

There have been significant improvements in the crash data component since the time of the last assessment.

- Electronic collection of crash reports in the field by law enforcement agencies (LEAs) has expanded dramatically.



- 90% (1/1/2016 – 5/31/2016) of crash reports are submitted electronically to the Highway Safety Information (HSI) system at the Nebraska Department of Transportation (NDOT).
- A previously documented problem of missing truck/bus supplemental reports has been resolved.
- An XML crash data transfer standard has been developed for use by LEAs and their software providers to enable more of them to submit data electronically in the future. XML version 2.0 was deployed January 2015.
- Crash data timeliness has improved from approximately four months' backlog to less than 10 days from crash event to completion of data entry.

Timeliness of Fatal Crashes – Electronic

Once a report has been approved, it is instantly available within the Accident Records System (ARS), Electronic Accident Form (EAF), and Storefront. It must be noted that law enforcement has a maximum of ten days to report a crash. This rule applies unless the report has a partial match within the ARS system; in these cases, one business day needs to be added to manually process these reports through the EAF system.

Timeliness of Injury through Property Damage Only (PDO) Crashes – Electronic

Once a report has been approved it is instantly available within the ARS, EAF, and Storefront. It must be noted that law enforcement has a maximum of ten days to report a crash. This rule applies unless the report has a partial match within the ARS system; in these cases, one business day needs to be added to manually process these reports through the EAF system.

Timeliness of Fatal Crashes – Paper

10 days maximum for report filing + 3 days US mail + 1 day for priority Indexing/Data Entry = 14 days.

Timeliness of Injury through PDO Crashes – Paper

10 days maximum for report filing + 3 days US mail + 4 day for Indexing/Data Entry = 17 days.

How are paper reports processed?

All paper reports are mailed to our office using standard mailing practices. Upon receipt of the mail it is sorted, opened, and organized by report type (single-side, double-sided, Truck and Bus, Fatal, etc.). Scanning takes place daily, around 1 p.m. central time. Once the reports have been scanned into NDOT's imaging database's indexing queue, the paper reports are filed within the stand alone filing system (lectriver) as reference material for one year. The electronic images are manually indexed into the imaging system by a team of indexers. The order of work to be indexed follows NDOT's business rule first by report priority: Fatal, Truck and Bus, then the remaining reports are processed by the first in - first out method.

- All crash records are coded with latitude/longitude coordinates, which averages 8 months behind current date. Adding this data at the time of submitting would greatly improve timeliness.

These notable improvements represent a prelude to the achievements that are possible in the next five-year period. The State is poised to achieve very high levels of both electronic data capture and electronic data submission of crash reports. Coinciding with the transition to electronic data capture and submission, NDOT is also poised to reconfigure its data management processes to place an increased emphasis on data quality. Information technology support for the crash system within NDOT is satisfactory, but some system upgrades are required in order to ensure that the State obtains the most benefits possible from the improved data collection and transfer processes.

**Table 1: Crash Records System**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	Develop a formal plan for expanding electronic data collection and submission. <b>Baseline:</b> Currently at 46.26% within 10 days.	95% of crash data submitted to NDOT electronically within 10 days of the crash.	90% of crash reports were submitted electronically between 1/1/16 – 5/31/16	1 & 2
	Complete crash data entered into {electronic system} within 3 days (except fatal crashes). <b>Baseline:</b> Currently at 10 days.	100% within 3 days.	Xx% of crash data was entered in the database within 3 days from 1/1/15 – 12/31/15	3
Accuracy	Deploy a “smart map” point-and-click interface for law enforcement officers to indicate the precise locations from an electronic map. <b>Baseline:</b> Not accurately measured.	100% of location data auto-populated on crash form.	Currently location data is added to crash data within 8-10 months after the crash	4
	Establish a comprehensive, formal quality control program for crash data.	<ul style="list-style-type: none"> <li>A complete set of data quality performance measures for the crash system covering timeliness, accuracy, completeness, uniformity, integration, and accessibility.</li> <li>A formal method of tracking errors and providing feedback to law enforcement agencies.</li> <li>A link between error tracking and training.</li> <li>Coordination with users to ensure that errors noted by users are logged, corrected, and addressed in training.</li> <li>Periodic audits of crash reports comparing the narrative and diagram to the coded information on the form.</li> <li>Oversight by the Traffic Records Coordinating Committee, to include devoting time on the agenda to review of data quality measurements.</li> </ul>	Manual updated and help files in EAF updated.	5, 7, 8, 9 & 10
	30% errors found during data audits of critical data elements (severity, seatbelt usage, location, date of crash, county).	0% errors found during data audits of crash data	% of data errors verified during data audit	7

**Table 1: Crash Records System (continued)**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Completeness	Generate measures of crash data completeness. <b>Baseline:</b> Not measured – not addressed.	100% of all MMUCC data included in all fatality crash records. 95% in all other crash records	Not currently measured	8
Uniformity	Redesign data collection form in reference to current Model Minimum Uniform Crash Criteria (MMUCC) Version. <b>Baseline:</b> Version 1.0 compliant.	100% compliant with the current MMUCC Version.	Crash form currently contains 58% of all MMUCC version 4 data	6
	Improve the data dictionary to ensure consistency. <b>Baseline:</b> Not currently produced – not addressed.	100% consistent data that follows data dictionary and procedures.	Not currently measured	7
Accessibility	Make crash query data available to researchers and public. <b>Baseline:</b> Online reports are available per approval upon request.	User Interface to allow data users immediate access to published data	Data not accessible at this time	9
Data Integration	Produce metrics of data integration. <b>Baseline:</b> No formal report – not addressed.	Automatic integration between roadway, driver, vehicle and injury surveillance datasets	Some exporting of crash data to other datasets, no integration	5



#### A. Roadway Data Component Status

The Nebraska Department of Transportation (NDOT) collects and maintains roadway features of all public roads in the State. The data are updated periodically with changes related to construction, maintenance, and traffic and the data are housed in the Integrated Highway Inventory (IHI) database. The information includes roadway identification, cross section, traffic, speed limit, bridge, pavement, and rail grade crossing data. The IHI provides current highway information necessary to meet Highway Performance Monitoring System (HPMS) reporting needs and to support department decision-making. Information from the IHI is a source for the development of mileage statistics utilized by state and federal authorities for the purpose of allocating funds and special studies.

The IHI is the primary source of information for the management of the 9,944-mile State highway system. The State road system represents over ten percent of the 96,555-mile public road system. In addition to the State system of roads there are 77,928 miles of county roads, and 8,677 miles of municipal streets. The NDOT is in the process of collecting road features data on the local road system and at this time have surface type, road width, and shoulder width on 67 percent of the local public road system.

The NDOT is involved in several major safety programs; the most significant is the Strategic Highway Safety Plan (SHSP). The SHSP draws heavily on the traffic crash data in the Highway Safety Information (HSI) system. Along with their partners on the Nebraska Interagency Safety Committee, the NDOT developed the Nebraska Strategic Highway Safety Plan in order to address the frequency, rate and factors contributing to fatal and disabling injury crashes. The Interagency Safety Committee then undertook a screening process that ultimately resulted in the selection of five areas of focus—the Critical Emphasis Areas—for the Plan:

- Increasing Safety Belt Usage
- Keeping Vehicles on the Roadway, Minimizing the Consequences of Leaving the Road, and Reducing Head-On and Across-Median Crashes
- Reducing Alcohol-Impaired Driving
- Improving the Design and Operation of Highway Intersections
- Addressing the Over Involvement of Young Drivers

NDOT uses data from the IHI and the HSI to create a merged dataset to produce high frequency crash locations for analysis of potential safety problems and the development of possible countermeasures. The resulting projects developed from these analyses are candidates for the Highway Safety Improvement Program (HSIP).

NDOT also monitors high risk rural roads and programs which concentrate highway safety funds on rural road segments experiencing high crash rates. Most funds are targeted to the local public road system.

#### **Applicable Guidelines**

Guidelines and standards were taken into consideration with the development of the IHI. The NDOT complies with the HPMS, a national guideline for reporting to the Federal Highway Association (FHWA) certain road data on federally aided roads. The HPMS provides guidance to the states on standards for sample data collection and reporting for traffic volume counts, inventory, capacity, delay, and pavement management data elements.

The NDOT is aware of the analytic software tools recommended in the Highway Safety Manual. Adoption would require the collection of additional roadway features data and adherence to data requirements for use with these analytic safety software tools. In conjunction with the use of these tools, the NDOT would also have to consider the data elements suggested in the Model Inventory of Road Elements (MIRE) guideline. The program costs and systems enhancements are a concern.

#### **Interface with Other Traffic Records System Components**

The NDOT uses several Location Reference Systems (LRS) for public roads. The State highway LRS is a Reference Post based referencing system. All non-State roads were inventoried using road or street name and latitude/longitude coordinates. This provides the capability to interface roadway and crash data from the IHI and the HSI. The accurate location of data especially on the local road system would be greatly enhanced with an electronic locator tool.

#### **Quality Control Program**

The roadway inventory is augmented by annual updates from construction and maintenance plans with field verification. Traffic data collection is conducted to represent all State system roads, all federal-aid non-State system roads, all HPMS sample segments, and a small sample of other non-State system roads. Truck counts are collected by class and weight on selected functional class roads. Surveys are conducted annually for HPMS roads, every four years for urban streets and highways, and every six years for non-HPMS local roads.

**Table 2: Roadway Data Component System**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	55% of traffic counts conducted each year (on roads which are required to be counted)	50%, Target is to count every 2 years	55% of traffic counts are being conducted annually	
	240 days from crash event to location coding of crashes	100% coded at time of entry	Currently at 240 days from crash event	4
	182-720 days from construction completion to roadway file update (depending on complexity of roadway)	Update at a minimum, every 6 months	50% of projects being updated with 6 months of completion	37
Accuracy	All errors found through edit checks are corrected prior to data being pushed out to users.	100% error free data	This target is currently being met	37
Completeness	96% of traffic data based on actual counts no more than 4 years old (on roads which are required to be counted)	99% of traffic data based on actual counts no more than 4 years old (on roads which are required to be counted)	96% of traffic data based on actual counts no more than 4 years old	37
	97% of known public roadways are listed in the inventory. The roadways for the cities of Lincoln and Omaha are contained in group records and only provide mileage and surface type.	97% of public roadways are listed in the inventory	This target is currently being met	37
	100% of known roadways are listed in the LRS.	100% of roadways are listed in the LRS within 3 mo. of data collection.	This target is currently being met.	37
Uniformity	All data elements consistent with historic data definitions	100% of data matches definitions	This target is currently being met.	37
Accessibility	All roadway files accessible to approved stakeholders through the pavement optimization program (POP)	100% of published roadway data accessible to approved stakeholders	This target is currently being met.	35
Data Integration	Traffic records component files linked to roadway files – now files are updated within 6 months after.	100% of roadway data integrated with crash and citation to populate at time of crash or citation	0% of data from the roadway data is integrated	38



**C. Driver Data Component**

The Nebraska Department of Motor Vehicles (DMV), is responsible for driver and vehicle services, and administers its functions through Driver Licensing Services and Vehicle Services with a Driver and Vehicle Records Division that controls the record activities of the two services. The driver and vehicle databases are not integrated or directly linked. Both of the services deal with commercial motor vehicles and operators.

Driver Licensing Services qualifies and issues driver licenses and identification cards, creates and maintains driver license records, and administers programs for driver control and improvement. A current count of driver records listed 1,341,587 non-commercial and 90,137 (6.7 percent) commercial driver licenses. Commercial and non-commercial driver records are maintained together.

**Table 3: Driver Data Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	All driver records are currently being created the same day the application is accepted	100% received by 8:00 p.m. on a daily basis.	100% completed daily	23
	Currently being mailed within 15 days.	100% of licenses mailed within 20 days unless held up by fraud gate (state statute).	100% mailed within 15 days.	23
	100% of convictions are being posted on day received.	100% of in-state convictions received via paper posted the same day as received.	Target currently being met.	
	100% of in-state convictions are being received same day.	100% of in-state convictions received electronically on same day.	Target currently being met.	
Accuracy	% of duplicate records for individuals requiring correction = 2%.	98% duplicate free	To be determined.	
	Frequency of CDL desk audits to assure data validity.	Daily	We audit all CDL records processed each day.	
	% of errors found during CDL audits of critical data elements?	98% error free	We currently have a 4% error rate on CDL desk audits.	

**Table 3: Driver Data Component (continued)**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Completeness	% of records checked for drivers moving into the state = 100%.	100%	Goal currently being met.	
	% of driver records received from prior state = in progress.	100% once the State 2 State system is fully operational in all U.S. Jurisdictions.	Currently only 14 states including Nebraska. Mississippi will implement in June 2017.	20
	Record the adverse driver histories from previous states of record on non-commercial drivers = in progress.	100% once the State 2 State system is fully operational in all U.S. Jurisdictions.	Currently only 14 states including Nebraska. Mississippi will implement in June 2017.	20
Uniformity	% of Social Security Numbers verified online = 100%.	100%	Goal currently being met.	
	% of immigration documents verified online = 100%.	100%	Goal currently being met.	
	% non-CDL violations reported from other states added to driver history = in progress.	100% once the State 2 State system is fully operational in all U.S. Jurisdictions.	Currently only 14 states including Nebraska. Mississippi will implement in June 2017.	
Accessibility	Base: 140,000 driver's licenses processed online.	Increase by 10% each calendar.	79,612 driver's licenses process from 1/1/15 -12/31/15	
Data Integration	Opportunity for integration is currently not available due to lack of personally identifiable information in the vehicle system.	By 2017 begin collection of personally identifiable information as part of title and registration issuance. This will provide the information necessary for future integration of data between the driver and vehicle systems.	Integrate data from the crash, driver, vehicle, roadway, citation and ems systems.	38



#### D. Vehicle Data Component

The Nebraska Department of Motor Vehicles (DMV) is responsible for vehicle and driver services, and administers its functions through Vehicle Services and Driver Licensing Services with a Driver and Vehicle Records Division that controls the record activities of the two Services. The vehicle and driver databases are not integrated or directly linked. The DMV is currently working to integrate International Registration Plan (IRP) registration information into the registration and title database. Both of the services deal with commercial motor vehicles and operators, aspects that are not addressed in this traffic records assessment. There were 2,421,231 registered vehicles listed at the end of 2016.

Registration data are updated interactively as titles and registrations are issued. The quality controls in place are system edits and occasional data mining by DMV (i.e., run error reports for valid name entries and correct fuel type).

NE DMV is currently in the initial stages of a vehicle system modernization and replacement project. Project roll-out is anticipated to be in the 2019 timeframe.

The activities completed to date include: passage of three legislative bills providing a funding source for system replacement and continued maintenance; contracted with consultant for consulting services to assist in the modernizations of a vehicle title and registration system, expected completion December 2016; published a Request for Information to gain knowledge from vendor community; initiated data conversion/data cleanup efforts in preparation for migration to the new system and published a Request for Proposal, RFP Number 5557Z1, for the purpose of selecting a qualified contractor to provide the modernization system. Proposals are due by June 16, 2017.

**Table 4: Vehicle Data Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	Average time from accepted title application to create vehicle record = daily	100% processed on date received	Target currently being met	
Accuracy	Registration data is updated upon entry	99%	Target currently being met	
	% of errors found during data audits of critical data elements	5% or fewer	To be determined	
Completeness	All of the vehicle information is contained in records	100%	Target currently being met	
Uniformity	All data elements consistent with data definitions	99%	To be determined	26
Accessibility	Base: 286,000 vehicle registrations processed online in 2014	Increase online renewals by 5% on an annual basis	293,984 registrations processed online 1/1/16 – 12/31/16	
Data Integration	Law Enforcement Agencies can access DMV data to auto-populate crash reports with vehicle information	Provide interface for 100% of electronic users		38
	DMV vehicle file is integrated with the driver file and is updated with information on stolen vehicles	Complete by January 1, 2022	Progress made on developing new vehicle system	38





#### E. Citation/Adjudication Data Component

The most effective and efficient means by which to determine the impact of enforcement countermeasures is to track the statewide issuance and outcome of traffic citations, and to determine, through evaluation of baseline data and subsequent crash incidence, whether such enforcement had the effect of reducing either the number and/or severity of crashes in Nebraska. A number of approaches can be taken to developing relevant enforcement data and to using those data effectively. One of the most important aspects of data utility is that they are consistent in terms of data definitions and collection methodology. A statewide Uniform Traffic Citation is the first step in assuring consistency of data.

##### **Uniform Traffic Citation**

Law enforcement agencies throughout Nebraska are required to use a Uniform Traffic Citation by Nebraska Revised Statutes, §29-422 through 29-429 and Nebraska Supreme Court Rules, §61463. Data to be included on the form, the number and colors of copies that the citation must include, and its size are mandated. Paper copies, which continue to be required by the courts, may be letter size.

##### **Citation Data Collection**

Effectively, data regarding traffic convictions are but a portion of the information needed to adequately assess the impact of traffic enforcement. Because of the discretion granted to the prosecutors' offices to plea bargain, defer adjudication or sentencing, and to change or drop charges initiated by law enforcement officers, reports of convictions are not telling either of the violations witnessed and charged by law enforcement officers, nor potentially of the true volume of such charges.

The information housed in the JUSTICE system does not include charges which were listed by the officer but not filed. NCJIS data, on the other hand, includes the ultimate statute or ordinance of which the violator was convicted as part of the court/JUSTICE record, but it may not be easily linked to a particular citation. In this regard, unless all appropriate data elements are available neither source seamlessly provides a full picture of traffic law enforcement within Nebraska.

##### **Electronic Citations**

One of the driving forces in Nebraska in support of electronic citations was the legislated requirement to collect all data related to traffic stops and traffic citations. Additionally, strategic planning efforts in various state governmental entities recognized the potential for time savings and reduction of errors through the use of electronic citations. As agencies throughout the State became equipped with mobile data computers, their effectiveness for collection of citation data became apparent to both users and collectors of citation data.

Citation data from these electronic systems are currently captured in a citation file created by NCJIS. That file contains data from all citations written by the State Patrol, whether paper or electronic. Data from local agencies on citations written using Sleuth or TraCS software will be added. A copy of the electronic ticket is sent to the appropriate prosecutor through NCJIS for the determination of whether to file a case.

Court personnel and prosecutors noted that common errors occur on handwritten citations and that they are often difficult to read and decipher. Electronic citations have the benefit of embedded edits, drop-down menus, the potential to copy and paste data from the mobile data computer in the officers' vehicle, and to read the bar codes from driver and vehicle documents and auto-populate the citation forms. All of these opportunities would improve citation data quality within the State.

Errors at this point in time are either corrected by the prosecutor or returned to the officer for correction.

**Driving Under the Influence of Alcohol and/or Drugs and Administrative Adjudication**

Nebraska Revised Statutes provide for administrative withdrawal of driver licenses for driving under the influence of alcohol and/or drugs. Test refusal carries a more severe penalty than does test failure. Administrative processes and hearings are managed by the Department of Motor Vehicles.

An effort is underway to develop an electronic DUI package, which would speed processing for the arresting officer. The potential for capture of driver and vehicle data electronically, particularly if bar codes from the driver license and registration documents are used, will also provide better data in both the criminal and the administrative proceedings.

**Common Linking Variables between Citation/Adjudication and Other Data Components of a Traffic Records System**

Citation/Adjudication Linkages to Other Law Enforcement Files and Tracking Systems	<ul style="list-style-type: none"> <li>• Computer Aided Dispatch (CAD) Record Number</li> <li>• Citation/Arrest/Incident Number, Court Case Number</li> <li>• Location (street address, description, coordinates, etc.)</li> <li>• Personal ID (name, address, Driver License number, etc.)</li> </ul>
Citation/Adjudication Linkages to Driver/Vehicle Files	<ul style="list-style-type: none"> <li>• Driver and Owner Names, Driver License Number</li> <li>• Driver and Owner Addresses (location code, coordinates)</li> <li>• Vehicle Plate Number, Vehicle Identification Number</li> </ul>

**Table 5: Citation/Adjudication Data Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	Average time citations sent from LEA to courts = 24 hours.	100% within 24 hours	Reduce time from citation issue to available in NCJIS.	14
	Average time convictions sent to DMV from courts = 24 hours, immediately upon conviction – currently real time.	Real time	Currently meeting this target.	14
Accuracy	% "errors" found during data audits of critical data elements = Not tracked	< 1%	To be determined	12
	% violations narratives that match the proper statute = Not tracked	100%	To be determined	12
Completeness	% traffic citations statewide written on a uniform citation = (required by statute)	100% (required by statute)	Currently meeting this target.	
	Examine use/utility of MIDRIS DUI tracking system for changes/updates. Currently not implemented.		Develop a system to track DUI and related data	16

Table 5: Citation/Adjudication Data Component (continued)

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Uniformity	Citations issued on consistent forms. (required by statute)	100%	Currently meeting this target.	12
Accessibility	Data available to other departments, researchers, public is available when issued electronically	100% of public data available	Planned for future development	
Data Integration	Assign a subcommittee of the TRCC the responsibility for review of the current citation data collected by NCJIS and JUSTICE and a determination of the feasibility of enhancing either for use as a Citation Tracking System.	One integrated Citation Tracking System.	Due to staff turnover Crime Commission hoping to begin in July of 2017	14
	Include personnel from the DMV in the review and planning for the electronic DUI package to ensure that the forms and format meet the needs of the administrative license revocation (ALR) process.	100% of process included	Working with DMV on the ALR requirements. This has become an automation process to generate the ALR forms as an adjunct to eCitations. Currently testing this process in TraCS and have provided the specifications to Sleuth.	16
	Electronic notification to DMV from ignition interlock companies. Currently 100%.	100%	Currently meeting this target.	
	Explore Jail/Prosecutor data interface and TraCS local installation. Currently have a process available to provide prosecutors with citation data via NCJIS.	100% of Citation/Adjudication information available to Jail personnel	100% of all citations are accessible.	15

**F. Nebraska Injury Surveillance System (NISS) Data Component**

A successful statewide injury surveillance system uses several key components to monitor the incidence of, risk factors for, and costs of fatal and non-fatal injuries. These components are: emergency medical services, ambulatory care, acute care, trauma and rehabilitation facilities, and vital records. Oversight for these entities' activities may be governed by local, State, and regional authorities. Data collected by these agencies provides a wealth of patient care, intervention, and prevention information that can be used to evaluate current treatment modalities and injury prevention activities. A comprehensive surveillance system will provide crucial healthcare and injury prevention information to health agencies, providers, and planners at all levels of the State.

Integration of injury surveillance data with other State traffic records system components benefits all organizations involved. Motor vehicle crash data supply much of the pre-event and event information used by the Haddon Matrix for injury prevention program planning activities. In a comprehensive traffic records system, data related to all EMS, outpatient care, and hospital admissions resulting from a motor vehicle crash may be used to quantify the severity and cost of the crash as well as the long-term outcomes associated with any resulting injuries. Providing traffic safety program coordinators and engineers with medical outcomes of motor vehicle crashes enables them to more accurately identify the level of crash and injury severity beyond the typical five-point scale utilized on most crash reports.

**Current Status**

The Nebraska Department of Health and Human Services (DHHS) has statutory authority to collect and manage many of the core components of an injury surveillance system. These databases include the Nebraska Ambulance Rescue Service Information System (NARSIS), emergency department and hospital discharge data provided by the Nebraska Hospital Association (NHA), trauma registry data, and vital statistics data. In addition, DHHS also manages the traumatic brain injury registry and the Behavioral Risk Factor Surveillance System along with other registries related to chronic and communicable diseases. Crash data are provided to DHHS by the Nebraska Department of Transportation (NDOT) for analysis and for inclusion in the State's Crash Outcome Data Evaluation System (CODES).

DHHS personnel and the CODES program respond to numerous data requests and provide analytic support for many of the highway safety programs and research initiatives within the State. Data are also provided to researchers at the University of Nebraska - Lincoln for special studies, such as an evaluation of driver education and graduated licensing programs and impaired driving initiatives. The State's Safe Kids program and local health departments are also provided with crash and injury data to assist with problem identification and grant proposals.

In addition to serving on the Traffic Records Coordinating Committee, DHHS representatives meet regularly with the HSO to outline upcoming data needs and program support. CODES data and activities are included in the State's Section 408/405c application and highway safety plans.

While an online querying tool is not yet available for any of the datasets maintained by DHHS, there are numerous fact sheets and comprehensive reports available from their web site. Examples of available reports include "Injury in Nebraska Report, 2009-2013", "Motorcycle Injuries and Fatalities 2009-2013" and a variety of fact sheets covering impaired driving, safety equipment use, and crash severity.

### 1. **Emergency Medical Services (EMS)**

The Emergency Medical Services Program within DHHS provides regulatory authority for EMS activities within Nebraska. The State is divided into seven EMS regions containing 419 ambulance and first responder services that respond to approximately 200,000 calls for service each year, 50 percent of which occur in the Omaha and Lincoln metropolitan areas. In 2014, the Electronic Nebraska Ambulance Rescue Service Information System (ENARSIS) was developed in association with ImageTrend, Inc., to allow for electronic submission of patient care reports to the State. Currently, 100 percent of the State's EMS agencies are reporting data to DHHS and all of those reporting directly through ENARSIS V.3. A fifty cent surcharge on vehicle registration fees helped provide the initial funding for the EMS data collection system. However, the success of this program has resulted in a diversion of general funds once designated for EMS to other areas.

**Table 6: EMS Data Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
			As of 2/14/14	
Timeliness	% EMS reports sent to governing agency within 10 days of incident. <b>Baseline: 38</b>	100% of EMS reports sent to governing agency within 72 hours of incident.	90.44%	27
	% EMS reports sent to governing agency within 30 days. <b>Baseline: 50</b>	100% of EMS reports sent to governing agency within 72 hours of incident.	96.66%	27
	Mean # days from incident to data availability on statewide system. <b>Baseline: 100</b>	3 days	20.2 days	27
Accuracy	% EMS run locations that match statewide location coding. <b>Baseline: 13</b>	100%	98.75%	27
Completeness	% of EMS agencies contributing to the statewide database. <b>Baseline: 13</b>	100%	382/432=88.4%	27
	% "missing" found during data audits of critical data elements. <b>Baseline: 8</b>	< 5%	Future measure planned	27
Uniformity	% of records on EMS database that meet the current NEMSIS standards. <b>Baseline: 92</b>	> 90% of records	26.85%	27
Accessibility	Data available to other departments, researchers and public.	Respond to aggregate and generate fact-sheets and reports.	Planned for future development	38
Data Integration	% data collected through NARSIS, ENARSIS, and Omaha Fire and Rescue linked to CODES.	100% of records collected electronically.	Future measure planned	38

## 2. Emergency Department and Hospital Discharge Data System

The Nebraska Hospital Association (NHA), comprised of 89 acute and specialty care hospitals within the State, collects uniform information on approximately 200,000 injury-related emergency department visits and 12,000 injury related hospital discharges each year. Information on each emergency department visit and hospital discharge is reported from acute care hospitals in Nebraska to the NHA. This information is reported using the Uniform Billing Form (UB-04) and is transmitted electronically to the NHA and then to DHHS. Hospital discharge records contain information on the date of admission, date of discharge, patient's age, gender, county of residence, and primary and secondary ICD-9-CM diagnosis codes and E-CODEs. The availability of both ambulatory care and hospital discharge data allows safety analysts to provide a more complete picture of the extent of motor vehicle injury in Nebraska.

**Table 7: Emergency Department and Hospital Discharge Data Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	Number of days from hospital/ED discharge until data is entered into database. Baseline: 30 days	Due to the nature of medical billing, there is not standard or requirement that can be imposed	23.5 days	29
	Number of days from end of quarter/year until data is available for analysis on a state level. Baseline: 270 days	Due to the nature of medical billing, there is not a standard or requirement that can be imposed	90 days	29
Accuracy	% of injury-related Emergency Department discharges containing a valid E-CODE. Baseline: 92%	95% of injury-related ED discharges contain a valid E-CODE	93%	29
	% of hospital discharges records in the injury dataset containing a valid N-CODE and E-CODE. Baseline: 70%	95% of injury hospital discharges records contain a valid N-CODE and E-CODE	61%	29
Completeness	% "missing" found during data audits of critical data elements. Baseline: 0	<1% of critical data elements found "missing"	Future measure planned	29
Uniformity	% of hospitals participating in statewide database. Baseline: 95%	100% of hospitals participating in statewide database	Future measure planned	29
Accessibility	Data available to other departments, researchers and to the public. Baseline: Respond to aggregate and generate fact-sheets and reports.	Online query access by approved departments	Selected for implementation by TRCC 4/21/16	38
Data Integration	% data collected linked in CODES.	99% Linked	Selected for implementation by TRCC 4/21/16	38

### 3. Trauma Registry

Nebraska is divided into four trauma regions with 48 designated trauma centers throughout Nebraska. These trauma centers are designated as Comprehensive (2 hospital), Advanced (4 hospitals), General (5 hospitals), and Basic (37 hospitals). Comprehensive and Advanced trauma centers are verified by the American College of Surgeons criteria. General and Basic hospitals are state certified. In 2007, hospitals were provided with a statewide web-based data entry system developed in conjunction with ImageTrend. All hospitals with an emergency department are encouraged to participate in the trauma registry regardless of designation. In 2015, 55 hospitals provided data to the trauma registry system.

#### Process Flow

There are two software systems in place for collection of trauma data in Nebraska, the hospital-based National Trauma Registry-American College of Surgeons (NTRACS) and the state web-based trauma registry developed by ImageTrend. Level I and II trauma centers initially enter data into NTRACS and then submit to DHHS on a monthly basis. Level III and IV trauma centers enter data directly into the state system, also on a monthly basis. The State Trauma Registrar integrates the data submitted to both systems into a common database.

**Table 8: Trauma Registry Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	Number of days from trauma center discharge until data is entered into database. <b>Baseline:</b> 30 days	To have data entered within 15 days of discharge	Median: 51 days	27
	Number of days from end of month of discharge until data is available for analysis on a state level. <b>Baseline:</b> 30 days	To have data received and available quickly to be able to monitor current trends	Median: 45.5 days	27
Accuracy	% "missing" found during data audits of critical data elements. <b>Baseline:</b> <2.5%	To have no missing data in the fields of Injury Date and Time, ED Arrival Date and Time, ED Disposition, Primary Cause of Injury and Primary Diagnosis	8% of records missing at least one field.	27
Completeness	% of discharges containing a valid E-CODE. <b>Baseline:</b> >95%	To have a complete database	Currently at 97.1%	27
Uniformity	Each designated trauma center in Nebraska reports registry cases monthly to the statewide registry	Monthly data quality and completeness checks are preformed to ensure compliance with reporting consistency	% of designated trauma centers reporting monthly	27
Accessibility	Data available to other departments, researchers, public	To have a streamlined, easy to understand process to request and receive trauma registry data	Selected for implementation by TRCC 4/21/16	38
Data Integration	% data collected linked to CODES	100% of data collected linked to CODES	Selected for implementation by TRCC 4/21/16	32

#### 4. Division of Vital Records (DVR)

##### **Process Flow**

Vital statistics are submitted through one of three processes: fully electronic, partial electronic, and manual.

The fully electronic record is initiated by the funeral home using Nebraska's Electronic Registration System (ERS). The electronic record is assigned to the appropriate medical certifier who completes the record electronically and places it in a queue to be registered and assigned a state file number.

The partial electronic record is initiated by the funeral home using the ERS. A copy is then printed out to be mailed or taken to the medical certifier for completion. The copy is then returned to the funeral home for submission to the State.

Manual records are also initiated by the funeral home using a typewriter or word processing software. These records then go to the medical certifier, back to the funeral home, and finally to the State either through regular mail or by manual pick-up. Cause of death fields are completed by State nosologists.

A fourth process was implemented a few years ago that is electronic but has a fax attestation component.

Through the National Center for Health Statistics, Nebraska cooperates with other states in the exchange of death records. DHHS collects data concerning deaths of all persons who died in Nebraska, and for all Nebraska resident deaths regardless of where the death took place.

**Table 9: Division of Vital Records Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	Number of days from death discharge until data is entered into database. <b>Baseline:</b> 10 days	5 days from death discharge	Future measure planned	
	Number of days from end of quarter/year until final data is available for analysis on a state level. <b>Baseline:</b> 6 months	3 months from end of quarter	Future measure planned	
	New project to migrate to electronic submission and verification.	100% records submitted electronic	LB 786 passed in 2016 to require that all death records will be submitted electronically beginning July 21 <sup>st</sup> 2016.	
Accuracy	% "missing" found during data audits. <b>Baseline:</b>	< 10% data missing	To be determined	
Completeness	% of injury-related fatalities containing a valid cause code. <b>Baseline:</b>	100% of fatalities contain valid code	Future measure planned	
Uniformity	% of death records that are reported through the electronic system	100% of records reported electronically	49%	
Accessibility	Data available to other departments, researchers, public	To have a streamlined, easy to understand process to request and receive trauma registry data	Selected for implementation by TRCC 4/21/16	38



**Table 9: Division of Vital Records Component (continued)**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Data Integration	% data collected linked to CODES.	100% of data collected linked to CODES	Selected for implementation by TRCC 4/21/16	32

### 5. **Crash Outcome Data Evaluation System (CODES)**

Nebraska has been a part of the CODES program since 1998, with DHHS staff managing the data files and conducting the linkage and analysis processes for NHTSA and the State. Over the years, the CODES program has become an integral part of the highway safety program in Nebraska.

Most recently, analysts within DHHS have successfully integrated crash data provided by the NDOT with hospital discharge, EMS and vital records data for calendar years 2008 through 2014. Incomplete statewide EMS data for previous years prevented its complete inclusion in the linkage process.

The CODES database allows for the analysis of persons injured as the result of a motor vehicle crash throughout their continuum of care. The integrated data are used for State specific applications and in response to NHTSA data requests. Analysts at DHHS are experienced in working with the available datasets and in performing deterministic and probabilistic linkage methodologies using SAS and CODES2000 software. The table below provides a sample of the variables available for linkage among the core CODES datasets.

**Table 10: Variables to Link CODES Datasets**

Crash	EMS	ED*	Hospital	Trauma Registry	Vital Statistics
First Name	YES	NO	NO	YES	YES
Last Name	YES	NO	NO	YES	YES
Date of Birth	YES	YES	YES	YES	YES
Crash Date	YES	YES	YES	YES	YES
Crash Time	YES	NO	NO	YES	YES
Crash County	YES	YES (hospital county)	YES (hospital county)	YES	YES (county of death)

\*Emergency Department

**Table 11: Crash Outcome Data Evaluation System Component**

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Timeliness	By May of each year a new CODES dataset will be generated (e.g. by May 2015, the CODES 2013 dataset will be generated)	15 months from the end of the year, the CODES dataset will be generated	2014 dataset was generated Jan. 2016	
Accuracy	% accuracy and consistency of ENARSIS data	By 2016, >80% of yearly crash records indicating EMS transport are linked	From 1/1/14 to 12/31/14 91% of crash records indicating EMS transport linked to EMS or HDD	
Completeness	Increasing the percentage of crash records linked with other records	Reduce false positive and false negative linkage rate (currently only for crash records linked with death certificate)	False positive: 11% False negative: 8.7% of crash records linked in 2014	

Uniformity	% data from State EMS agencies compliant with NEMSIS 3.0 standards	100% of EMS agencies compliant with current NEMSIS standards	Future measure planned	
Accessibility	Data available to other departments, researchers and to the public	To have a streamlined, easy to understand process to request and receive CODES data	New factsheets posted to website	38
Data Integration	Public Health Data Center to develop online querying of CODES datasets	By 2017, have public health surveillance indicators from CODES posted on the PH Data Center website	PH Surveillance indicators posted to website?	38

## V. Projects and Prioritization

Table 12 shows candidate projects identified by the TRCC. This list includes projects funded by all available funding sources, notes the system and quality category the project will address, whether the project has been selected for implementation and last update.

**Table 12: Projects**

Project #	Candidate Project Name / Description	System: Quality Category Project Addresses	Comments / Status	Selected for Implementation (Yes or No)	Last Update Date
1	Driver's Electronic Crash Reporting System	Crash Records	Testing is completed. Planned launch mid-year 2018.	Yes	4/20/18
2	Investigator's Electronic Crash Reporting System	Crash Records	Analyzing different strategies/possible use of TraCS and other systems.	Yes	4/20/18
3	PAR XSD Reporting System Upgrade	Crash Records	Selecting vendor to build a new crash database.	Yes	4/20/18
4	Develop a "Smart Map" Harmonized location referencing system	<b>Crash &amp; Citation/ Adjudication</b>	Testing new system.	Yes	4/20/18
5	Improve the data quality control program for the Crash data system	Crash Records	Implement performance measures and trend analysis to assess data quality	Yes	4/20/18
6	MMUCC Version 4.0 Compliant	Crash Records	Completed - MMUCC 5 Police Accident Report (PAR) was finalized	Yes	4/20/18
7	Improve the data dictionary for the Crash data system	Crash Records	Include edit checks/validation rules, detailed text-based descriptions, and note which elements are captured through linkage	Yes	4/20/18
8	Improve the procedures/ process flows for the Crash data system	Crash Records	Create process flow diagram for collection, reporting and posting	Yes	4/20/18
9	Improve the interfaces with the Crash data system	Crash Records	Real-time interfaces for driver, vehicle & roadway systems	Future planned development	7/21/16

Table 12: Projects (continued)

Project #	Candidate Project Name / Description	System: Quality Category Project Addresses	Comments / Status	Selected for Implementation (Yes or No)	Last Update Date
10	Crash report rejection/resubmission process	Crash Records	Define and implement process after new database in 2020.	Future planned development	7/21/16
11	Data Dictionary	Citation/ Adjudication	Include edit checks/validation rules, detailed text-based descriptions, and note which elements are captured through linkage	Yes	4/20/17
12	Improve the data quality control program for the citation/adjudication system	Citation/ Adjudication	Implement performance measures and trend analysis to assess data quality	Yes	4/20/17
13	NIEM Guidelines	Citation/ Adjudication	Update to adhere for data transfer to the courts	Yes	4/20/17
14	Citation Tracking	Citation/ Adjudication	Track citations from point of issuance to posting on the driver file	Yes	1/4/18
15	Linkage	Citation/ Adjudication	Linked with driver, vehicle, crash	Yes	4/21/16
16	Establish a linked DUI system (MIDRIS)	<b>Driver &amp; Citation/ Adjudication</b>	Linked to the driver system electronically. With Driver Data and sanctions included. Include all citations written	Yes	4/21/16
17	Develop Traffic Records Inventory	TRCC Management	Table created, working with data managers to complete	Yes	4/20/18
18	Improve quality control and quality improvement programs.	TRCC Management	Include timeliness, accuracy, completeness, uniformity, integration & accessibility for all 5 data systems	Yes	4/20/18
19	Completed a lifecycle cost consideration for projects	TRCC Management	To ensure long-term projects are successful beyond federal funding	Yes	5/3/17
20	Record adverse driving histories for non-commercial	Driver	AAMVA developing a state-to-state system	Yes	4/20/17
21	Create a process flow	Driver	Create process flow (flow chart)	Future planned development	4/20/18
22	Create a data dictionary	Driver	Definitions and elements		4/20/18
23	Improve the data quality control program for the Driver data system	Driver	Implement performance measures and trend analysis to assess data quality		4/20/17

Table 12: Projects (continued)

Project #	Candidate Project Name / Description	System: Quality Category Project Addresses	Comments / Status	Selected for Implementation (Yes or No)	Last Update Date
24	Deny PRISM Reincarnated carriers	Vehicle	Improve safety by denying registration		4/20/18
25	Create workflow documentation	Vehicle	Include NMVTIS		4/20/18
26	Create System Performance Measures	Vehicle	Timeliness, accuracy, completeness, uniformity, integration and accessibility.		4/20/18
27	Nebraska Emergency Medical Services Data Quality Improvement	EMS/Injury Surveillance	83% of EMS services are using electronic forms to submit data to eNarsis. Expand edit checks and validation rules	Yes	4/20/18
28	Create a CODES database linking crash, EMS, Hospital Discharge and death certificate data	EMS/Injury Surveillance	77% of 2012 data was linked.	Yes	4/20/18
29	Project Name: E-CODE Data Quality Improvement	EMS/Injury Surveillance	2/13/14 data results not complete records.	Yes	4/20/18
30	Create a data dictionary	EMS/Injury Surveillance	Definitions and elements	Yes	6/4/18
31	Create System Performance Measures	EMS/Injury Surveillance	Timeliness, accuracy, completeness, uniformity, integration and accessibility with goals	Yes	6/4/18
32	Interfaces/linkage	EMS/Injury Surveillance	For EMS Hospital data.		6/4/18
33	Include rehabilitation data	EMS/Injury Surveillance	Interface or linkage.	Yes	6/4/18
34	Track frequency, severity, & nature of injuries in MVC	EMS/Injury Surveillance	Create linkage	Yes	6/4/18
35	Allow access to data	Roadway	Allow access for consumption and updates		4/20/18
36	Collect all MIRE data	Roadway	Include a process for updating and adding data	Yes	4/20/18
37	Improve the data quality control program for the Roadway data system	Roadway	Implement performance measures and trend analysis to assess data quality	Yes	4/20/18
38	Provide truly integrated data.	Data Use & Integration	Integrate data from all six components	Yes	4/21/16
39	Develop Data Governance	All Data Systems	Overall management of the availability, usability, integrity, & security of the data	Yes	4/20/18
40	Highway Safety Information System Database Rewrite	Crash Records	Planning and selection of new database system scheduled	Yes	4/20/18

**VI. Projects Selected for Implementation**

The following projects were selected for implementation by the TRCC:

<b>Project # 1</b>	<b>Project Name: Driver’s Electronic Crash Reporting System</b>					
<b>Lead Agency:</b> NDOT	<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628					
<b>Project Description / Purpose:</b>						
<ul style="list-style-type: none"> <li>To create a driver’s electronic crash report form, DR41 that will reduce time for the submittal of driver’s reports that allow data retrieval from the Highway Safety Information system to 45 days from the current 90 days.</li> <li>To increase the accuracy rate of driver’s submitted reports by eliminating hard-to-read hand written reports and replacing them with electronic versions.</li> <li>To reduce mail handling and scanning time by creating the images electronically and then automatically moving the reports into the Highway Safety – Accident Records Section’s imaging system.</li> <li>To notify and to give the public an electronic means to enter and submit a vehicle crash report.</li> </ul>						
<b>System: Quality Category Project will Address: Crash Records</b>						
<b>Target or Deficiency Project will Address:</b>						
The target of this system support project is to reduce the number of days between the submittal of driver’s reports and data retrieval from the HSI system from 90 days to 45 days or less by an electronic means to enter and submit a vehicle crash report.						
<b>Update:</b>						
11/15: Databank is currently working to map NDOT’s XSD 2.0 to the Driver’s Crash Reporting System (DCRS’s) front-end. It is expected that preliminary testing of the data transmittal process will begin mid-February, 2016. The current “soft release” target date is the third quarter of 2016.						
1/16: Coding was complete 1/15/16. Databank is now mapping to NDOT’s XSD schema. The user interface has been tested.						
2/16: Databank is scheduled to deliver the test URL the first week of March 2016.						
4/16: Final release of the DCRS will depend on which testing methods are employed and the amount of time it takes to resolve any issues encountered during the testing process. The current “soft release” target date is set for the third quarter of 2016.						
7/21/16: Testing to the User Interface has been completed. Additional testing has been performed on the DR41 to crash reporting database – testing should be wrapped up by the end of August. Coding to extract and display the DR41 image is underway and should be completed by October 1, 2016, at which time the system will be ready to go live.						
10/20/16: NDOT is testing the image creation and data transmittal process at this time. The system is scheduled to go live January 2017. Training information will be included with the online application.						
1/5/17: A new developer has been assigned to the project. The anticipated production date is now April 10, 2017.						
4/20/17: The DCRS is currently in final testing and is scheduled to be moved into production on July 1, 2017.						
1/4/18: The DCRS is scheduled to go into production February 19, 2018. Help files will be available with the soft launch of the electronic form. The paper DCR has been updated to MMUCC 5 and will be available in 2018.						
4/20/18: The DCRS has been delayed until mid-2018 due to other system demands.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	\$25,000.00	\$0	\$	\$	\$

<b>Project # 2</b>	<b>Project Name: Investigator's Electronic Crash Reporting System</b>					
<b>Lead Agency:</b> NDOT	<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628					
<b>Project Description / Purpose:</b> To upgrade the EAF 2.0 Investigator's electronic crash report form.						
<b>System: Quality Category Project will Address: Crash Records</b>						
<b>Target or Deficiency Project will Address:</b> To reduce the current average of 15 minutes to an average of less than 10 minutes for submittal of an Investigator's report. To increase the accuracy rate of Investigator's submitted reports by eliminating manual entry of key data. To reduce the amount of amended reports being submitted to NDOT by eliminating the manual entry of data. To reduce the amount of rework required by the data entry unit by reducing the amount of incoming amended reports. To reduce the amount of time it takes an officer / supervisor to approve an entered investigator's report.						
<b>Update:</b> 11/15: NDOT user interface screens completed – working on data image migration. Currently, there are a few outstanding technical issues that need to be addressed before a final decision can be made. A final decision should be made by the end of December, or early January, at which time the strategies on this project can be outlined. 2/16: NDOT in discussion with Nebraska State Patrol (NSP) whether to use the TraCS or the EAF2.0 to collect the new MMUCC elements. Hiring process began for contract programmers. 4/16: The hiring process for the contractors has begun. The discussions with Nebraska State Patrol about using TraCS crash reporting instead of the current EAF2.0 could result in changes to this project. 7/21/16: Testing to the User Interface has been completed. Additional testing has been performed on the DR41 to crash reporting database – testing should be wrapped up by the end of August. Coding to extract and display the DR41 image is underway and should be completed by October 1, 2016, at which time the system will be ready to go live. 10/20/16: The mapping of all third party 1.0 Investigator electronic reporting systems to NDOT's XSD 2.1 reporting process was finalized in September 2016. Additionally, since the last TRCC meeting NSP has started mapping their TraCS crash reporting model to NDOT's XSD 2.1 process, once done NSP will migrate their users from NDOT's electronic crash reporting system (EAF2.0) over to the new TraCS reporting process. It is planned that all statewide EAF 2.0 users will be migrated over to TraCS within the next year – Time frame is subject to change depending on testing and user acceptance of the TraCS crash module. 4/20/17: Currently, NSP is planning to schedule migrating the EAF 2.0 agencies over sometime after August 2017. Complete migration could take up to six months. 1/4/18: NDOT's proposed MMUCC 5 Police Accident Report (PAR) was finalized October 5, 2017. NSP has continued to move forward with TraCS and is now planning to migrate the EAF 2.0 users to TraCS third quarter 2018. The other NSP updates include: MACH/CAD (Computer Aided Dispatch Software) is in use by NSP. MACH pricing has been set at \$24 per user for local agencies. Several agencies have signed contracts for MACH with NSP. TraCS pricing has been set at \$60 per user for local agencies. Several agencies are interested in contracting with NSP for TraCS. Ongoing support for the web based TraCS service will need to be discussed. 4/20/18: Migration of EAF users to TraCS is planned for late 2018 after the testing is completed. NDOT will provide support for the users.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	<b>\$230,265.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$</b>	<b>\$</b>

<b>Project # 3</b>	<b>Project Name: PAR XSD Reporting System Upgrade</b>					
<b>Lead Agency:</b> NDOT	<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628					
<b>Project Description / Purpose:</b> Updating NDOT's Police Accident Report (PAR) to align closer to the recommendations within the MMUCC 4th edition. All electronic systems will be transmitting the same data, via the same transmittal process, thus eliminating the current two separate transmittal approach. Redesign of the PAR will allow NDOT to capture high interest research data elements, like mobile phone distraction.						
<b>System: Quality Category Project will Address:</b>						
<b>Target or Deficiency Project will Address:</b> The target of this project is to increase the MMUCC compliance of NDOT's current PAR from the now 55.8% to 80% or greater.						
<b>Update:</b> 2015: Stage One: Severity change definition – Done 1/1/2016 Stage Two: The mapping of all third party Investigator electronic reporting systems to NDOT's XSD 2.0 reporting process will be accomplished by July 1, 2016. The Business Technology Support Division is currently actively working with both third party vendors to map to the new XSD and transmittal process. Reports indicate that they will meet the July deadline. Stage Three: The rewriting of NDOT's XSD 2.0 to incorporate all MMUCC 4th editions data elements. BTSD has hired three new contractors – first to start May 9th, the following two shortly after, at which time creation of the XSD 3.0 will commence. Once done, the new XSD 3.0 will incorporate all the NDOT approved MMUCC 4th edition data elements. This new XSD will then become the approved standard for electronic reporting, with adoption and implementation of all electronic reporting systems to make the switch over by 7/1/2017 4/16: Work on updating the new paper PAR has been underway for the last 9 months and should be finalized by the NDOT PAR group by month's end. The remaining tasks of this project have been broken down into three stages. This new XSD will then become the approved standard for electronic reporting, with adoption and implementation of all electronic reporting systems to make the switch over by 7/1/2017 – date subject to change 7/21/16: Since MMUCC 5 (preliminary) has been released NDOT has made the decision to incorporate most MMUCC 5 elements into the new PAR, this inclusion has required additional time to rework the PAR. A final version of the MMUCC 4+ PAR should be complete by October 1, 2016. 10/20/16: Since the last TRCC meeting, a new version of MMUCC had been released. NDOT decided to incorporate most of the version 5 data elements. This decision required the complete redesign of the then approved MMUCC 4 PAR form. Redesigning the form will allow for the additional MMUCC 5 data elements and form design suggestions being made within the new version. A new Beta version of the MMUCC 4+ form should be ready for the State MMUCC team's review by month's end. Training will be created for law enforcement and coordinated with the Law Enforcement Training Center. 1/5/17: Redesign of the Police Accident Report (PAR) to incorporate both the MMUCC 4 and MMUCC 5 data elements has been finished by the internal NDOT MMUCC team and the image is currently being modified by the NDOT's Communications Division's graphics team. Once complete, this latest version will be sent out to the statewide MMUCC team for final review (Mid-January); after which, any approved suggestions will be designed into the final PAR making the form complete. 4/20/17: The NDOT MMUCC team is currently reviewing NHTSA's Go Team findings in preparation for an upcoming meeting. The final decisions will be used to modify and enhance NDOT's MMUCC 4+ PAR. 1/4/18: Since a complete replacement or rewrite of the current vehicle crash database is needed to accommodate MMUCC 5, a Request for Proposal has been completed and will be updated in Project # 40. 4/20/18: The RFP closed January 25, 2018 but there is not a firm date to have a vendor on site yet.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$36,638.00	\$0	\$0	\$	\$

<b>Project # 4</b>	<b>Project Name: Develop a "Smart Map" Harmonized Location Referencing System</b>					
<b>Lead Agency:</b> NDOT/NCC	<b>Contact Information:</b> Sean Owings and <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628			Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992		
<b>Project Description / Purpose:</b> Deploy a "smart map" point-and-click interface for law enforcement officers to indicate the precise locations from an electronic map. Ability to overlay enforcement with crash records.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Crash locations are currently not accurately recorded. Ideally, this system would support auto-population of location data fields on the crash report (and other forms) including street names, reference posts, offsets, and latitude/longitude coordinates. The Nebraska Department of Transportation should supply the base map for the field-deployed smart map so that crash locations indicated by officers automatically match locations in the roadway inventory data.						
<b>Update:</b> The first part of this two-part project has been completed. NDOT has built the backend of this system which will allow us to capture the incoming data and map this data to our investigator forms. The second stage will allow the officers to navigate a map to place a point at the location of the crash. This "point placement" will then transfer the maps latitude/longitude data into the EAF system and into NDOT's database. A completion date has not been established for the second stage of the project. 3/2016: This will be pending a decision by NDOT and NSP on the input system (if TraCS is selected or EAF2.0). 7/21/16: NDOT has made the decision to move to TraCS (6/23/16) so work on this project has stopped. These features will be available within TraCS. 10/20/16: NSP is deploying the web services implementation of TraCS. This will provide advantages for NSP as well as implementing agencies. This will centralize updates, making them easier for NSP, and removing the need for local agencies to deploy and license their own agency maintained TraCS database. With all of the data at the central server we will still be able to distribute it to prosecutors and the courts. We anticipate also licensing the TraCS Location Tool (TLT) but need to work out start times and funding availability. 4/20/17: The TraCS Location Tool (TLT) is being tested by the Nebraska State Patrol (NSP), the Lincoln Police Department and Lancaster County Sheriff's Office. Once testing is complete it will be rolled out to all TraCS users. 4/20/18: TLT has a working version that is being tested. Still waiting on some local road data.						
<b>Estimated Budget/Funding</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Source by Year:</b>	<b>Section: 402</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>



<b>Project # 5</b>	<b>Project Name: Establish a comprehensive, formal quality control program for crash data</b>					
<b>Lead Agency:</b> NDOT	<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628					
<b>Project Description / Purpose:</b> Establish a comprehensive, formal quality control program for crash data.						
<b>System: Quality Category Project will Address: Crash Records</b>						
<b>Target or Deficiency Project will Address:</b>						
<ul style="list-style-type: none"> <li>• A complete set of operationally-relevant data quality performance measures for the crash system covering timeliness, accuracy, completeness, consistency, integration, and accessibility.</li> <li>• A formal method of counting and tracking errors and providing feedback to law enforcement agencies.</li> <li>• A link between error tracking and training content so that common errors can be documented and addressed in the academies and in periodic refresher training.</li> <li>• Assured coordination with key users to ensure that errors noted by users of the data are logged, corrected (where feasible), and addressed in training, instruction manuals and help files for data collectors.</li> <li>• Periodic audits of crash reports comparing the narrative and diagram to the coded information on the form.</li> </ul>						
<b>Update:</b>						
The investigators manual has been updated to address errors logged, corrected and addressed in training (January 2014). Help files are within the EAF system and can be updated as needed. This project will be updated after project 2 and 3 are completed to allow metrics to be established on complete data.						
1/2016: NDOT has started a Business Intelligence Competency Center (BICC) workgroup as well as a Data Governance workgroup. These groups will be responsible for all of the data for the NDOT including the crash data. It is estimated that Data Governance policies will be established during 2016 or 2017.						
7/21/16: Work continues.						
4/20/18: The quality control measures will be established as the new system is launched in 2020.						
<b>Estimated Budget/Funding</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Source by Year:</b>	<b>Section:</b>	\$0	\$0	\$	\$	\$

<b>Project # 6</b>	<b>Project Name: MMUCC Version 4.0 Compliant (PAR XSD Upgrade)</b>					
<b>Lead Agency:</b> NDOT	<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628					
<b>Project Description / Purpose:</b> Update the Crash Records systems to become MMUCC version 4.0 compliant. <ul style="list-style-type: none"> <li>All electronic systems will be transmitting the same data, via the same transmittal process.</li> <li>Redesigned PAR will allow NDOT to capture high interest research data elements.</li> <li>Richer dataset to work from leading to a safer and national roadway system.</li> </ul>						
<b>System: Quality Category Project will Address: Crash Records</b>						
<b>Target or Deficiency Project will Address:</b> <ul style="list-style-type: none"> <li>Crash records are currently MMUCC version 1.0 compliant, will upgrade to version 4.00.</li> <li>Additional data is necessary to have standard data to allow national comparisons.</li> </ul>						
<b>Update:</b> 11/15: A team has been assembled to assess the data requirements to meet the MMUCC version 4.0 requirements. The mapping of all third party Investigator electronic reporting systems to NDOT's XSD 2.0 reporting process will be accomplished by July 1, 2016. The rewriting of NDOT's XSD 2.0 to incorporate all MMUCC 4th editions data elements is planned for the first quarter of 2016. 2/16: MMUCC elements have been reviewed, recommendations have been entered into the form and is now being reviewed. 7/21/16: NDOT has decided to incorporate most of the suggested MMUCC 5 elements into the new XSD and PAR. Contractors are currently working on the new XSD and NDOT is creating the new PAR – both should be completed by October 1, 2016. 10/20/16: Since the last TRCC meeting, a new version of MMUCC had been released. NDOT decided to incorporate most of the version 5 data elements. This decision required the complete redesign of the then approved MMUCC 4 PAR form. Redesigning the form will allow for the additional MMUCC 5 data elements and form design suggestions being made within the new version. A new Beta version of the MMUCC 4+ form should be ready for the State MMUCC team's review by month's end. Training will be created for law enforcement and coordinated with the Law Enforcement Training Center. 1/5/17: The MMUCC coding team met with NDOT's upper management on October 27, 2016 to discuss the project's scope, time and cost. With our current level of understanding, it has been estimated that the project will take between 2.08 to 6.26 years (mean 4.17 years) and cost between \$1.7 million and \$5.1 million (mean \$3.4 million). Management has requested that a Request For Information (RFI) be drafted and posted. Currently, the RFI is completed and waiting for final BTSD approval before being sent to NDOT Procurement for review and posting which is expected by end of next week. 4/20/17: This RFI was posted and advertised on February 28, 2017, and closed April 5, 2017. NDOT received one response which we are currently reviewing. 1/4/18: NDOT's MMUCC 5 Police Accident Report (PAR) was finalized October 5, 2017. Since a complete replacement or rewrite of the current vehicle crash database is needed to accommodate MMUCC 5, a Request for Proposal has been completed and will be updated in Project # 40. 4/20/18: The new MMUCC form will launch with the new database in 2020.						
<b>Estimated Budget/Funding</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Source by Year:</b>	<b>Section: 405c</b>	\$38,640.00	\$	\$	\$	\$

Project # 7		Project Name: Improve the Data Dictionary for the Crash Data System				
Lead Agency: NDOT		Contact Information: Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628				
Project Description / Purpose: Include edit checks/validation rules, detailed text-based descriptions, and note which elements are captured through linkage.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the crash data completeness and accuracy.						
Update: Selected for implementation by the TRCC 4/21/16. 7/21/16: This will be included in the XSD validation process. 1/4/18: This will be included in the Highway System Database Rewrite and will be updated in Project # 40. 4/20/18: This project is scheduled to be completed in 2020.						
Estimated Budget/Funding Source by Year:	Source	2016	2017	2018	2019	2020
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 8		Project Name: Improve the Process/Procedures Flows for the Crash Data System				
Lead Agency: NDOT		Contact Information: Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628				
Project Description / Purpose: Create a process flow diagram for collection, reporting and posting of crash data.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the completeness and accuracy of crash data.						
Update: Selected for implementation by the TRCC on 4/21/16. 7/21/16: This will be included in the XSD validation process 1/4/18: This will be included in the Highway System Database Rewrite and will be updated in Project # 40. 4/20/18: This project is scheduled to be completed in 2020.						
Estimated Budget/Funding Source by Year:	Source	2016	2017	2018	2019	2020
	Section: 405c	\$0	\$0	\$0	\$0	\$0

<b>Project # 9</b>		<b>Project Name: Improve the Interfaces with the Crash Data System</b>				
<b>Lead Agency:</b> NDOT		<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628				
<b>Project Description / Purpose:</b> Improve the timeliness and availability with real-time interfaces for driver, vehicle and roadway data systems.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the integration and accessibility of the crash data by providing real-time links with three other data systems.						
<b>Update:</b> Selected for implementation by the TRCC on 4/21/16. 7/21/16: At the present time the crash system cannot be linked due to software constraints. This will be reviewed after the system upgrade that is scheduled to be completed in 2020.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source Section: 405c</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
		\$0	\$0	\$0	\$0	\$0

<b>Project # 10</b>		<b>Project Name: Crash Report Rejection/Resubmission Process</b>				
<b>Lead Agency:</b> NDOT		<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628				
<b>Project Description / Purpose:</b> Define and implement a process where incomplete or inaccurate crash reports will be returned to law enforcement for corrections.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy of the crash data system.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 7/21/16: No progress 4/20/18: This process will be reviewed with the planning of the new system replacement.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source Section: 405c</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
		\$0	\$0	\$0	\$0	\$0

Project # 11		Project Name: Citation/Adjudication System Data Dictionary				
<b>Lead Agency:</b> Nebraska Crime Commission		<b>Contact Information:</b> Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992				
<b>Project Description / Purpose:</b> Include edit checks/validation rules, detailed text-based descriptions, and note which elements are captured through linkage.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Create an approved data dictionary for the Citation/Adjudication system including all databases.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 4/20/17: Due to changes in Staff, this project has not been implemented.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 12		Project Name: Improve the Data Quality Control Program for the Citation/Adjudication System				
<b>Lead Agency:</b> Nebraska Crime Commission		<b>Contact Information:</b> Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992				
<b>Project Description / Purpose:</b> <ul style="list-style-type: none"> <li>Implement performance measures and trend analysis to assess data quality. These will include a complete set of data quality performance measures for the citation/adjudication systems covering timeliness, accuracy, completeness, consistency, integration, and accessibility.</li> </ul>						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve data accuracy by tracking all needed improvements. Develop a performance measure grid with all six attributes being updated annually.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 4/20/17: Due to changes in Staff, this project has not been implemented.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

<b>Project # 13</b>		<b>Project Name: NIEM Guidelines</b>				
<b>Lead Agency:</b> Nebraska Crime Commission		<b>Contact Information:</b> Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992				
<b>Project Description / Purpose:</b> Update NIEM guidelines to adhere for data transfer to the courts.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve data uniformity by 50% of data records from the current 0% that comply with NIEM guidelines.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 4/20/17: Due to changes in Staff, this project has not been implemented.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

<b>Project # 14</b>	<b>Project Name: Citation Tracking System</b>					
<b>Lead Agency:</b> Nebraska Crime Commission			<b>Contact Information:</b> Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992			
<b>Project Description / Purpose:</b> Review of the current citation data collected by NCJIS and JUSTICE and a determination of the feasibility of enhancing either for use as a Citation Tracking System.						
<b>System: Quality Category Project will Address: Citation and Adjudication Records</b>						
<b>Target or Deficiency Project will Address:</b>						
<ul style="list-style-type: none"> <li>Launch an integrated system that will track 100% of citations through adjudication.</li> </ul>						
<b>Update:</b>						
<p>Citations issued electronically are now being made available to prosecutors via NCJIS uploaded the same day of issuance and then made available within 48 hours. The main agency not using this process is the Douglas County Attorney. The citations are instead delivered manually. Those prosecutors who are ingesting the data into their case management system similarly have the data available on the same day the images are available.</p> <p>1/2016: User conferences for Sleuth (law enforcement) and CMS (prosecutors) were held in October. Both could have significant impacts on eCitations. Affinity is continuing work on the eCrash form and ALR report for TraCS. We have received an initial draft of the crash report but Affinity has questions on data validations. Valerie Morris began working more on traffic record automation. She will work with agencies to move citations and crashes electronically. We have been working with NSP and NDOT on using a crash report platform, probably TraCS, to have agencies submit crash data and images instead of NDOT developing a new EAF extension. This creates questions and issues on support and development. There are apparent issues in some states with online TraCS (a newer application) and we must look closely at this being a viable solution.</p> <p>3/2016: Investigating TraCS as an online solution for smaller agencies so they do not have to purchase high priced equipment.</p> <p>4/16: The NCC continued work with the Administrative Office of the Courts (AOC) and the Nebraska State Patrol (NSP) and others on the format and content of a new citation. This is anticipated to be completed and before the Supreme Court for approval and questions by the fall of 2016. The NCC completed contracts with Hastings PD, Lincoln PD and the Lancaster County Sheriff's Office for hardware acquisitions. The NCC will be implementing the TraCS web services with the servers at the NSP and anticipate licensing the TraCS Location Tool (TLT).</p> <p>10/20/16: The NCC continued work with the Administrative Office of the Courts (AOC) and the Nebraska State Patrol (NSP) and others on the format and content of a new citation. This is anticipated to be completed and before the Supreme Court for approval and questions by the fall of 2016. The NCC will be implementing the TraCS web services with the servers at the NSP and anticipate licensing the TraCS Location Tool (TLT).</p> <p>1/5/17: The NCC continued work with the Administrative Office of the Courts (AOC) and the Nebraska State Patrol (NSP) and others on the format and content of a new citation. The NCC has implemented the TraCS web services with the servers at the NSP which is currently being tested by Lincoln Police Department and Lancaster County Sheriff's Office.</p> <p>4/20/17: The NCC continued work with the Administrative Office of the Courts (AOC) and the Nebraska State Patrol (NSP) and others on the format and content of a new citation. During this time NCC experienced turnover in the Information Services Division causing delays. The TraCS and TLT will now be part of the same contractual agreement and includes 3rd Party Vendor options. An effort must be made to ensure all law enforcement agencies of all sizes and citation volume have an opportunity to enhance citation data collection processes. A concentrated effort will be made to increase the competitive technological market place as it relates to the whole citation tracking system. To succeed there is a need for re-commitment to a high level of collaboration and overall team transparency as it relates so the citation tracking system.</p> <p>1/4/18: The new citation form has been approved by the Supreme Court and will be implemented by 1/1/2019. TraCS is being completed for over 10 agencies in 2018. Grants have been approved for 17 agencies to purchase equipment for electronic citations. Additional vendors are testing E-Citation systems that will be available soon.</p> <p>4/20/18: New XSD/XML has been created for the new citation and has been distributed to TraCS. Will begin working with other vendors to update forms to be implemented 1/1/2019. Currently looking into adding City Attorney to the portal for eCitations.</p>						
<b>Estimated Budget/Funding</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Source by Year:</b>	<b>Section:</b> <b>405c</b>	\$364,000.00	\$255,000.00	\$498,710.00	\$	\$

Project # 15		Project Name: Citation/Adjudication Data Linkage				
<b>Lead Agency:</b> Nebraska Crime Commission		<b>Contact Information:</b> Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992				
<b>Project Description / Purpose:</b> Link data within citation/adjudication system and with driver, vehicle and crash systems. Explore Jail/Prosecutor data interface and TraCS local installation. Currently have a process available to provide prosecutors with citation data via NCJIS.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve data linkage by upgrading systems that will automatically link 100% of citation/adjudication data for all justice departments, driver, vehicle and crash data systems.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. Jail interface is not viable for necessary data. Arrest form automation from law enforcement to prosecutors would provide the necessary data and improve timeliness. 5/30/18: No update.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 16		Project Name: Establish a Linked DUI System (MIDRIS)				
<b>Lead Agency:</b> Nebraska Crime Commission / Department of Motor Vehicles		<b>Contact Information:</b> Mike Fargen <a href="mailto:mike.fargen@nebraska.gov">mike.fargen@nebraska.gov</a> (402) 471-3992			Kathy VanBrocklin <a href="mailto:kathy.VanBrocklin@nebraska.gov">kathy.VanBrocklin@nebraska.gov</a> 402-471-3901	
<b>Project Description / Purpose:</b> Linked to the driver system electronically. Include driver sanctions and all citations written by law enforcement.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve data completeness and linkage by linking 100% of alcohol involved citations through the justice system to the driver records.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0



Project # 17		Project Name: Develop Traffic Records Inventory				
<b>Lead Agency:</b> TRCC Management/HSO		<b>Contact Information:</b> Bill Kovarik <a href="mailto:william.kovarik@nebraska.gov">william.kovarik@nebraska.gov</a> 402-471-2516				
<b>Project Description / Purpose:</b> Create a document that contains the description and details of all of the traffic records data including the data manager for each system.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the completeness of all of the data systems to allow integration.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 5/3/17: Partial roadway inventory submitted. Reminded other data administrators to compile data inventory while in process of updating/replacing systems. 4/20/18: Continue working with data administrators through conversions and upgrades to establish inventory during transitions.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 18		Project Name: Improve Quality Control and Quality Improvement Programs				
<b>Lead Agency:</b> TRCC Management/HSO		<b>Contact Information:</b> Bill Kovarik <a href="mailto:william.kovarik@nebraska.gov">william.kovarik@nebraska.gov</a> 402-471-2516				
<b>Project Description / Purpose:</b> Develop quality control guidelines for all six data systems including timeliness, accuracy, completeness, uniformity, integration and accessibility.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Allows the opportunity to measure all performance goals for all data systems.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 6/1/16: A request has been sent to each data system manager with format and guidelines. 4/20/18: Continue working with data administrators through conversions and upgrades to establish inventory during transitions.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 19		Project Name: Develop a Lifecycle Cost Consideration for Projects				
<b>Lead Agency:</b> TRCC Management/HSO		<b>Contact Information:</b> Bill Kovarik <a href="mailto:william.kovarik@nebraska.gov">william.kovarik@nebraska.gov</a> 402-471-2516				
<b>Project Description / Purpose:</b> Develop a lifecycle cost consideration for projects to ensure long-term projects are successful beyond federal funding.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the completeness of projects by considering the long-term and on-going costs.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 5/2/17: The lifecycle cost consideration is reviewed during the initial grant contract proposal application review.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source Section: 405c</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
		\$0	\$0	\$0	\$0	\$0

Project # 20		Project Name: Record Adverse Driving Histories for Non-Commercial Drivers				
<b>Lead Agency:</b> Department of Motor Vehicles		<b>Contact Information:</b> Sara O'Rourke <a href="mailto:sara.Orourke@nebraska.gov">sara.Orourke@nebraska.gov</a> 402-471-2670		Kathy VanBrocklin <a href="mailto:kathy.VanBrocklin@nebraska.gov">kathy.VanBrocklin@nebraska.gov</a> 402-471-3901		
<b>Project Description / Purpose:</b> Continue to follow the American Association of Motor Vehicle Administrators (AAMVA) progress in building the state-to-state driver record system.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the completeness and accuracy of the driver data system.						
<b>Update:</b> 3/15/15 – The American Association of Motor Vehicle Administrators (AAMVA) is currently developing the state-to-state system (S2S) that will facilitate the electronic transfer of information between participating states. Nebraska is scheduled to be one of 11 pilot states, with implementation expected no later than July 2017. Full compliance will not occur until all U.S. based jurisdictions have completed implementation. At this time implementation by all jurisdictions is not mandated. 5/31/16: Nebraska is scheduled to implement state-to-state in October 2016. 7/21/16: The Nebraska DMV continues to work on this initiative and plans to implement on October 17, 2016. 4/20/17: Nebraska implemented S2S 10-17-2016. Implementation went smoothly and all errors and issues have been resolved. As new states join S2S, duplicate resolution is required, and Nebraska has resolved all issues with all states at this time. 4/20/18: Nebraska has resolved all issues with states, currently waiting for TN and MA to resolve duplicate issues on their side. Nebraska has an automated process to resolve duplicates for same name and same SSN#. AAMVA is will be working on an auto duplicate process that would eliminate the need for individual states to manually process duplicates as new states are added. At this time, 16 states have implemented S2S.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source Section: 405c</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
		\$0	\$0	\$0	\$0	\$0

<b>Project # 21</b>	<b>Project Name: Create a Process Flow for the Driver Data System</b>					
<b>Lead Agency:</b> Department of Motor Vehicles	<b>Contact Information:</b> Sara O'Rourke <a href="mailto:sara.Orourke@nebraska.gov">sara.Orourke@nebraska.gov</a> 402-471-2670			Kathy VanBrocklin <a href="mailto:kathy.VanBrocklin@nebraska.gov">kathy.VanBrocklin@nebraska.gov</a> 402-471-3901		
<b>Project Description / Purpose:</b> Develop a process flow chart for the driver data system to document all processes.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy of the driver data system.						
<b>Update:</b> 5/31/16: Currently the Vehicle, Title and Registration System is being modernized. Once that project has been completed – it will be determined when the Driver Licensing System will be incorporated into it. At that time, the process flow chart will be created documenting all processes. 4/20/18: The driver data system will be planned for update after the vehicle system is launch in October 2019.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b> Section: 405c	<b>2016</b> \$0	<b>2017</b> \$0	<b>2018</b> \$0	<b>2019</b> \$0	<b>2020</b> \$0

<b>Project # 22</b>	<b>Project Name: Create a Data Dictionary for the Driver Data System.</b>					
<b>Lead Agency:</b> Department of Motor Vehicles	<b>Contact Information:</b> Sara O'Rourke <a href="mailto:sara.Orourke@nebraska.gov">sara.Orourke@nebraska.gov</a> 402-471-2670			Kathy VanBrocklin <a href="mailto:kathy.VanBrocklin@nebraska.gov">kathy.VanBrocklin@nebraska.gov</a> 402-471-3901		
<b>Project Description / Purpose:</b> Create a data dictionary for the driver data system that will include all of the data elements, validation rules and any elements that will be captured through linkage.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy and completeness of the driver system data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 4/20/18: The driver data system will be planned for update after the vehicle system is launch in October 2019. The data dictionary will be established with the new system.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b> Section: 405c	<b>2016</b> \$0	<b>2017</b> \$0	<b>2018</b> \$0	<b>2019</b> \$0	<b>2020</b> \$0

Project # 23		Project Name: Implement the Quality Control Program for the Driver Data System				
<b>Lead Agency:</b> Department of Motor Vehicles		<b>Contact Information:</b> Sara O'Rourke <a href="mailto:sara.Orourke@nebraska.gov">sara.Orourke@nebraska.gov</a> 402-471-2670				
		Kathy VanBrocklin <a href="mailto:kathy.VanBrocklin@nebraska.gov">kathy.VanBrocklin@nebraska.gov</a> 402-471-3901				
<b>Project Description / Purpose:</b> Develop quality control program for the Driver data system including timeliness, accuracy, completeness, uniformity, integration and accessibility.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy of the driver data system.						
<b>Update:</b> 6/1/16: All CDL records processed daily are reviewed for accuracy. We currently have a 4% error rate, which we would like to reduce to no more than 2%. We also hope in the next year to begin auditing 5% of non-commercial records processed daily. 4/20/17: All CDL records processed daily for accuracy. We get monthly reports from AAMVA and the highest error rate was 1.9%. Current emphasis is on CDL/Third Party audits.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b> Section: 405c	<b>2016</b> \$0	<b>2017</b> \$0	<b>2018</b> \$0	<b>2019</b> \$0	<b>2020</b> \$0

Project # 24		Project Name: Deny PRISM Reincarnated Carriers				
<b>Lead Agency:</b> Department of Motor Vehicles		<b>Contact Information:</b> Cathy Beedle <a href="mailto:cathy.Beedle@nebraska.gov">cathy.Beedle@nebraska.gov</a> 402-471-3894				
<b>Project Description / Purpose:</b> Develop the process to deny registration to the PRISM reincarnated carriers.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy of the vehicle data systems.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 7/21/16: No update to report 4/20/17: DMV has the authority and does deny registration for out of service carriers under the PRISM program, but <i>identifying</i> "suspected reincarnated carriers" and denying registration would require statute changes. 4/20/18 – No update to report.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b> Section: 405c	<b>2016</b> \$0	<b>2017</b> \$0	<b>2018</b> \$0	<b>2019</b> \$0	<b>2020</b> \$0

<b>Project # 25</b>		<b>Project Name: Create Workflow Documentation for the Vehicle Database</b>				
<b>Lead Agency:</b> Department of Motor Vehicles		<b>Contact Information:</b> Betty Johnson <a href="mailto:betty.Johnson@nebraska.gov">betty.Johnson@nebraska.gov</a> 402-471-3909				
<b>Project Description / Purpose:</b> Create a workflow document for the vehicle system that includes National Motor Vehicle Title Information System (NMVTIS).						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the uniformity of the vehicle data with a complete workflow document so all users follow the same guidelines.						
Update: Update 6/1/16: NE DMV is currently in the initial stages of a vehicle system modernization and replacement project. Plans for the new system include full integration with NMVTIS. Project roll-out is anticipated to be in the 2019 timeframe. 7/21/16: Work continues to identify best practices, secure budget authority, and hire a vendor to build a new vehicle system. 4/20/17: A Request for Proposal, RFP Number 5557Z1, for the purpose of selecting a qualified contractor to provide the modernization system was released on March 27, 2017. Proposals are due by June 16, 2017; a resulting contract is expected to be signed by September 28, 2017. Final budget authority expected by June 15, 2017. 4/20/18: Contract 80890 (O4) between the State of Nebraska and Fast Enterprises was signed on March 15, 2018 to provide a modernized motor vehicle system. Initial stages of the work required by this contract have commenced, including conversations with the American Association of Motor Vehicle Administrators (AAMVA) regarding development and implementation of interactive NMVTIS. A deployment date of October 15, 2019 has been designated.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

<b>Project # 26</b>		<b>Project Name: Create Vehicle System Performance Measures</b>				
<b>Lead Agency:</b> Department of Motor Vehicles		<b>Contact Information:</b> Betty Johnson <a href="mailto:betty.johnson@nebraska.gov">betty.johnson@nebraska.gov</a> 402-471-3909				
<b>Project Description / Purpose:</b> Develop quality control program for the vehicle data system including timeliness, accuracy, completeness, uniformity, integration and accessibility. Include data audits to identify trends and differences.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy of the vehicle data system.						
<b>Update:</b> Update 6/1/16 NE DMV is currently in the initial stages of a vehicle system modernization and replacement project. Plans for the new system include utilizing performance measures and auditing capabilities. Project roll-out is anticipated to be in the 2019 timeframe. 7/21/16: Work continues to identify best practices, secure budget authority, and hire a vendor to build a new vehicle system. 4/20/17: A Request for Proposal, RFP Number 555721, for the purpose of selecting a qualified contractor to provide the modernization system was released on March 27, 2017. Proposals are due by June 16, 2017; a resulting contract is expected to be signed by September 28, 2017. Final budget authority expected by June 15, 2017. 4/20/18: Contract 80890 (O4) between the State of Nebraska and Fast Enterprises was signed on March 15, 2018 to provide a modernized motor vehicle system. Initial stages of the work required by this contract have commenced. A deployment date of October 15, 2019 has been designated.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>Project # 27</b>	<b>Project Name: Nebraska Emergency Medical Services Data Quality Improvement</b>					
<b>Lead Agency:</b> DHHS	<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377					
<b>Project Description / Purpose:</b> Finalize and implement quality control measures to improve the accuracy and consistency of eNarsis data. Convert all EMS services to electronic submission in eNarsis. Expand edit checks and validation rules.						
<b>System: Quality Category Project will Address:</b>						
<b>Target or Deficiency Project will Address:</b> 100% of EMS records will be submitted electronically in eNarsis.						
<b>Update:</b> 2015: 83% of EMS services across the state are using electronic forms to submit data to eNarsis. Omaha Fire and Rescue have specific reporting systems developed on their own. All licensed Nebraska Ambulance Services are now required to submit pre-hospital patient data electronically within 72 hours to DHHS, EMS program. 11/2015: Dropped to 70.1% of EMS reports to governing agency within 10 days from a high of 99.07 earlier in year. 6/2016: 100% of the EMS agencies reporting data electronically submit to eNarsis per state requirements. 7/21/16: 100% of the EMS agencies reporting data electronically submit to eNarsis per state requirements. Services are no longer allowed to submit data via paper format. We are moving to helping support the EMS program in development of reports in the electronic Elite system. We are awaiting access to the system so that we can begin developing electronic reports that can be run by each service. 1/5/17: Currently have EMS v.2 data through December 2015, no v.3 data available to analyze but is being collected in the Elite Software system. Preparing the full 2015 annual dataset for analysis. 4/20/17: Currently have EMS v.2 and EMS v. 3 data through April 2017. Received the NEMSIS V.3/Elite collected data set from Image trend on Monday 4/17/17. 4/20/18: Obtained all EMS v.3 data through January 2018. Working with EMS staff to improve timeliness of the data. Working on the EMS data dictionary.						
<b>Estimated Budget/Funding Source</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>by Year:</b>	<b>Section: 405c</b>	<b>\$36,638.00</b>	<b>\$37,954.00</b>	<b>\$38,245.00</b>	<b>\$</b>	<b>\$</b>

<b>Project # 28</b>	<b>Project Name: CODES – Linking data</b>					
<b>Lead Agency:</b> DHHS	<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377					
<b>Project Description / Purpose:</b> To create a CODES database linking crash, EMS, Hospital Discharge and death certificate data. Resolve errors and issues with final data.						
<b>System: Quality Category Project will Address:</b>						
<b>Target or Deficiency Project will Address:</b> CODES will create one uniform database to evaluate Nebraska’s fatal and serious motor vehicle injury crashes. This will allow us to reduce the fatal and serious injury crash rates.						
<b>Update:</b> January 2014 the 2012 data was linked. After modifications of the linkage specifications, the linkage rate between 2012 crash and hospital discharge data was 77%. 2013 Management Report has been completed. 2014 datasets have been cleaned, standardized and linked. 7/21/16: Linking of the 2014 data is complete, we are working on the 2014 management report. A project on alcohol involvement, seatbelt use and crash outcomes in ongoing as well as a data request from the Injury prevention program on Motorcycle helmet use and a comparison of medical charges. 1/5/17: DHHS is searching for a new CODES analyst. The 2014 management report has been reviewed by communications. A factsheet will be developed to disseminate the results of the interactive effects of non-seatbelt use and alcohol impaired driving study. 4/20/17: Received 2015 death data; continued checking, cleaning, and standardizing 2015 crash and death data for linkage. Finalized factsheets entitled “Seatbelt use reduces death and severe injuries of alcohol-impaired drivers” and “Helmet use reduces injury severity in motorcycle crashes.” They were approved by communications and will be added to the CODES webpage. 1/4/18: Data linkage has been completed for 2015 data and the management report is finalized. Nebraska Injury Surveillance is expanding to add Violent Death Reporting. 4/20/18: 2016 CODES Management Reports have been completed and made available to all providers. 2017 EMS and driver license data has been received. An ESTR story map and dashboard has been created for the Nebraska Teen Drivers 2008-2016 annual research project.						
<b>Estimated Budget/Funding</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Source by Year:</b>	<b>Section: 405c</b>	\$168,980.00	\$173,003.00	\$174,677.00	\$	\$



Project # 29		Project Name: E-CODE Data Quality Improvement				
<b>Lead Agency:</b> DHHS		<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377				
<b>Project Description / Purpose:</b> E-CODE data is the major information source that public health uses to study injuries. E-CODE compliance has been declining since 2004 which results in incomplete and inconsistent data.						
<b>System: Quality Category Project will Address:</b>						
<b>Target or Deficiency Project will Address:</b> The target is to annually assess the data quality of the E-CODE data and provide data quality improvement feedback.						
<b>Update:</b> February 13, 2014 the 2012 E-CODE report cards were sent to 88 acute care hospitals. Three quarterly reports were also sent to these hospitals with 2013/2014 data by July 2014. One conclusion was that 88% of drug poisoning cases did not reflect valid N-CODEs in the 2012 data. The 2015 data was received through September and the quarterly reports have been prepared and distributed. Preparing for the ICD-10-CM transition by modifying the SAS program. 7/21/16: On-going writing of the SAS program to analyze the ICD-10-CM coded records. The NE Hospital Association is coordinating a meeting with medical coders so that we can discuss feedback on the usefulness of the reports. We are also developing a factsheet on the importance and use of accurate E-CODE data to share with medical coders. 1/5/17: DHHS has continued to prepare for the ICD-10-CM transition and modified the SAS program for the new coding structure. The ICD-10 coded records have been received through November 2016. 4/20/17: Preparations continue for the ICD-10-CM transition. Modified SAS program to conduct data quality assessment on new coding structure. As of April 10th we received monthly files through March of 2017 of ICD-10-CM coded records. Prepared a monthly update of the number of records that were received that were still coded in ICD-9-CM. 1/4/18: Completed modifications to the SAS program to accommodate ICD-10 records. The ICD-10 coded records have been received through September 2017. 4/20/18: SAS program modifications have been completed for ICD-10-CM records. The 2017 quality report has been completed and sent to all hospitals.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section:405c</b>	\$36,638.00	\$46,356.00	\$44,347.00	\$	\$

<b>Project # 30</b>	<b>Project Name: Create a Data Dictionary for the EMS/Injury Surveillance Systems</b>					
<b>Lead Agency:</b> DHHS	<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377					
<b>Project Description / Purpose:</b> Include edit checks/validation rules, detailed text-based descriptions, and note which elements are captured through linkage.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy and uniformity of the EMS/Injury Surveillance System data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 6/16: Current validation rules are under review by the Office of EMS and Trauma and are being expanded due to new NEMSIS 3.4 standards needing to be integrated. Validation rules are also being reviewed to get performance measure reports for EMS for Stroke, Cardiac and other medical conditions. 7/21/16: Current validation rules continue to be reviewed by the Office of EMS and Trauma and are being expanded due to new NEMSIS 3.4 standards needing to be integrated. Validation rules are also being reviewed so the Office of EMS and Trauma can develop performance measure reports for EMS for Stroke, Cardiac and other medical conditions. Working with the EMS program on the best process to complete this task. EMS program staff have developed various working document data dictionary during their transition to NEMSIS v.3. We are working to avoid duplication of efforts. 4/20/18: Obtained all EMS v.3 data through January 2018. Working with EMS staff to improve timeliness of the data. Working on the EMS data dictionary.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>Project # 31</b>		<b>Project Name: Create System Performance Measures for the EMS/Injury Surveillance Systems</b>				
<b>Lead Agency:</b> DHHS		<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377				
<b>Project Description / Purpose:</b> Develop quality control program for the ems/injury surveillance data systems including timeliness, accuracy, completeness, uniformity, integration and accessibility. Include data audits to identify trends and differences.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the data in the ems/injury surveillance systems.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 6/16: This process is being started in 2016 by the Office of EMS and Trauma. All systems will be reviewed and more validity rules are being put in place. Data audits will be sent out to services in efforts to support services data quality and move to a data driven approach from the department and EMS Board 7/21/16: The EMS section of this project is overlapping with the EMS data quality improvement project. We will incorporate relevant performance measures to and build those into the electronic reports being developing in the Elite system once we have confirmation from the EMS program as to what is most meaningful to measure or is their priority to measure. 1/5/17: Currently have EMS v.2 data through December 2015, no v.3 data available to analyze but is being collected in the Elite Software system. Preparing the full 2015 annual dataset for analysis. 6/4/18: We have complete EMS v.3 data for calendar year 2016 and 2017. Working toward getting monthly back-up files transferred to Nebraska server. Have prepared EMS annual data reports for 2016 and 2017 and currently conducting evaluations of key data sections, demographics, transport times, injury information, etc. driven by EMS program need.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

<b>Project # 32</b>		<b>Project Name: Interfaces/linkage for EMS/Injury Surveillance Systems</b>				
<b>Lead Agency:</b> DHHS		<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377				
<b>Project Description / Purpose:</b> Link all EMS/Injury surveillance systems possible within current statutes.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the linkage of the EMS/Injury Surveillance data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 7/21/16: Only interface between EMS/Injury Surveillance systems currently in place is that between the EMS system and the trauma registry system. 6/4/18: Due to statute restrictions, of all of the datasets that are part of the injury surveillance system only EMS/Trauma Registry can be linked and are linked (as in, has an interface between the two data collection systems) at this time. Work is being done to exchange information between the Omaha hospital electronic medical record vendors and Omaha Fire/Rescue utilizing the Nebraska Health Information Initiative (Health information exchange). This would eventually be a bi-directional exchange of information to provide EMS services with patient outcome information, and hospitals with pre-hospital information.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	\$0	\$0	\$0	\$0	\$0

<b>Project # 33</b>		<b>Project Name: Include Rehabilitation Data in the EMS/Injury Surveillance Data Systems</b>				
<b>Lead Agency:</b> DHHS		<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377				
<b>Project Description / Purpose:</b> Add rehabilitation data to the current data systems.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the completeness of the EMS/injury surveillance data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 7/21/16: The Trauma regulations committee has met, but nothing final on the rehab data section. 6/4/18: The Trauma regulations have been approved by the Trauma Board, but still need Board of Health approval and then submitted to the Secretary of State to begin the more formal process.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	\$0	\$0	\$0	\$0	\$0

<b>Project # 34</b>	<b>Project Name: Track Frequency, Severity, &amp; Nature of Injuries in MVC</b>					
<b>Lead Agency:</b> DHHS	<b>Contact Information:</b> Ashley Newmyer <a href="mailto:ashley.newmyer@nebraska.gov">ashley.newmyer@nebraska.gov</a> (402) 471-4377					
<b>Project Description / Purpose:</b> Track the frequency, severity and nature of injuries in Motor Vehicle Crashes (MVC). This information will improve the completeness of traffic record data.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the completeness of EMS/injury surveillance data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 7/21/16: Development stage of this project. 6/4/18: Transitioned to EMS version 3. Conducted evaluation on demographic variables to determine if all EMS validity rules were catching appropriate issues. Met with EMS program to report 2016 & 2017 results and discuss potential areas of data quality improvement. Transitioned E-Code data quality SAS program to accommodate ICD-10-CM diagnosis and external cause of injury cases. Presented E-Code data quality report to Nebraska Hospital Association and Nebraska Health Information Managers Association Meeting. Linked 2016 Crash, EMS, E-Code, and Death records into the CODES dataset. Presented data linkage quality results at CODES Advisory Committee Meeting.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 35		Project Name: Allow Access to Roadway Data				
<b>Lead Agency:</b> NDOT		<b>Contact Information:</b> Mark Osborn <a href="mailto:mark.Osborn@nebraska.gov">mark.Osborn@nebraska.gov</a> 402-479-4443				
<b>Project Description / Purpose:</b> Allow access to the roadway data for information users and other departments that could update the information.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accessibility of the roadway data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 4/25/18: The department has implemented a data warehouse that makes roadway data available the entire department. The capabilities for outside users to access the data are under investigation with the domain move. Users outside of the roadway Asset Management section will not be able to update data. The Traffic Analysis Unit created interactive statewide GIS maps of all NDOT traffic counts in the last two years and published it to the NDOT website for the public to use. Because NDOT collects all traffic counts on a two-year cycle, this data represents the most complete and up-to-date traffic count data available. The data has also been publishing to the State of Nebraska GIS data repository (NebraskaMAP) for the public to download and complete their own data analysis.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 36		Project Name: Collect All MIRE Data				
<b>Lead Agency:</b> NDOT		<b>Contact Information:</b> Mark Osborn <a href="mailto:mark.Osborn@nebraska.gov">mark.Osborn@nebraska.gov</a> 402-479-4443				
<b>Project Description / Purpose:</b> Collect all MIRE FDE data in the roadway data system and include a process for updating and adding data.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the completeness of the roadway data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 10/20/16: BTSD has approved the project to update the mainframe to include tables for the remaining MIRE FDE's not currently collected. We have the data available so when the tables are created we can populate them fairly easily. 4/20/18: This project is on hold due to other department priorities but it will make the deadline.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	Section: 405c	\$0	\$0	\$0	\$0	\$0

Project # 37		Project Name: Develop a Quality Control Program for the Roadway Data				
<b>Lead Agency:</b> NDOT		<b>Contact Information:</b> Mark Osborn <a href="mailto:mark.Osborn@nebraska.gov">mark.Osborn@nebraska.gov</a> 402-479-4443				
<b>Project Description / Purpose:</b> Develop quality control program for the roadway data system including timeliness, accuracy, completeness, uniformity, integration and accessibility. Include data audits to identify trends and differences. Develop a comprehensive data dictionary.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the data accuracy of the roadway data system.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 5/2/17: Currently only the business area responsible for the elements internally have access to the data. The systems are planned to facilitate access to the data. NDOT will put the data on the State of Nebraska Open Data website and also put a link on the Nebraska Department of Transportation public site. 4/20/18: The Traffic Analysis Unit created multiple automated quality control reports that compare the route and reference posts of traffic counts and traffic log segments against the valid routes and reference posts tables maintained by Materials & Research division. A historical quality report was created to chart the change in data quality over time against historical trends. Another initiative was dropping the national functional classification (NFC) code from the traffic count description table and pulling that code from the NFC table maintained by Materials & Research division. This automatic linking of NFC data to the source improved the quality of data by removing the need to manually update the NFC data in the traffic count table.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	\$0	\$0	\$0	\$0	\$0

Project # 38		Project Name: Provide Truly Integrated Data				
<b>Lead Agency:</b> TRCC Management/HSO		<b>Contact Information:</b> Bill Kovarik <a href="mailto:william.kovarik@nebraska.gov">william.kovarik@nebraska.gov</a> 402-471-2516				
<b>Project Description / Purpose:</b> Work with all data system administrators to integrate all of the traffic records systems.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve data integration of all of the data systems.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	\$0	\$0	\$0	\$0	\$0

<b>Project # 39</b>		<b>Project Name: Develop Data Governance</b>				
<b>Lead Agency:</b> TRCC Management/HSO		<b>Contact Information:</b> Bill Kovarik <a href="mailto:william.kovarik@nebraska.gov">william.kovarik@nebraska.gov</a> 402-471-2516				
<b>Project Description / Purpose:</b> Work with all data system administrators to define the overall management of the availability, usability, integrity, and security of the traffic records data.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> Improve the accuracy of the traffic records data by verifying the security of the data.						
<b>Update:</b> Selected for implementation by the TRCC 4/21/16. 10/20/16: The NDOT has established a Data Governance (DG) and a Business Intelligence Competency Center (BICC) to manage all Nebraska traffic data. 4/20/17: All data is expected to be moved to the new data management system by 2018. Data Governance is now considered a discipline at NDOT. The NDOT DG Working Group is responsible for creating and resolving data quality issues, data standards and documenting the source of truth of the data. DG helps the business analysts in the Traffic Highway Safety Division identify where they should be getting the source of truth for data (highway, city, county, zip codes, roadway classifications, ADT and more) when they are analyzing their data and reporting on it. DG can also help the Traffic Highway Safety Division identify where there are data quality issues in their source data and take actions to correct it. 4/20/18: Department of Health and Human Services (DHHS) has started a DG process. To date, steering and executive committees have been established, a draft charter has been completed, a list of data themes and issues has been compiled, a "yellow pages" data staff directory project has begun, and a basic framework for future actions has been completed.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>



<b>Project # 40</b>		<b>Project Name: Highway Safety Information System Database Rewrite</b>				
<b>Lead Agency:</b> NDOT		<b>Contact Information:</b> Sean Owings <a href="mailto:sean.owings@nebraska.gov">sean.owings@nebraska.gov</a> (402) 479-4628				
<b>Project Description / Purpose:</b> Replace the existing IBM DB2 mainframe HSI database with a modern database software solution with normalized structure to minimize data redundancies. Expand the underlying database tables to allow for the collection of all MMUCC version 4 data elements, making NDOT 100% MMUCC version 4 compliant.						
<b>System: Quality Category Project will Address: Traffic Records</b>						
<b>Target or Deficiency Project will Address:</b> The target of this project is to improve the crash data completeness to 100% MMUCC version 4 compliant from the current approximate 50%. An additional target is to improve the timeliness from the current average of 30 days to 15 days from the crash date to the time the data is available in the HSI database.						
<b>Update:</b> Project plans are completed to start in October 2016. 7/21/16: Directed by Dan Waddle to create a Request For Proposal (RFP) to replace the system. I'm currently performing the requirement gathering phase of the project. 10/20/16: A rewriting of the Highway Safety Information system (HSI) is required in order to accommodate the new Model Minimum Uniform Crash Criteria (MMUCC) 4+ data elements and table structure. At this time NDOT knows the HSI database needs to be redesigned or replaced, but a decision hasn't been made as to the direction this stage of the project will take. The upcoming meeting on October 27 <sup>th</sup> will dictate the direction of the upgrade and the go-live date for the complete MMUCC 4+ Upgrade Project. 1/5/17: The MMUCC coding team met with NDOT's upper management on October 27, 2016 to discuss the project's scope, time and cost. With our current level of understanding, it has been estimated that the project will take between 2.08 to 6.26 years (mean 4.17 years) and cost between \$1.7 million and \$5.1 million (mean \$3.4 million). Management has requested that a Request For Information (RFI) be drafted and posted. Currently, the RFI is completed and waiting for final BTSD approval before being sent to NDOT Procurement for review and posting which is expected by end of next week. 4/20/17: NDOT received one response, we are currently reviewing the response and have a meeting to discuss the findings with upper management on May 2, 2017. We will know more after this meeting on which approach the new vehicle crash database will take – in-house created or a third party solution. 4/20/18: Since a complete replacement of the current vehicle crash database is needed to accommodate the MMUCC 5 data requirements, NDOT has made the decision to replace the current database. A Request for Proposal (RFP) was completed and posted on December 28, 2017 with a final closing date of January 25, 2018. Final negotiations are in progress and no firm date has been established to have a vendor on site.						
<b>Estimated Budget/Funding Source by Year:</b>	<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>Section: 405c</b>	<b>\$0</b>	<b>\$100,000.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Index of Acronyms**

AAMVA	American Association of Motor Vehicle Administrators	MIRE	Model Inventory of Road Elements
ALR	Administrative License Revocation	MMUCC	Model Minimum Uniform Crash Criteria
ARS	Accident Records System	NMVTIS	National Motor Vehicle Title Information System
CAD	Computer Aided Dispatch	NCJIS	Nebraska Criminal Justice Information System
CODES	Crash Outcome Data Evaluation System	NDOT NEMSIS	Nebraska Department of Transportation National Emergency Management System Information System
DHHS	Nebraska Department of Health and Human Services		
DMV	Nebraska Department of Motor Vehicles	NHA	Nebraska Hospital Association
DUI	Driving Under the Influence (of alcohol or drugs)	NHTSA	National Highway Traffic Safety Administration
EAF	Electronic Accident Form	NISS	Nebraska Injury Surveillance System
ED	Emergency Department	HSO NTRACS	Nebraska Department of Transportation - Highway Safety Office National Trauma Registry-American College of Surgeons
EMS ENARSIS	Emergency Medical Services Electronic Nebraska Ambulance Rescue Service Information System		
		OPD	Omaha Police Department
ERS	Nebraska's Electronic Registration System	PAR	Police Accident Report
FHWA	Federal Highway Association	PDO SAFETEA-LU	Property Damage Only The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users of 2005
Highway Safety Manual	American Association of State Highway and Transportation Officials <a href="http://www.highwaysafetymanual.org/Documents/HSMP-1.pdf">www.highwaysafetymanual.org/Documents/HSMP-1.pdf</a>		
HPMS	Highway Performance Monitoring System	SAS	Statistical Analysis Software
		SHSP	Strategic Highway Safety Plan
HSI	Highway Safety Information	TRA	Traffic Records Assessment
HSIP	Highway Safety Improvement Program	TRCC	Traffic Safety Information System Improvement Program
IHI	Integrated Highway Inventory		Traffic Records Coordinating Committee Implementation of the Traffic Records System Plan Targets and priorities
IRP	International Registration Plan		
JUSTICE	Nebraska Trial Courts Case Search System	U.S. DOT	United States Department of Transportation
LEA	Law Enforcement Agency		
LRS	Location Reference Systems		
MIDRIS	Model Impaired Driving Records Information System		